Introduction

In northeast Tanzania there is a moderate-sized game reserve with many birds and a superabundance of beetles (Map 1). It is called Mkomazi. It attracts few tourists and little revenue, but it has been the subject of controversy within Tanzania and internationally. The reserve has long been contested by people who wished to use it and those promoting the interest of wildlife, who wanted it restored as a wildlife sanctuary. In the late 1980s the wildlife interests prevailed; large numbers of people, many of them pastoralists, were evicted from the reserve.

Mkomazi is another example to add to the catalogue of lost East African pastures, and in particular, another case of land lost to conservation. What are the effects of such evictions? The incidents of land loss to conservation, and the history and politics of struggles over them, are well recorded; but surprisingly there is little material that deals with the practical changes that result. In this paper I examine some of the consequences of eviction from Mkomazi. I focus on the changes resulting to the livestock economy at the district and household level; then I consider the opposition to the moves and international reports about them.

I argue here that eviction and loss of grazing land had a detrimental effect on the livestock economy, and that livelihoods have changed as a result. The livelihood changes serve to underline the resilience of rural peoples’ response to impoverishment.

Pastoralism and Land Loss

The eviction of people from their land has been common in East Africa. It is central to the region’s history this century. Writings about the current fortunes of pastoralists routinely observe that their pastures have diminished through dispossession (Horowitz and Little 1987: 61, 75; Galaty and Bonte 1991: 284; Galaty et al. 1994: 9; Campbell 1993: 263–70; Fratkin 1997: 236).

Dispossession for conservation is a major cause of land alienation in Tanzania (McCabe et al. 1992: 354). Protected areas were established by both the German and British authorities with the creation of numerous game reserves and, towards the end of colonial rule, the Serengeti National Park. Many more game reserves and national parks have been established following Independence. Lands gazetted as
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game reserves, forest reserves or national parks are now extensive. In all these places residence is illegal and in total 27 percent of Tanzania’s land is prohibited to human habitation (Wildlife Sector Review Task Force, 1995: 20). Since that figure was calculated, plans have been finalised to gazette more land as national parks or game reserves. These include the Rukwa National Park (about 4,000 km²); Katavi National Park (about 3,000 km²) and the Usangu Game Reserve (about 1,000 km²).

Other causes of land alienation include state enterprises, such as the ranching or agricultural parastatals. In addition, since the mid 1980s, new economic policies have made land alienation easier and more profitable. By the end of the 1980s the pressures on rural land had become so great, and the legislation and regulations governing land alienation so confused, that in 1990 a Presidential Commission of Inquiry into Land Matters was set up. Its chairman reported that:

The Land Commission received overwhelming evidence showing large-scale encroachment of customary individual land and village lands by parastatals, District Development Corporations (and) state organs such as the army, prisons, national service, parks and reserves. The story is varied, details are different but the theme is the same. Village and rural folks holding land under customary tenure have no security. Their lands are under constant threat of alienation by state organs ostensibly for ‘national projects’ or in the ‘public interest’ but very often in favour of high and middle echelons of the bureaucracy or well-connected ‘outsiders’ (Shivji 1995: 10–11).

Land loss, then, is a pressing issue for all rural people in Tanzania, and not just for pastoralists. Yet most of the attention on cases of land loss has focused on the fact, the injustice, or the illegality of the dispossession, and on the politics of disputes involved. There are few studies, in Tanzania at least, which detail the anatomy of the effects of sudden land alienation on the people evicted.

In Tanzania, Lane’s work on the Barabaig land losses provides little information about the coping strategies people adopted (Lane 1996). Similarly, work on the Meru Land Case mainly concerns the political aspects of the case rather than livelihoods (Luanda 1986; Gulliver 1961; Spear 1997). There is detailed information about how the residents of Mount Meru coped with the iron ring of alienated land around them, but this is a case of change in the face of restricted availability of land, rather than eviction and exclusion (Spear 1997).

There are good studies of the synergistic effects of continued small-scale land loss in Tanzania (Kjaerby 1979; Igoe forthcoming); and in Kenya (Galaty 1980, 1994; Grandin et al. 1988; Campbell 1993; Southgate and Hulme 1996; Rutten 1992). There are also detailed case studies of pastoral impoverishment and enforced change following war, drought and disease, all of which have been experienced in the face of increased commercialisation pressures and economic marginalisation (Dahl, 1979; Hogg 1980; Dietz 1987). These provide some models for how pastoral societies might respond to the sudden pressures of imposed land loss.

The impact of conservation policy on rural people has caused considerable concern in some circles (Turton 1985: 344; 1996: 109; McCabe et al. 1992: 354; Anderson and
Grove 1987: 3). In particular, the impact of Protected Areas on pastoralists, especially Maasai pastoralists, is a cause célèbre amongst anthropologists and conservationists (Collett 1987; Brockington and Homewood 1996; Lindsay 1987; Enghoff 1990; Deihl 1985; Homewood 1995: 335–36; Western 1994). The most detailed information about livelihood change comes from the Ngorongoro Conservation Area, in Tanzania (Arhem 1986; Homewood, Rodgers and Arhem 1987; Homewood and Rodgers 1991; McCabe et al. 1992; Potkanski 1997). Their studies do not concern land loss per se, but the impact of an unusual conservation policy on livelihoods.

Descriptions of the impact of eviction from protected areas are remarkable for their absence. The gap is yet more surprising given the growth of protected areas in Tanzania and the increasing concern to enhance good relations between conservation areas and their neighbours (IIED 1994, Western and Wright 1994).

Mkomazi

In the nineteenth century, use of the lands north of the Pare and Usambara mountains was constrained by aridity, disrupted by war and interrupted altogether by disease. Early explorers’ accounts describe a dry and sparsely peopled, or unpopulated, land. At the same time, a number of references are made to former occupation of the area by the ‘Kwavi’ or ‘Kwafi’ people, whose range had extended to the coast and whose main domain had been between the Pare and Usambara hills to the south and the Teita and Kilimanjaro to the north. These people seem to have fled following the disturbances of the Iloikop wars in the first half of the nineteenth century (Brockington 1998).

Populations recovered somewhat after the Iloikop wars and later explorers’ accounts mention encounters with pastoralists north of the Pare mountains. However in early 1891, rinderpest struck (Waller 1988: 76–77 and footnote 11). Smith, travelling through Mkomazi in 1892 came across no game or people, and marked the area on his map as having ‘no inhabitants’ (Smith 1894: 427, 429). Subsequent German occupation of the area further deterred pastoralists with a number of military expeditions against them (Ekemode 1973: 103–4, 157–60). Before World War One Maa-speaking pastoralists were restricted to a reserve south of the Moshi-Arusha road and west of the Pangani river.

Pastoral populations recovered from these set-backs so that by 1950 there were three main groups of herders present north of the Pare and Usambara mountains. There was a group of Maa-speaking pastoralists at Toloha, in the North Pare mountains; some (predominantly Pare) pastoralists whose animals grazed southwest of Gonja and some Parakuyo pastoralists near Mnazi. When Mkomazi was created in 1951, limited residence was allowed to the Parakuyo herdsmen of Mnazi and about 5,000 of their cattle.

For at least three decades prior to the reserve’s creation, livestock and human populations had been growing, and Maasai pastoralists had been pushing
eastwards from the Maasai Steppe. These conditions dominated the history of the reserve until the late 1980s. Resident pastoralists prospered and mingled with others coming in from the west. The Pare and Sambaa agriculturalists, the majority in the area, prospered too and invested in livestock. Collectively and individually the herders fought and negotiated with the Division of Wildlife, with ever greater success, to gain access to the reserve. By the mid-1980s the best part of 100,000 cattle could be found in and around the reserve. In the late 1980s, the Division of Wildlife evicted all residents and forbade further use. Grazing is now only legally possible in the thin strip of land that divides the borders of the reserve from the Pare and Usambara mountains (Rogers et al. 1999).

Since then, the reserve has been the subject of a campaign to rehabilitate it as a ‘wilderness’. Three charities, the UK-based George Adamson African Wildlife Preservation Trust (GAWPT), the US-based Tony Fitzjohn/George Adamson African Wildlife Preservation Trust (TF/GAWPT), and the Wildlife Preservation Trust (Tanzania) have raised money to support the regrading of roads and airstrips, and to reintroduce lost species. Wild dog pups have been raised in one compound and a Rhino sanctuary established and stocked with four black rhinoceroses from the Addo Elephant National Park of South Africa.

My research into Mkomazi took place between 1994 and 1998. The fieldwork principally comprised a repeat round survey of household livelihoods conducted around Mn’garo, in Lushoto District and Kisiwani, in Same District. It also involved archival work, investigation of local records and oral histories. Most of the pastoralists I worked with were Maasai or Parakuyo. My colleague, Hilda Kiwasila, worked mainly with Pare agropastoralists.

In all, the main body of data presented here is derived from twenty households in Lushoto District and thirty-two in Same District. These were grouped into 38 bomas (compounds) and contained 148 sub-households. Of the sample, the five households in Kamorei Juu were Pare pastoralists, the rest were Parakuyo and Maasai. All households had been using the reserve’s resources at the time of eviction.

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Livestock Markets

In Same District, livestock markets have taken place twice a month at four different locations for many years. The records of sales, and of the types of animals sold, should be a useful means of finding out about the nature of pastoralists’ commercial activity, and hence the nature of their domestic economy (Baker 1967). Unfortunately, there are considerable problems with the records available from Mkomazi. They are incomplete, compiled in a variety of ways so that the information available on type of stock sold, or the spatial aggregation of sales is not constant. They are also wrong. By this I mean that they are not a true record of the number of animals sold at each market, nor of the total sales
throughout the district, and they are certainly not an accurate record of the value of these sales. The problems are dealt with in more detail elsewhere (Brockington 1998). Suffice to say that they do not produce trends but rather confound them. Therefore, any patterns that are observed may still be robust.

Graph 1 shows that since pastoralists were evicted from the reserve there has been a decline in the number of cattle sold. The mean number of sales before 1986, just before moves to evict pastoralists began, is 261.7 animals a month, significantly higher than that after 1986 when 146 animals a month were sold (Table 1). This is not due to changes in the value of cattle with respect to maize. If this is taken into account sales are still statistically significantly lower after eviction (Brockington 1998).

Graph 1: Cattle sales in Same District markets 1974–1996

Table 1: Comparing sales of cattle in Same District from November 1974 to October 1985 and from July 1986 to July 1996

<table>
<thead>
<tr>
<th>Period</th>
<th>Months of data</th>
<th>Mean</th>
<th>std dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>all period</td>
<td>192</td>
<td>194.85</td>
<td>89.22</td>
</tr>
<tr>
<td>11/74–10/85</td>
<td>81</td>
<td>261.72</td>
<td>78.94</td>
</tr>
<tr>
<td>7/86–7/96</td>
<td>111</td>
<td>146.06</td>
<td>59.95</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Periods compared</th>
<th>‘t’ test for separate variance</th>
<th>Degrees of freedom</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/74–10/85:</td>
<td>11.06</td>
<td>143.07</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>
Further changes are also visible in these data. There are also significant differences in the proportion of female cattle sold at the markets. A far higher proportion of females are sold after eviction than before (Graph 2). As well as having fewer animals to sell, herders seem to have less choice in which animals they sell. As a result, they are forced to sell more females, the productive nucleus of their herds. This is a classic indication of household stress in pastoral societies.

**Household Herd Size**

Changes are also apparent in the household herd size. Table 2 shows that the size of the household herd present in each boma has decreased between 1984 and 1996. In Same District, the extent of the decrease reflects the fact that herds were often sent to graze in distant locations. In Lushoto District, where there was more space for grazing, and herds were more often in the boma, the decline is more representative of decreases experienced since eviction. Here household herd sizes have decreased to between 3 percent and 38 percent of their former size.

It is possible to use the current wealth distribution to learn more about how eviction affected different families. Table 2 shows that the wealthier households at Mahambalawe are still almost as wealthy as pastoralists at Kisima (Same District) were before the evictions but much wealthier than their current neighbours in Kisima (Lushoto District). Livestock distribution is highly skewed; over half do not have the minimum needed for subsistence requirements.

Other studies have shown that impoverishment affects poorer pastoralists more than richer ones as poorer families lose a greater proportion of their stock than the wealthy and are therefore more likely to be pushed ‘out’ of pastoralism and into
Daniel Brockington

other livelihoods (Fratkin and Roth 1990; Roth 1996; Ensminger 1992). The principles of these cases are applicable to Mkomazi. If there were a reduction in the average household herd, then the current distribution of wealth in Lushoto District gives some idea of how it might have affected different groups. The consequences of impoverishment following eviction would have been most severely felt by the poorer and middle income families. A number of households may have been able to remain wealthy following the evictions, as those at Mahambalawe appear to have done.

Herd Dynamics

One unusual source of data at Mkomazi was the record of cow fertility and mortality in previous years. This was collected by interviewing people about the lives of their cattle. Cattle are the subject of intense interest and women in particular can remember the fate and history of each named animal in the herd allotted to them for some time. This store of knowledge is a valuable source of information about the history of herds in an area and fertility and mortality of individual cows. Compiling these histories into a year by year record allows a sequence of herd performance to be built up (Table 3 and 4).

This method overrepresents survivors as we could only begin to ask about cattle which were still alive. It underrepresents infertile animals as we could only ask about named cattle and cattle are only named when they give birth. The mortality rates must therefore be taken as minimum estimates, and fertility rates as maximum estimates. In comparison with other areas, the tendency of these errors will be to make these indices appear healthier than they really are for Mkomazi. Poor herd performance relative to other areas is likely to be robust and not an artefact.

Fertility and mortality data are compared to other cattle populations in Table 3 and Table 4. De Leeuw and Wilson have observed that Maasai calf mortality is

### Table 2: Household herd sizes in Same and Lushoto District before and after eviction

<table>
<thead>
<tr>
<th>Year</th>
<th>District</th>
<th>Village</th>
<th>Sub-Village</th>
<th>Cattle keepers</th>
<th>TLU</th>
<th>TLU per household</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>Same</td>
<td>Kisiwani</td>
<td>Kavateta</td>
<td>12</td>
<td>11,300</td>
<td>942</td>
</tr>
<tr>
<td>1984</td>
<td>Same</td>
<td>Kisiwani</td>
<td>Kisima</td>
<td>16</td>
<td>2,402</td>
<td>150</td>
</tr>
<tr>
<td>1984</td>
<td>Lushoto</td>
<td>Kivingo</td>
<td>–</td>
<td>92</td>
<td>32,761</td>
<td>356</td>
</tr>
<tr>
<td>1995–6</td>
<td>Same</td>
<td>Kisiwani</td>
<td>–</td>
<td>26</td>
<td>633</td>
<td>24</td>
</tr>
<tr>
<td>1995–6</td>
<td>Lushoto</td>
<td>Mn’garo</td>
<td>Mahambalawe</td>
<td>10</td>
<td>1,341</td>
<td>134</td>
</tr>
<tr>
<td>1995–6</td>
<td>Lushoto</td>
<td>Lunguza,</td>
<td>Kisima,</td>
<td>10</td>
<td>101</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mng’aro</td>
<td>Mazinde</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Kisiwani Ward Livestock File, 11/10/1983.*

1 Tropical Livestock Unit is equivalent to one bovine or 6 small ruminants.
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low compared with West African pastoralists. They suggest this is due to better
calf management and provision of reserved calf pastures (De Leeuw and Wilson,
1987: 380). To keep factors relatively constant here, I have compared the data
from Mkomazi with other Maa-speaking pastoralists.

Table 3: Cattle fertility at Mkomazi and elsewhere

<table>
<thead>
<tr>
<th>Year</th>
<th>Place</th>
<th>fertility</th>
<th>n</th>
<th>Place</th>
<th>fertility</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981–3</td>
<td>Kajidao(^a)</td>
<td>0.6</td>
<td>120</td>
<td>NCA(^c)</td>
<td>0.61</td>
<td>153</td>
</tr>
<tr>
<td>1982–3</td>
<td>Baringo pre-drought(^b)</td>
<td>0.83</td>
<td>68</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1983–4</td>
<td>Baringo drought</td>
<td>0.69</td>
<td>76</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1988</td>
<td>Same(^d)</td>
<td>0.47</td>
<td>8.5</td>
<td>Lushoto(^d)</td>
<td>0.52</td>
<td>34.5</td>
</tr>
<tr>
<td>1989</td>
<td>Same</td>
<td>0.7</td>
<td>11.5</td>
<td>Lushoto</td>
<td>0.46</td>
<td>44</td>
</tr>
<tr>
<td>1990</td>
<td>Same</td>
<td>0.33</td>
<td>15</td>
<td>Lushoto</td>
<td>0.52</td>
<td>51.5</td>
</tr>
<tr>
<td>1991</td>
<td>Same</td>
<td>0.29</td>
<td>25</td>
<td>Lushoto</td>
<td>0.31</td>
<td>61</td>
</tr>
<tr>
<td>1992</td>
<td>Same</td>
<td>0.46</td>
<td>35</td>
<td>Lushoto</td>
<td>0.4</td>
<td>80.5</td>
</tr>
<tr>
<td>1993</td>
<td>Same</td>
<td>0.59</td>
<td>44</td>
<td>Lushoto</td>
<td>0.47</td>
<td>105</td>
</tr>
<tr>
<td>1994</td>
<td>Same</td>
<td>0.67</td>
<td>58</td>
<td>Lushoto</td>
<td>0.51</td>
<td>125</td>
</tr>
<tr>
<td>1995</td>
<td>Same</td>
<td>0.7</td>
<td>68</td>
<td>Lushoto</td>
<td>0.57</td>
<td>135</td>
</tr>
<tr>
<td>1996</td>
<td>Same</td>
<td>0.71</td>
<td>35</td>
<td>Lushoto</td>
<td>0.37</td>
<td>65.5</td>
</tr>
</tbody>
</table>

Note: n = number of cattle monitored for Kajiado, NCA and Baringo (82–3) and number of ‘cow years at risk’ for the data of this paper.

\(^b\) Homewood and Lewis, 1987.
\(^c\) Homewood et al, 1987.
\(^d\) This survey.

Table 4: Calf mortality at Mkomazi and elsewhere

<table>
<thead>
<tr>
<th>Year</th>
<th>Place</th>
<th>n</th>
<th>mortality within 2 years</th>
<th>Place</th>
<th>n</th>
<th>mortality within 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981–3</td>
<td>Kajiado</td>
<td>678</td>
<td>0.09*</td>
<td>NCA</td>
<td>no data</td>
<td>0.26</td>
</tr>
<tr>
<td>1983–4</td>
<td>Baringo – drought</td>
<td>no data</td>
<td>0.89*</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1988</td>
<td>Same</td>
<td>6</td>
<td>0.17</td>
<td>Lushoto</td>
<td>29</td>
<td>0.17</td>
</tr>
<tr>
<td>1989</td>
<td>Same</td>
<td>13</td>
<td>0.15</td>
<td>Lushoto</td>
<td>32</td>
<td>0.06</td>
</tr>
<tr>
<td>1990</td>
<td>Same</td>
<td>12</td>
<td>-</td>
<td>Lushoto</td>
<td>34</td>
<td>0.12</td>
</tr>
<tr>
<td>1991</td>
<td>Same</td>
<td>12</td>
<td>0.25</td>
<td>Lushoto</td>
<td>27</td>
<td>0.04</td>
</tr>
<tr>
<td>1992</td>
<td>Same</td>
<td>20</td>
<td>0.20</td>
<td>Lushoto</td>
<td>33</td>
<td>0.09</td>
</tr>
<tr>
<td>1993</td>
<td>Same</td>
<td>28</td>
<td>0.36</td>
<td>Lushoto</td>
<td>50</td>
<td>0.18</td>
</tr>
<tr>
<td>1994</td>
<td>Same</td>
<td>39</td>
<td>0.28</td>
<td>Lushoto</td>
<td>65</td>
<td>0.06</td>
</tr>
<tr>
<td>1995</td>
<td>Same</td>
<td>47</td>
<td>0.19*</td>
<td>Lushoto</td>
<td>77</td>
<td>0.18*</td>
</tr>
</tbody>
</table>

\(^*\) within 18 months only.

Source: as for Table 3.
Table 3 shows that, while calving rates at Mkomazi can approach and even exceed levels elsewhere, in general rates do not compare favourably with other populations. Calving rates were particularly low during a dry spell of 1991, and considerably lower than the rates recorded at Baringo during the first year of a drought (note that the 1982–8 figure in Baringo is unusually high as it conceals a delayed recovery to a previous to drought, see Homewood and Lewis 1987: 628).

Calf mortality figures in Table 4 show that rates in Lushoto District are on a par with those elsewhere; in Same District, however, they are similar to those of the Ngorongoro Conservation Area where high levels of tick-borne disease were recorded at the middle altitude study site. The dry year of 1991 appears to have had relatively little impact compared with that recorded in Baringo.

These data concur to some extent with interview data which suggest that eviction concentrated cattle into areas close to the mountains, where tick-borne diseases are prevalent. We observed the herd of one pastoralist, kept at Kamorei, decline from twenty cows to zero during the course of this study. This was mainly due to disease; although other adverse circumstances played a part since the household head fell ill on a number of occasions and had to pay high medical costs. Elsewhere around the reserve, individuals’ household herds declined due to wasteful selling by drunkards or profligate youths (Potkanski 1997: 102–3; Talle, 1988: 265; Spencer, 1988: 10–11, 237–8).

Milk Yields

One key indication of the importance of livestock to families’ day-to-day needs is the amount of milk used. This is less open to dissimulation than are cash sales of animals because it does not involve sensitive questions about income and it was measured directly when taken. Overall average milk yields in Mkomazi are also low compared with other locations. Milk availability averages 0.42 and 0.16 kg/reference adult/day in the wet and dry seasons respectively in Lushoto District and 0.41 and 0.26 kg/reference adult/day in Same. This corresponds to low contributions to the recommended calorie intake levels compared with other pastoral populations. If the recommended calorie intake per day is 2,530 k/cal, these figures translate to 4.7 percent–12.4 percent of the recommended intake in Lushoto and 7.7 percent–12 percent in Same. This can be compared with Ngorongoro, where dry season values average 34 percent and with Kajiado where annual averages were 48 percent of the recommended calorie intake (Homewood 1992: 71).

There are noticeable differences within the study sites. Some households had little, if any, milk for daily use, other could take considerable quantities. In Same District some men had many animals but did not keep them near their homes as there was insufficient grazing and because they felt that the disease risks were high. Women in these households would complain to us that they were unable to milk animals because they were kept so far from the home.

This strategy has been reported elsewhere. For example, Grandin has shown that rich and poor households tend to take similar amounts of milk from the herds,
even though the rich have many more animals (Grandin 1988: 11–16). She concludes that the richer households are effectively investing in the herd and leaving the extra milk for their calves. Sikana et al. report other examples, and note that when wealthy households reside in towns they leave their herds in more distant camps and the dairy economy declines in importance (Sikana et al. 1993: 10–12). The resulting shortfalls in food supply are made up by sale of stock and purchase of grain. This strategy entails splitting herds: while some animals may be retained to meet household milk needs, the rest are sent away. It allows pastoralists to take advantage of the greater productivity that mobile herds can enjoy but depends on having access to considerable labour and animals.

The strategy reflects the fact that men and women control different spheres of economic activity (Guyer 1986: 83; Hay, 1976: 90; Maddox 1991: 40). Men have the final decision over the disposal of livestock and control the proceeds of their sale. In contrast, milk is entirely controlled by women, who are responsible for milking the beasts and allocating the product, to their children, guests and husband (Rigby 1985: 148; Talle, 1988: 205, 211). By sending animals to distant camps men are denying women access to milk. This can have knock-on effects on women’s earning and expenditure (see below).

Other Livelihoods – Farming, Women’s Income and Towns

There has been a general increase in the amount of agriculture undertaken since eviction. People claimed that ‘no-one’ cultivated before the eviction. That claim is hard to refute or confirm without previous descriptions of peoples’ livelihoods. However it does appear that herds were large and may well have sufficed to meet most peoples needs so that few supplemented the proceeds from their herds with agriculture. Now, almost all families cultivate. The wealthier herders practise capital intensive farming, paying people to work their fields and investing in pumps to irrigate land. Poorer farmers are labour intensive, working the land themselves and rarely using paid labour. Livelihoods have undergone a qualitative shift following eviction (cf. Dahl 1979; Dietz 1987).

Changes are also apparent in women’s income earning. In Lushoto District we found a two-fold division. Women from wealthy households sell milk or chickens but do so irregularly. Women from poor households sell firewood, cows’ and goats’ milk and traditional medicine more often. The poorest do so every day in neighbouring villages. In Same District the pattern was more complicated. In addition to the pattern in Lushoto District there were some women who went on long journeys selling medicine in distant towns, some women needed to sell firewood or medicine because their stock were kept far away and Pare women are part of a localised dairy network which contributes considerable income. Fratkin and Smith found that different levels of involvement in sales by women was manifest in people’s diet. This is also true for the this study. The different strategies outlined above have a clear impact on families’ diet (Graph 3 and Graph 4).
Women who sell frequently
Mean weekly income: 750/-
Mean household rank: 13.6

Women who sell infrequently
Mean weekly income: 126/-
Mean household rank: 4.6

**Graph 3: Frequency of food use for women in Lushoto District in 239 meal days**

<table>
<thead>
<tr>
<th>Food</th>
<th>Itinerant Saleswomen</th>
<th>Local Saleswomen</th>
<th>Women’s sales and pastoralism</th>
<th>No sales</th>
<th>Pare Dairywomen</th>
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Mean women’s income: 1,286/-
Mean hh rank: 28

Mean women’s income: 394/-
Mean hh rank: 23

Mean women’s income: 246/-
Mean hh rank: 9

Mean women’s income: 27/-
Mean hh rank: 12

Mean women’s income: 1,192/-
Mean hh rank: 18

**Graph 4: Frequency of food use for women in Same District in 325 meal days**
Women have long traded independently in these societies and sales are valued because they provide women with their own income which they control (Talle 1988: 65; House-Midamba 1995: 86). There are dangers in assuming that women’s sales automatically means that there has been impoverishment (Buhl and Homewood 1999). Here, however, in some cases the income which women had once used for their own purposes is now expected to support the whole family.

This development needs to be seen in the context of household dynamics. It is common for men to seek to defray some household expenses, that might otherwise be met by selling animals, onto women, who have to pay for them through selling goods. There were families like this in Same District. This is similar to the cases discussed above of men keeping the herd away from the boma in order to reduce the milk offtake. As a result at Mkomazi and elsewhere the availability of milk and money from selling animals, and the respective responsibilities of men and women to provide for household needs, is hotly contested. Where there is no herd, or where it is greatly reduced, there is less room to manoeuvre. At Mkomazi, currently more of the responsibility appears to fall on the women. The evictions are blamed for causing the poverty that makes this sort of activity necessary.

Despite the hardship mentioned above, very few evictees have sought urban livelihoods (Dahl 1979: 212–13; Hogg 1980: 307–8). Women do go to towns to sell medicine, but it involves only a transient life in towns. Only one young man was reported to have gone to the towns to find work as a watchman and a survey of 1,032 siblings revealed only two in non-rural occupations (Brockington 1998). Instead, people sought work servicing the rural economy, selling clothes, veterinary medicine or livestock or employment in Non-Governmental Organizations (NGO) or building new NGO headquarters. This, however, is just a start. The numbers of people working in towns from Mkomazi will probably steadily increase.

Opposition to Eviction

There is continual passive resistance to the reserve’s legislation and flouting of its laws. Although fines make Mkomazi less attractive to pastoralists than it once was, it is still important and pastoralists repeatedly graze there illegally. This is especially common for pastoralists in the Ruvu valley who like to move east of the Pare mountains in the short rainy season, and who still set up wet season camps inside the reserve.

There is also more organised opposition to the eviction from the Maasai and Parakuyo pastoralists. Following their eviction, and having experienced considerable stock losses, these pastoralists wrote variously to the Prime Minister, the Regional Commissioner, the Minister of Home Affairs and the Government Party Headquarters in Dodoma. Their appeals brought no real change. In 1992 the late Henry Fosbrooke visited Mkomazi as a consultant for the International Institute for Environment and Development (IIED) (Fosbrooke 1992). He contacted the Legal Aid Committee of the University of Dar es Salaam. In September 1994 the
Legal Aid Committee had prepared its case against the evictions (Juma and Mchome 1994). In the High Court at Moshi cases were taken out in 1994 and 1995 against the Ministry of Tourism, Natural Resources and the Environment.

Judgement on the case was given in June 1998. The judge held that the eviction of the plaintiffs was unlawful but the eviction took place over ten years ago and has therefore ‘been overtaken by events’. She concluded that ‘an order for restoration would be impracticable in the circumstances’. An appeal has been lodged. The plaintiff’s lawyers claim that the judge erred in law by taking extraneous matters into account when she decreed that a restoration order was impracticable.

Awareness of the Problems

No account of the problems that pastoralists have experienced would be complete without mention of how they are portrayed. There are two common imbalances. The first is that where people’s problems are known and recognised, pastoralists’ concerns have dominated to the detriment of other groups, particularly the Pare and Sambaa agro-pastoralists (Fratkin and Wu, 1997: 59–60). This paper hardly redresses that balance, but to do so would be beyond my expertise and the focus of this journal collection. I can only state that pastoralists are not the only ones to suffer, and that those who used to keep bee-hives, gather fuelwood or collect wild foods inside the reserve have also faced adversity as a result of eviction (Homewood et al. 1997; Kiwasila and Homewood 1999).

The problems that I have detailed are just a subset of more general problems in the relationships between the reserve and its neighbours. The second is that the problems resulting from eviction are inadequately treated in literature produced by conservation groups. I wish to focus on this in more detail as it is more germane to the issue of conflicts between conservation and people’s needs.

At the centre of the conservation effort at Mkomazi is a campaign to restore the reserve as a wilderness. Given the success of moves to evict and exclude people the reserve is consistently portrayed as a corner of Africa saved from degradation and brought back from the brink of destruction. The campaign, and the images which accompany it, rest on ideas of degradation and wilderness which have been questioned in detail elsewhere (Brockington and Homewood 1996; Western 1994: 18; Turton 1987: 180; 1996: 107; Anderson and Grove 1987: 4–6; Adams and McShane 1992). Here it is important to describe how the campaign deals with the experiences of some of the reserve’s neighbours.

Sometimes the problems people have experienced are described as nothing unusual or glossed over. For example the chairman of the GAWPT (UK) has suggested of the reserve’s neighbours that:

The lot of the local villagers is no better and no worse than that of most of the rural population in Tanzania (Eltringham 1997: 30).

The problem with this particular claim is that it was based on regional health statistics dated from 1982 and 1972 (Eltringham to Lane 4/11/97). These are not
good data to use. The impact of eviction cannot be assessed from data gathered prior to its occurrence, and regional statistics are not appropriate to monitor effects at the local level.

On other occasions the political consequences of the evictions is played down. For example, an evaluation of the Rhino sanctuary, made before the animals arrived, reported that:

There appears to be limited resentment towards the Mkomazi Game Reserve by the Msaai (sic), as they were well aware that their permission to graze within the reserve was only a temporary one … The more numerous Wapare and Wasambar (sic) tribe members within the Kisiwane (sic) and Usambaras areas were never historically associated with the reserve and thus have no negative feelings towards it … it would appear that the introduction of black rhinoceros into the M[komazi]G[ame]R[eserve] would be … little affected by the limited to dwindling negative feelings towards the reserve by the surrounding communities. (Knight and Morkel 1994: 6–7).

These remarks were based on a brief visit spent with Outreach Programme workers. The reported remarks of Tanzanian wildlife officials about the problem of people’s claims are more telling. They told South African counterparts that the court case dispute was being pursued by Maasai who originally came from Kenya, and that it did not have the support of the local population of Mkomazi (Koch 1997: 109).

In a similar vein the campaign often involves making misleading claims about people’s history and rights in the area. For example, fund-raising material of the Trusts supporting the species reintroduction states that evicted people were ‘not indigenous to the area.’

Overall people’s needs and problems have not been well represented. It is arguable that they should be well represented if the practices of community conservation are to work at Mkomazi as Community Conservation surely requires an adequate understanding of people’s needs. On the other hand that may not be necessary. Whatever ideals motivate it, in practice Community Conservation is a political exercise. It could be possible just to ignore the impoverishment at Mkomazi. Pastoralists are the minority in the area, and marginalised within the state; there may be no pressing political reason to consider their needs.

**Conclusion: the resilience of pastoral societies.**

Some accounts of change to pastoralism offer doom-laden assessments of their futures: they are groups bound to disappear, or to be marginalised, or facing crisis (Bonfiglioli 1992: 3; chapter one, page 47–8; Péron 1995, vol II: 231; Graham 1989: 185). I suggest these observations err in two ways. First, they offer broad generalisations about diverse fortunes and responses; second they are
overwhelmingly negative and portray little of the resilience that can accompany people’s responses to land loss.

At Mkomazi I was working with a great variety of families pursuing varied livelihoods with different strategies to enhance prosperity while minimising the risk of loss. There were Maasai and Parakuyo herders splitting their herds into several different locations in Kenya and Tanzania and there were Pare herders sending animals down towards the coast. Women were selling firewood every day in Kisiwani, or travelling far to sell medicine, or selling the milk from animals which they had lobbied their husbands to bring back to the boma. There were old men dependent on stock loans from relatives after profligate sons had wasted their inheritance; there were young wives reliant on selling milk from borrowed goats; widows who sold medicine and beadwork on the one hand and managed their herds with their sons on the other. Pare farmers bought weak animals from Maasai herders during the dry season, and toiled continuously to ensure that their rain-fed farms did not succumb to weeds. Alcoholics sold their animals recklessly and their children ran away from home. There were vulnerable individuals with few relatives to rely on; stock-poor families who depended on wage labour; aging families who had to pay the cattle bridewealth of their sons’ weddings, and others who experienced new-found prosperity when their daughters were married. There were stockless dependents living in other people’s bomas (homesteads), rich women whose adult sons controlled many cows and their poor co-wives who only had smallstock. There were wealthy elders renting irrigated rice fields, and poorer youths gleaning from neighbour’s lands. There were men engaged in stock trading, or buying improved stall-fed cattle, while others invested wages in goats, or sought careers with Maasai NGOs.

Amidst the diversity, two features stand out. First, that people now are using similar strategies tried in the past (Anderson and Johnson 1988). Second, that the experience of impoverishment is mediated by other aspects of pastoral life. It has been intensified by the expenses and opportunities that people face at different stages in their, and their families’, lives. It has been shaped by and played out along tension lines between male and female-controlled economies.

This research therefore supports a number of authors who have emphasized the resilience of pastoralists’ coping strategies. Waller criticises ideas about marginalisation of pastoralists under capitalism for the way they fail to consider the agency of the pastoralists themselves. He argues that this leads to a one-dimensional view of pastoralists as ‘victims’. What is needed instead is to approach things with the pastoral viewpoint foremost in mind (Waller 1986). Turton has shown that the Mursi experienced devastating losses in the droughts of the early 1970s but argues that the Mursi’s response to drought and impoverishment then and subsequently shows ‘resilience, technical sophistication, inventiveness and sheer human determination to survive’ (Turton and Turton 1984: 178). He criticises some ideas about displacement as being ‘sedentarist’ and argues that we need to see displacement as part of a longer history of movement,
migration and adaptation that is normal for these areas. Fratkin argues that ‘things do not necessarily fall apart’ for the Ariaal, despite the effects of drought and development programmes (Fratkin 1991: 125). Hogg writes about a ‘crisis in pastoralism’ resulting from the changes to the world around them and loss of land, but sets that in the context of pastoral resilience in the face of change, and of great variety of responses by different pastoral groups (Hogg 1992: 133, 135).

Enforced change can have serious consequences; but it is also clear that pastoralists’ resilience is manifest in hardship. At Mkomazi, the eviction occurred because the evictees were politically weak. Yet it is despite the imbalance of power that protest against the moves has been mounted. It is in the face of resource loss that livelihoods are adapted and coping strategies formulated. The former residents of Mkomazi are at once impoverished but resourceful; weak but strong.

Acknowledgements

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Notes

1. The Parakuyo at Mnazi were called ‘Kwavi’ in the archival records, and the term can also be heard today. This suggests that this group derive from the ‘Kwavi’ that Krapf and others described in this area in the nineteenth century. The term now has negative connotations however and I use the current appellation: Parakuyo.

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Résumé

La conservation, l’expulsion et modes de subsistance: les conséquences pour les pasteurs expulsés de la réserve des animaux sauvages de Mkomazi en Tanzanie

Bien que les pasteurs nomades d’Afrique de l’Est aient perdu des terrains considérables durant ce siècle, la manière dont ces pertes ont influencé leur mode de vie a rarement été prise en considération. Dans cet article, l’auteur présente le cas des populations pastorales expulsées de la Réserve des Animaux Sauvages du Mkomazi en Tanzanie. Il documente l’appauvrissement qui en fut la conséquence, la résistance de la part de la population ainsi que le changement des modes de subsistance.

Resumen

Conservación, desplazamiento y formas de subsistencia: el impacto de la expulsión de los pastores de la Reserva de Fauna Silvestre Mkomazi, Tanzania

A pesar de que las poblaciones de pastores del Africa oriental hayan sufrido una pérdida substancial de tierras de pastoreo durante este siglo, el impacto que tiene esta pérdida sobre el nivel de vida de los pastores, no ha sido analizado de manera exhaustiva. El presente trabajo trata el caso de los pastores expulsados de la
reserva natural de Mkomazi en Tanzanía. Documenta el proceso de 
emprobecimiento de los pastores, la resistencia de las comunidades y los cambios 
que han sufrido en su nivel de vida.

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conservation policy on livelihoods there. He is researching the consequences 
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