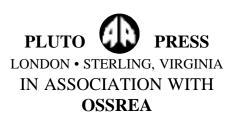
AFRICAN PASTORALISM

CONFLICT, INSTITUTIONS AND GOVERNMENT

Edited by M.A Mohamed Salih, Ton Dietz and Abdel Ghaffar Mohamed Ahmed

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Introduction

M. A. Mohamed Salih

This volume is the outcome of an international conference on 'Resource Competition and Sustainable Development in Eastern and Southern Africa' organised by the Organisation of Social Science Research in Eastern and Southern Africa (OSSREA) and the Institute of Social Studies (ISS) in October 1999. The Research Section of the Netherlands Directorate General for International Cooperation (DGIC) funded the research project and the conference. The conference organisers decided to publish the papers emanated directly from the research project and those given in the conference in order to highlight issues originally not included in the research project. The papers provided an informed debate based on the authors' and policy makers' profound expertise in the academic and policy debate on sustainable development in eastern and southern Africa. Understandably a research project on pastoral resource competition is dominated by presentations on this theme.

The two main themes that have emerged from the workshop are particularly relevant to the current debate on sustainability: institutions and governance and their pivotal role in implementing sustainable development. Two novel ideas have prompted our decision to publish this volume and share the experience, and insights it brought to the fore with a wider audience are as follows.

- Instead of grappling with procedural and definitional issues, glorifying or rejecting sustainable development outright, the volume tried to answer the question whether conflicts are structurally inherent in sustainable development thus ushering in processes that might undermine the very objectives of sustainable development.
- Sustainable development is an implicit individual, group or policy which masks institutions that have to deal with natural resource use, allocation, administration and management. In fact, peasants and pastoralists are well aware of the need to use their resources sustainably, not only for current, but also future, generations.

Three assumptions inform the two questions posed by the chapters and the mutual consequences of resource competition and sustainable development on society and on each other. First, resource competition and conflicts amid a shrinking environmental space, changing production patterns and increasing populations are ongoing processes that may or may not be enhanced by superimposing sustainable development strategies on them. The possibility that such strategies would fail is certain if sustainable development objectives are pursued without proper consultation and peoples' participation in their conception and implementation. No matter how noble sustainable objectives are, as a strategy they impact differently on different resource users and managers and their implementation involves a multiplicity of stakeholders, with varying objectives and interests.

Second, sustainable development encompasses an all-embracing ideal that requires the structural transformation of the political, economic, technological, reproductive, ecological and international trade (WCED (World Commission on Environment and Development), 1987, p. 65) before its objectives are transformed from theory to practice. Structural transformations cannot just occur without impacting on some vested interests or reconfiguring the existing power structures that sustain them.

Ironically, WCED describes sustainable development as a strategy 'to promote harmony among human beings and between humanity and nature'. In January 1997 delegates from eastern and southern Africa met in Nairobi, Kenya at the invitation of the Earth Council, United Nations Environment Programme (UNEP) and Africa 2000. The objective of the conference was to review their country's experiences of sustainable development five years after the Earth Summit 1992, better known as Rio+5. In their review of the major constraints confronting the implementation of sustainable development, the delegates mentioned critical issues that, we believe, are of significant relevance to this introduction:

First, some problems at the national level include poverty, illiteracy, nepotism, intellectual disempowerment, civil strife – conflicts and lack of peace (for example in Rwanda, Burundi and Sudan). Environmental issues take a backseat in the face of war, lack of preparedness, insufficient communication channels, insufficient resources, lack of political will and conviction to develop, lack of participatory mechanisms and differing emphasis on various conventions and agreements by governments. Second, capacity building involves giving people access to resources and ensuring that they utilise them effectively and efficiently. It includes training and educating as well as organisational and institutional development, aimed at all levels and abilities. (Earth Council, 1997, p. 4)

Essentially, the delegates argue that there has been very little difference between Rio+5 and Rio-5 to the extent that some old problems have persisted while new ones have emerged. Although the Earth Council has women and indigenous peoples and minorities as priority areas, pastoral and nomadic peoples have hardly surfaced in its deliberations. This 'business as usual' attitude has in effect undermined the sustainability ethos inherent in rural communities' centuries-long capacity to manage their resources.

Third, local peoples treat global development agendas and policies as competing agendas that impose on them their own governance and institutional arrangements. In situations where sustainable development policies have not even been heard of, the difference between development that is sustainable and development that is unsustainable becomes blurred. Essentially, while most of natural resources in Africa are in the hands of small-scale peasants and pastoralists, the environmental governance regimes prevalent in the continent are highly centralised. National and regional governance, and most recently, global environmental governance has more influence on how the natural environment is managed than the local populations. As a result of this skewed governance regime, two contradictory tendencies have emerged:

- the concentration of power and authority in the hands of a few wealthy and politically powerful elites who also control the state apparatus. The power and authority vested in the power-elite is often used or misused to shift resources from the local populations to the state or private interests. They have likewise been used to take important decisions related to natural resource and conservation, often not in congruency with the aspirations and perceptions of the local populations.
- the concentration of the actual management of the natural resources, except minerals and oil, in the hands of the peasants and pastoralists who make up the majority of Africa's populations.

More often than not, well-intended socially and economically justified state interventions have come to a coalition course with local people's interests and as a result have contributed to resource conflicts. Obviously resource conflicts undermine sound development objectives and derail people's energies from pursuing sustainable livelihood activities to a vicious circle of struggle for regaining these very livelihood sources. The apparent absence of avenues for political expression and the presence of highly decentralised decision making institutions have not made things easy either. Even in cases where genuine decentralisation to the lowest level of governance institutions has taken place, it has not been accompanied by devolution of power over the management, allocation and administration of natural resources. The central governments in Africa have reserved sufficient powers of jurisdiction to intervene, including the eviction and denial of customary rights for the implementation of projects for 'national interest'. Decentralisation without proper power shift, devolution of authority and resources to local-level institutions has failed to strengthen civil society, empower excluded communities or enhance local communities to control their resources.

Although sustainability is akin to sustainable development, and this concept existed much earlier, the two have to face up to formidable challenges from interests and well-entrenched institutional frameworks that govern the relationships between society, economy, polity and the environment. However, in my view, while sustainable development may look to many African peasants, pastoralists and forest dwellers as an imposed project, they are very much at ease with sustainability as a local response to balancing people's needs and their resource base. Pastoralists have been doing this for centuries by adopting migratory patterns compatible with the seasonally variable rainfall and pasture. Cultivators have adopted similar strategies through shifting cultivation and the like. The increasing and sometimes oppressive demands (taxes and cash crops such as cotton) or development interventions imposed on small-scale producers have distorted these strategies and made sustainability impossible. If the unsustainability problems are partially caused by development interventions, then sustainable development makes sense only if it sets out to cleanse development of its unintended social cost.

The problems associated with the sustainability conundrum or the puzzling complexity that has eluded social and natural social scientists is hardly escapable in the African context where a crude distinction between care for the environment and efforts to secure livelihood is not possible. Head (1998, p. 4) defines sustainability, generally in terms of the creation of:

a society instinctually compatible with its environment bearing in mind: 1) The recognition of long-run impact of resource and environmental constraints, patterns of development and consumption. 2) Concern for the well-being of future generations, particularly in so far as this is affected by their access to natural resources and to environmental goods. Considering the low level of technological development in Africa in general and pastoral societies in particular, it is easy to assume that they are instinctually compatible with the environment. Such an assumption has long been proved erroneous and images of stricken pastoral societies in the Sahel are far from compatible with the environment, which is generally inhospitable, but often produces surplus harvests only to be squandered by market or entitlement failure.

Local environmental sustainability has become uncertain, not because the local communities have relinquished their concern with the environmental imperative, but because in reality the policy environment lends itself neither to sustainability nor sustainable demands. While policy makers are expected to deliver alternative administrative, economic, political and technical strategies and interventions, they are constrained by lack of human and financial resources, weak institutions and ill-defined governance responsibilities. These inadequacies shed doubt on the incapacity of governance and institutional arrangements alone to overcome the constraints associated with the uncertainty of policy outcomes and the unsustainability of the livelihood conditions associated with it.

Therefore, in today's world, no quest for sustainability is simple or predictable within its immediate confines and present historical experience. The tendency towards complex sustainability even in seemingly simple systems is not surprising. In Clayton and Radcliffe's (1996, p. 12) words:

In general, complex systems generate outcomes that depend on numerous interactions. As a result, many complex systems are highly sensitive to the precise starting conditions and loading of factors.

In other words, sustainability systems whether in pastoral, peasant or the world economy are susceptible not only to immediate policy and technological interventions, but also to similar or other interventions that took place during several bygone decades. In the case of peasants and pastoralists, colonialism, the Cold War confrontations and other external factors do maintain certain degree of presence in their current attempts to create a liveable world.

In essence, sustainable resource management among peasants and pastoralists is not only a desirable official policy option, but is an integrated aspect of the production and reproduction of the livelihood conditions already practised by them. While there are several explanations as to why the unsustainability of local production systems is accelerating, most of the answer is found in the dismantling of property rights regimes that have given local communities a sense of tenure security. The contradictions inherent in sustainable development make it difficult to reconcile the interests of the rich and powerful with those of the poor. Redclift (1992, p. 46) suggests that a framework for understanding the power relations and competing interests in resource management and control should answer at least three questions:

- 1. How do legal and institutional changes limit or enable groups to engage in particular forms of environmental action?
- 2. How does the recomposition of power relations affect the political priority given to more sustainable resource management?
- 3. How do struggles over resources shape the paths of different social groups?

Redclift's view is an invitation to a dialectal understanding of the fact that the call for empowerment and participation will not be attained if we fail to understand that 'the articulation of demands governing the use of natural resources inevitably means the exercise of power, and resistance to it'.

The exercise of power outside a responsive institutional framework legally (or customarily) responsible for the disposition of power often ushers in authoritarianism, resistance or outright rejection. This is because:

institutions hold society together, give it a sense of purpose and enable it to adapt. It applies both to the structures of power and positional relationship – as found in organizations with leader, chief, information flows, resources for mobilization and the usual distortions of communication to suit their mandate. (O'Riordan and Voisey, 1998, p. 34)

To clarify this, I quote Jordan and O'Riordan (1997, p. 12) to make this point:

Institutions embody rules that encapsulate values, norms and views of the world. Rules define roles and the social context. Institutions determine what is appropriate, legitimate and proper. They define obligations, self-restraints, rights and immunities, as well as the sanctions for unacceptable behavior. Institutions also define the game of politics, establishing for players both the objective and range of appropriate tactics or moves. Two other characteristics that derive from the above definition of institutions are:

- they evolve slowly, over time
- they are changing and constantly renegotiated.

Jordan and O'Riordan's conceptualisation of institutions' objectives and functions speaks well for what 'traditional' institutions investigated in this volume were able to deliver in the past. As Opschoor's chapter indicates, institutional failure is primarily about the inability of institutions to deliver the range of values, norms and expectations that they are supposed to meet.

As the next section of this introduction will show, there is ample evidence of formal and informal institutional failure. The former is a result of the mismatch between local people's organisational culture and that of the state, and the latter is a result of excessive state intrusion and marginalisation of local institutions. While eroding traditional or rather local governance institutions, state-sponsored institutions fail to provide a viable alternative. The result is the accumulation of local crises which often develop into regional conflicts, with wider repercussions than ever before.

STRUCTURE OF THIS BOOK

The chapters of this book are grouped in three parts. The first deals with universal and regional sustainability issues particular to eastern and southern Africa. The second deals with case studies, largely drawn from pastoral and agro-pastoral societies and their relations with peasants, traders, game parks, large-scale mechanised agricultural schemes and other development interventions. The third part deals with gender issues in the new pastoralism and the consequences of war on resources and subsequently on women and men.

Each chapter provides sufficient background to a specific sustainability context and then builds up the argument using field data, supplemented with reinterpretation or critique of opposing views about the sustainability of livelihood and environmental conditions therein. The chapters each conclude with a note on the future of pastoralism or attempt to answer the difficult question of what can be done in terms of empowering pastoralists or advocating alternative policy options.

In addition to the introduction, Opschoor's chapter is developed from his opening speech that sets the scene for the discussion that

follows and therefore it has a bearing on most of the chapters. He argues at the theoretical level that the unsustainability of environmental use and resource management can manifest itself in the form of degradation at spatial levels ranging from local to global. Often, such manifestations are the result of causal factors operating at the associated levels, but this should not be taken as the normal situation. To the contrary: unsustainability can also reflect the impacts of driving forces that operate at different spatial levels - typically the higher ones, even if the manifest unsustainability is at the local or regional level. Environmental and other problems may also manifest themselves at the global level though their origins may be very local, or region specific. Their solution may require a sub-global approach because the authority to address these problems normally is at those lower levels, countries, or regional associations of countries, enterprises, non-governmental organisations (NGOs) and individuals. Also, vulnerability to environmental degradation or the vulnerabilities of socio-economic systems associated with degradation or its mitigation may differ across regions, countries, groups and individuals.

Darkoh and Mbaiwa's chapter combines a complex situation that involves wetlands, pastoralism, wildlife, cultivation, tourism and other resource management systems and a strong theoretical base. Their starting point is to question the applicability of the tenets of sustainable development by using a stakeholder approach. Darkoh and Mbaiwa argue that conflict between various stakeholders undermines sustainable resource management in Botswana. State institutions charged by government with wildlife control are highly centralised, thus concentrating power in the hands of officials insensitive to local demands. The local communities in wildlife areas view the latter negatively. Local communities are not allowed direct wildlife benefits from protected areas or to hunt freely in their communal areas thus view the police department as being part of the establishment denying them access to wildlife use. According to Darkoh and Mbaiwa, state control of wildlife resources is inadequate, especially since most of the control emanates from urban centres, which are dialectically and geographically detached from the rural areas. This, therefore, suggests that effective management and monitoring of wildlife resources requires the involvement of those living within the resource areas because they are best placed, and could be economically motivated, to monitor it effectively on a daily basis.

According to Helland, pastoralism as a way of life in eastern Africa has outlived its own well-established successes and that pastoral societies are now locked in a downward spiral of ecological crises, famine, dependency and permanent destitution. The outcome of these processes can only be the disappearance of pastoralism as a way of life. Pastoralists in eastern Africa today have become permanent beneficiaries (as the NGOs are fond of calling them) of various famine relief schemes. The once much-admired, proud, self-contained and fiercely independent pastoralists are today conceptualised, particularly in the development lexicon, as helpless paupers and perpetual famine relief clients. Pastoralists have long specialised in survival on marginal lands; these days they are being pushed to the margins of larger society in a social and political sense as well. Pastoralists' loss of economic autonomy and their relegation to the famine relief camps has silenced them and denied them influence over their own situation. In a nutshell, pastoralism in its current form and within the current state and NGO interventions is not sustainable. The message of Helland's chapter is that only pastoralists can empower themselves as decades-long interventions have failed to deliver them either development or sustainable resourcemanagement systems. In fact, according to Helland, development interventions have aggravated the potency of local institutions and coping mechanisms. Probably the third or fourth generation of pastoral development should be about enabling pastoralists to envisage and practice their own quest for self-development.

Gebre's chapter suggests that, in the competition for natural resources in the Awash Valley, Ethiopia, pastoralists constitute a politically and economically marginalised minority. The state sponsored development policies biased towards developing large-scale mechanised farming and crop cultivation and against the less controllable, more mobile pastoral groups. This state of affairs has not only made pastoral lands extremely vulnerable to encroachment and appropriation by outsiders, but also drastically brought about undesirable transformations of resource use accompanied by intense competition for resources. Gebre suggests this constitutes the principal cause of increasing interethnic tensions and conflicts as well as the deterioration of the ecology in the region. Gebre is of the view that an extensive network of conservation areas for game/tourist parks aggravates hostilities between the nomadic pastoral groups in this region. For instance, between two divisions of the Afar, Debine and Weima, on the one hand the Karrayu, on the other, conflicts were intensified as the Afar encroached further south into the Karrayu territory following their displacement from the north by the development of concession agriculture.

Muhereza argues that one of main constraints is the availability of adequate and reliable water for livestock throughout the year. For this to happen, each beneficiary of the ranches restructuring should be allowed access to adequate water throughout the year for livestock. Considering

the topography, climate and run-off rates in the schemes, valley tanks and dams alone might not cope with the demand. The 1998 and 1999 experience of the construction of valley tanks and dams under the Livestock Services Project (LSP), which could not collect any water, is all too clear. This therefore calls for the consideration of alternatives. In this regard, Muhereza questions whether sinking boreholes to tap water reserves below the surface has not been taken as a serious alternative. Although even such a change in strategy might not provide a long-term solution for the acute water scarcity on the ranches, a more sustainable, but more costly undertaking involving the construction of water pumps could be possible for the gravitational flow of water to various ranches. However, the biggest problem is the expansion of crop cultivation as a strategy to encourage the cattle keepers to appreciate the value of the land has a number of limitations as a form of intervention. The restructured ranches were divided into units of different sizes, with different resource potentials. Since the ranch owners had the opportunity of determining which parts they retained, they ended up with the best options. The majority of the former squatters who were settled on the restructured ranches normally ended up with potentially poor sections of the former ranches. Apart from the problem of greatly fragmenting land whose productivity (a function of soil structure and texture, and rainfall patterns) is considered marginal, this policy is unlikely to stem conditions that resolve some of the problems associated with cattlekeeping in the ranching schemes before the restructuring of the ranches. In essence, the rancher-pastoralist dichotomy raises at least two questions, both of which are concerned with sustainability:

- the question of equity versus economies of scale
- the resource scarcity (land in this case) issue versus population growth and an expanding demand for food.

Muhereza's chapter shows that the current policies are under immense pressure to satisfy these seemingly contradictory objectives to no avail. The need to invoke people's capacity through truly participatory methodologies leading to their empowerment is particularly important in relation to land distribution, a challenge that all stakeholders (pastoralists, ranchers and government institutions) should live up to.

Babiker attempts to elucidate terminological implications for the welfare of pastoralism and its sustainability. According to Babiker, the emphasis on herder-farmer or its reversal and even concepts such as agropastoralism do have significance. That significance is not only at the discourse level, but also at the practical level. He argues that the diversity and multiplicity of resources can be mapped out and important questions associated with access and control, such as how claims are contested, negotiated and settled, and who is involved, can be raised to negate rigid typologies. Although such postulates can ease the burden of moral responsibility, they hardly match up to their prudent claims of easing the pastoral suffering. Babiker charges that on many an occasion this burden and the associated populist sentiments have, in the process, seriously undermined the findings and the conclusions of high-quality research. Above all, murky discourse results in contradictory, and at times conflicting, policy goals and objectives as the herder/farmer dichotomy often does. In the case of the Dar Hamar region, the subject of Babiker's chapter, he warns against being entrapped into categories and distinctions that have little to do with the complexity and wholesomeness of pastoral communities that are not even entirely pastoral.

Dietz and his colleagues present a very persuasive argument in which they redefine sustainability of pastoral production along two axes linking society, environment and herd. The social dynamics of pastoralism create two imperatives: dependence on the household for labour and dependence on the herd for food and cash. However, pastoral commoditisation, a process in which the utility value of assets, goods and services increasingly changes, offers the possibility of conversion from herd to grain or cash, and vice versa. On the second axis sustainability hinges on the conversion of meat and grain into calories at various pressure points determined by a multiplicity of factors, including not only the natural environment, but also the political economy within which these processes take place. The wider implication for resource competition here is that the material values as well as non-material values operate to offset the social as well the capital deficit that may accrue from a set of institutional, market or production failures. Implicit in the argument raised by Dietz and colleagues is that resource competition is increasingly informed by market prices determined outside the pastoral society. The commercialisation of pastoral production and its operation within a wider regional context shows that there is a nexus between global processes and local realities that are increasing unravelling. Pastoral societies are under increasing pressure to reconcile value preference to certain types of foods and their nutritional values as well as the market values they seek to realise.

As the case of the Afar in the chapter by Kassa shows, land is a critical factor in internal conflicts and wars with their neighbours and regional resistance movements like that of the Afar Liberation Front (ALF). The Afar case serves to demonstrate the gravity of the impact of government and international development policies at local level and failure to recog-

nise pastoralists' land rights and resources, never more so than in recent decades when land rights of Ethiopian pastoralists began to undergo rapid transformations. The principal factors are land policies and development programmes of the government. These include the alienation of large areas of flood-fed and dry-season prime grazing lands for the establishment of large-scale commercial farms, for game parks and other programmes, and the creation of closed Tribal Grazing Reserves which led to a resource scarcity that endangered the survival of pastoralists and small farmers. These encroachments upon the land and resources of pastoralists by the state resulted in local responses such as sedentarisation, the engagement of pastoralist households in non-pastoral pursuits and the weakening of traditional authority, as a result of loss of control of the land and resources of the group. In addition, the encroachment by outsiders and by their own farming people internally, has resulted in an increasing reduction of the resource base and scarcity in pastoral areas. This has resulted in and encouraged the involvement of pastoral people in intensified local, regional and national level competitions and conflicts around the questions of access, use and tenure rights to land and land resources and their management. All these developments have increased vulnerability to occasional or periodical climatic changes, outbreak of epidemics (livestock and human) and droughts. Not surprisingly, conflicts over natural resources are prominent among pastoralists, not only between different ethnic groups, but also between the same ethnic groups and clans. Shortage of feed, animal diseases, marketing, political instability and insecurity are the other constraints. Market failure due to unavailability of markets locally and absence of international markets has contributed to the prevalence of diseases. The role of camel production as a food system will continue despite overgrazing and land degradation by cattle and small ruminants in the arid and semi-arid environments and as the human population increases.

Ahmed, using his long experience of the study of pastoral interaction with large-scale mechanised schemes owned by private wealthy cultivators, paints a picture of faulty policy prescriptions that have contributed to the predicament of pastoral society in the Horn of Africa. The case of the Rufa'a al Hoi of the Blue Nile is a testimony to how pastoral societies are engulfed in a bitter struggle between governments and liberation fronts as well as among themselves. The Sudanese state is party to the conflict in two ways: the development of large mechanised schemes at the expense of local communities has contributed to the enshrining of the environmental space available to subsistence producers; this has subsequently contributed to conflicts between subsistence pastoralists and cultivators as well as the owners of the large-scale mechanised schemes. The war in Southern Sudan has aggravated the situation, leading to excessive militarisation thus transforming the conflict from traditional warfare to modern conflicts in which pastoralists have divided their loyalty between the government and the rebel forces of their own tribal militias.

Ahmed's chapter has a much wider relevance to the myriad of conflicts in the Horn of Africa, which in the light of this contribution are fuelled by conflicts over resources. As Gebre has suggested in this volume, conflicts over resources are not only interethnic, they are also intra-ethnic conflicts and explaining them away as a result of a heightened clash of cultures does not hold much ground.

Baxter, a veteran scholar of pastoral studies, concludes his overview of the pastoral conditions with a moving statement, with particular reference to the Borana pastoralists whom he has studied for more than half a century. He declares, 'If Borana pastoralism is any guide, the main threats to pastoralism continue to be the end of the commons, privatisation and alienation of water and grazing and, most importantly of all, restrictions on their freedom to move in search of water and pastures in desperate times. They can only be resilient and rebuild their herds if they are allowed to move in emergencies to water and grazing. If not they will continue to be crowded out and the arid lands will revert to ungrazed wastelands.' Researchers involved in the project from which this book emanated, particularly the case studies of Sudanese, Ethiopian and Ugandan pastoralists, share Baxter's view.

El Nagar's chapter depicts the daily lives and struggles of migrant pastoral women to the urban centres in the Sudan by showing how shifts in production from animal husbandry to wage labour or piecework affect women's and men's lives. El Nagar uses ethnographic case studies to describe and explain the adaptive strategies of pastoral migrants in squatter settlements of Omdurman town in the Sudan. The chapter is written from a gender-sensitive perspective giving special attention to coping mechanisms among both men and women. She distinguishes between two types of urban pastoral communities in terms of the survival of the destitute, survival success and failure and success in taking advantage of the limited range of employment, social services and income-generating activities. Women's workload has increased and in most cases they have become the only breadwinners. In El Nagar's view, the remarkable resilience with which pastoralists have made their way to the urban centres reveals that they do have their own perception of development. It is apparent that the pastoralists' main agenda for development is to maintain the urban quality of life with social amenities and alternative career patterns including an improved urban-based pastoral production system.

It is clear to all pastoralists, even those who are outside of the system, that survival can only be achieved by secure undertakings in both the urban and local setting, not just one of them. To consider the pastoralists' agenda seriously requires a better understanding of the predicaments constraining the possibility of improvement in the current patterns of urban adaptation. The pastoralists themselves as the main actors and stakeholders should be given the lead in identifying their development priorities and expected contributions.

Doornbos deals with research policy in situations of resource scarcity and post-conflict reconstruction in Eritrea and Somalia, two countries gradually emerging from prolonged conflicts. He argues for the need for institutional mechanisms that facilitate peaceful transition from rehabilitation to development. This reconstruction according to Doornbos should be built on a variety of options among alternative priorities and agendas reached through participation rather than top-down approaches. In Doornbos's view, such mechanisms should be adaptive and mindful of the need to address competitive claims and actions tailored to respond to varying conflict and post-conflict reconstruction. The message from Doornbos is that conflict is not permanent and therefore thinking of peace to manage resource scarcity for development is an obvious option for pastoralists and policy makers alike.

In concluding this introductory chapter, I refer to a couple of points raised by Opschoor.

- In situations of conflict over natural resources, and of environmental insecurity generally, the usual proposals for solutions are: technological development which tries to raise productivity levels; and/or outwards expansion of the environmental space.
- Economic diversification is often not possible because of the marginality of the physical environment and the low degree of economic development of the communities concerned. That leaves the intensification route.

Apparently, both points hold promise for pastoral societies, particularly Opschoor's remark that 'other difficulties such as failing markets and fixes at the level of power structures' in situations of insecurity and scarcity entail the need for much profounder reforms, including institutional ones in particular.

PASTORALIST PERSPECTIVES

In order to examine some of the claims made by researchers and policy makers about the pastoral conditions, the Organisation for Social Science Research in Eastern and Southern Africa (OSSREA) organised the 'Resource Competition and Sustainable Development in Eastern and Southern Africa' conference with the support of the Research Section of the DGIC. The aim of the conference was to bring together pastoralists, policy makers and researchers from the areas studied by the pastoralists and where pastoral development projects had been implemented. The conference provided a platform for an open policy dialogue and exchange of knowledge about how the parties perceived each other's roles in the development process. Another aim of the conference was to give pastoralists the opportunity to articulate their own problems and present them to the conference participants in their own words, which were then translated for the audience.

The discussion revealed that a large gap still exists between pastoralists' perceptions of their realities and those held by researchers and policy makers. For instance, pastoralists were interested in the development of reservoirs similar to those discredited during the 1970s and 1980s for ecological reasons related to overgrazing around these reservoirs. However, it seems from the discussion that pastoral communities (Uganda and Sudan) have managed to mobilise their own resources to construct small-scale reservoirs that prove to be very successful and desirable among pastoralists today. There is no research as yet to confirm this claim. Pastoralists in Uganda, Sudan and Ethiopia also began to experiment with animal disease control through community-based local para-vets, supported by private veterinary medicines suppliers.

Pastoralists who declared that few policy interventions were truly participatory challenged researchers' and policy makers' claims of advancing a participatory ethos. Advocacy or participatory action research has been experimented with in OSSREA's projects, depending on the enthusiasm of both local researchers and the pastoral communities. Full participation where pastoralists take decisions on project budgets and activities has not been reached. A major problem was whether pastoralists have the skills and capacity to ensure successful full participation in project activities and on what terms with policy makers and researchers as facilitators.

Pastoralists emphasised the need for creating national and regional networks to defend their interests vis-à-vis state and other stakeholders in resource management and the potential competition over these resources. Some of the problems highlighted were well within the realm of the state, a fact that required more (not less) engagement of the state and the creation of more similar avenues for discussion.

The next question that emerged was of pastoralists' representation in

national and global forums for policy dialogue, strategy building and decision making at the local level as well as consultation before large-scale interventions are introduced by the state and private interests. Pastoralists' explanations of such interests might have attracted the attention of some researchers, particularly those who have for a long time assumed knowledge of what is good for pastoralists.

Researchers seem to be little aware of what informs contemporary pastoral cultural and attitudinal transformations as well as pastoralists' changing perceptions of wealth and wealth generation. Even at the material level, little is known about the establishment of livestock development banks and trade unions (Sudan), pastoral commercial pharmacies (Ethiopia, Somalia and Uganda) and engagement in setting up veterinary medicine pharmacies operated by the pastoralists themselves. Pastoralists are increasingly taking development initiatives independent of the state and often without state contributions. In fact, in safeguarding their monopoly over development, many eastern and southern African states hardly welcome autonomous development interventions.

The debate between pastoralists, policy makers and researchers revealed that there is a formidable gap in their mutual understanding of conflict management institutions, their resilience and vulnerability to socio-economic and administrative transformations. Old patterns of institutional transformation have given way to the contemporary reconfiguration of pastoral life and the increase in violence in pastoral areas (northern Kenya, Sudan, northern Uganda and southern Somalia) as the breakdown of the state institutions entrusted with maintaining peace and order.

One of the most important aspects of the pastoral competition research project is the potential for creating linkages between pastoral networks, research institutions and policy makers. This would at least have three major implications for communicating research findings:

- Although project-based research is useful in supporting specific interventions, the potential use of such research results in broader development contexts (including vulgar replication leading to reductionism) is very limited. In this sense research and development through networks would provide greater opportunities to communicate research findings and use these to develop governance institutions for development. This is also particularly significant in the field of authorising, enabling and eventually empowering development beneficiaries through collective action.
- Because action research is not a hallmark of African research institutions, the best way that they can influence development is through

combining researchers' networks with development actor networks and using these platforms for the effective communication of research findings and results. Books and ministerial reports that end up in university and research institution libraries and documentation centres are useful sources of knowledge for academics and development workers. These books and reports hardly ever reach the people from whom the information has been collected.

• It is about time that development actors represented themselves in national, regional and international forums, thereby developing multilayered networks of interests in which the authenticity of research findings can be brought to the scrutiny of these actors. As I will argue below, pastoralists and other development beneficiaries could be enabled through these researcher/stakeholder networks to develop their outreach from transboundary to transnational institutional arrangements. The capacity of stakeholders to tap the communication potential of research networks cannot be overstated.

Evidently, the International Closing Conference signalled that the move from 'telling' people to listening to them is not easy and could have been a logistical nightmare, particularly working with four pastoral languages (Afar, Ankole, Somali, Arabic) in one conference hall. Immediate translation and the all-pastoralist panels held within the overall confines of the Conference compensated for this. The question here was whether the communication barriers that emanate from divergent interests are actually representations of a common misreading of the message and meaning of development.

CONCLUSION

As a whole, the chapters reveal that the intensification of competition over resources in most of Africa is a consequence of at least four types of undesirable intervention, not all of them external to pastoral societies:

- appropriation of resources by the state and private interests, zoning regulations, the extension of peasant cultivation into semi-arid regions, the extension of irrigated agriculture into arid regions, land-use planning and classification, the development of agropastoralism, settlement schemes, etc.
- production- and service-providing interventions, often accompanied by the provision of veterinary services (numerous schemes have been introduced, many with plans and capital from abroad, primarily designed to increase the marketing of livestock from the pastoral

sector, and secondarily to expand production in arid and semi-arid lands), interventions in the form of veterinary services, livestock marketing policies, terms of exchange, taxation, cooperatives, ranching schemes, borehole drilling, etc.

As the chapters in this volume show, these interventions have contributed to the shrinking of the environmental space available to pastoralists and other land users and have in a sense intensified competition over ever-dwindling resources.

- administrative integration of the pastoralists by the independent states as the first step towards national integration of this marginalised section of society (previously, the colonial regime was content simply with 'encapsulating' pastoral societies within the boundaries of the newly founded states without transforming them). As a result, while national rules are imposed without making allowances for the peculiar requirements of the pastoral milieu, pastoral social institutions have come under severe strain. Research themes here include: the elimination of customary authority and the imposition of state administrative control; the replacement of customary law with state civil and administrative policies; land tenure changes and their consequences on pastoral societies' access to resources.
- prolonged, violent conflicts (Southern Sudan, Somalia and northern Uganda) which have ravaged many areas. Much of the conflicts were fought over fertile lands, water sources or moderate regions with less climatic and rainfall fluctuations. Intensified and unusually violent raiding among pastoralists is a related malignant phenomenon (see the cases of the Afar, Somali, Oromo and Pokot in this volume). The results are devastating. At present, relative peace has returned to many areas, and it is possible to begin the process of assessment. Participation in war as a survival strategy often results in its reverse, that is, loss of life and livestock, displacement within or outside state borders. Border closures between countries (for example, Sudan and Ethiopia and Eritrea) create physical restrictions on movement and loss of access to resources. Such policies impact negatively on pastoral production and social organisation, and may even create refugee camps, with particular consequences on gender and family relations (El Nagar in this volume).

Evidently, the pattern of resource competition is dominated by a host of internal and external factors which influence the pastoral resourcemanagement system and thus the ensuing competition. Both the internal and external factors play a continuing and increasing role in further social and economic change and will therefore be significant in a proper assessment of the dynamic context of pastoralism and the utilisation of ecological resources in the arid and semi-arid zones in the region. The focus has been on existing competition for access to natural resources; the socio-economic position of the households; changes in the role and position of women; the level of integration of pastoral production into the market economy and the extent of reliance on external income. In addition, past and present production systems have played a significant role in shaping the pastoralists' mode of utilisation of the natural resource base. As the availability of water and pastures varies within each year and from one year to the next, special attention has been given to factors inhibiting the mobility of livestock.

No wonder, in the circumstances, that none of the three axes of sustainable development (ecosystem, growth and social equity) has actually been attained in these conflict-ridden areas. In fact the chapters illustrate that sustainable development is impossible amid intensified resource competition, distorted local governance and externally imposed institutional arrangements.

Without exception, the chapters are forward-looking, and hence offer theoretical and policy directions in the field of sustainable pastoral resource management. However, despite the problems that confront pastoral societies, there is an emerging pastoral civil society of which researchers contrive to know little. Sadly, the research project out of which this book has emanated was conducted in some cases (for example, Sudan, Ethiopia, Uganda and Somalia) in areas in which rebellion and liberation movements were known for decades: pastoral networks, associations, unions, etc. However, research on the response of pastoral institutions to the changing world and how the pastoralists are themselves engaged in shaping their future is yet to be conducted. Some researchers have not yet taken a pastoralist's perspective nor looked at how this might seriously influence the pastoralists' current and future livelihood conditions. Now that many pastoralists have gained access to education and many more are involved, directly or indirectly, in official and NGO development work, it is possible for them to record these perceptions without intimidation by development agents or researchers.

The scaling-up and mainstreaming of non-participatory governmental or local and global NGOs' interventions will hamper the capacity of pastoral-community-based organisations to adapt, restructure or develop local institutional capacities to deal with an accelerating process of change. Excessive external interventions have weakened the pastoralists' resolve to cope with the pressing issues of livelihood security and new and ever more complex environmental insecurity concerns. It emerged from discussions that for at least the past two decades or so, pastoralist realities have changed much faster than the social scientists' conceptual tools and methodologies. It seems to me that the conventional definition of pastoralism as an annex to modern occupational patterns defies the complexity of pastoral reality. Our definition of what constitutes pastoralism, and what it is not, often falls short of depicting the pastoral reality in its totality.

The rolling back of the state has produced lesser evils than those associated with authoritarian and militarised states. The move from coercive development to a more democratic development has created a limited space for political participation and has not been matched by pastoral or formal institutional frameworks to enable a response to this change. Social scientists who were right in their critique of coercive development have been addicted to new initiatives and more creative service-delivery systems based on local initiatives and community sets of priorities.

Paradoxically, the stronger the state the more political space it can create for local institutions and governance to heed the concerns of an emerging pastoral civil society. The chapters on Somaliland, Uganda and Sudan show that some pastoral groups have reconstructed local institutions that were long considered vanished in order to cope with current problems. Notably these institutions have lost much of their traditional form and content and have likewise been adjusted to cope with modern and hugely reconfigured social and political reality.

The more pastoralists are integrated into the global market economy the more diverse the sources of livelihood they may be able to secure. Pastoral withdrawal and any attempt towards the reconstruction of a pastoral glorious past is doomed to failure. As other weaker partners in the globalised world, pastoralists have been subject to globalisation's most adverse consequences: exclusion, and devaluation of 'irrelevant' skills, as they are known in the terminology of the new elite.

In spite of all the problems that I have outlined in this introduction, pastoralism is not declining. What is taking place in pastoral areas is the configuration of pastoral realities alongside new global and local realities. While pastoralists can manage problems emanating from limited local environmental change, it is most difficult for them to understand, let alone solve, problems emanating from global environmental change. The future of pastoralism will be determined more by the international political economy of natural resource management than by the conservation of the natural environment itself.

There are two views vis-à-vis the role of pastoral institutions. One view suggests that pastoral institutions are doomed and they will

increasingly lose their ability to confront current and future problems. However, this does not mean that all pastoral institutions will disappear. Paradoxically those institutions with traditional functions that may compete with modern institutions would suffer most. The fear here is that some of these institutions may be corroborated or corrupted by pastoral elites whose interests are often on a collision course with those of the majority of impoverished pastoralists. The second view, supported by current resurrection of traditional institutional arrangements, suggests that pastoral societies are resilient to change and cannot be thwarted by the onset of late modernity and the pressures associated with it. No matter how sparse the renewal of traditional institutional arrangements, it shows that withdrawal from and incorporation into global designs are not mutually exclusive.

In my view, market failures more than empowerment failures will be the driving force in the lives of present and future pastoralists. While market failures will produce more destitution, empowerment failures will produce struggles over power in which institutional reforms will fail to pay the expected dividends – peace and security. In states where pastoralists represent a destitute marginalised majority, empowerment failure (in Opschoor's terms) may contribute to further unrest and destabilisation within the state and pastoralists. Such political unrest, instability and violence should not be treated as an extension of early nineteenth-century struggles over well-defined notions of identity and place making, but over natural resources whose value is determined by global transactions, financial flows and stock markets, over which the pastoralists have no control.

In short, the most common trend in contemporary pastoral societies is that they defy the old concepts of pastoralism and its connotation with animal husbandry as the dominant source of sustenance. As an enlarged concept, pastoralism is currently subsumed under a wider variety of career patterns, geographical locations and economic sub-sectors. More than ever before, pastoralism will be too difficult to study as an independently identifiable production system. In the new pastoralism, animals will still play a central role, but will increasingly be removed from traditional power structures, age sets and generation sets. The force of the global markets and global governance institutions will certainly usher in a new reality whereby transnational rather than state-boundary or transboundary relations are the dominant factors in the political economy of pastoral production.

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Towards Security, Stability and Sustainability Oriented Strategies of Development in Eastern Africa

J. B. Opschoor

It was with great pleasure and a sense of honour that I delivered the opening keynote address at OSSREA's important conference involving pastoralists, researchers, educationalists and policy makers.

OSSREA was created in Nazareth, Ethiopia in April 1980, by a number of social scientists from institutes and universities in eastern and southern Africa. The University of Botswana was one of these universities, and at the time I had the honour to represent it in Nazareth, thereby making me one of OSSREA's founding fathers. Now, almost 20 years later, I have returned to Addis to find that OSSREA has become a competent and internationally recognised leading research organisation, hosting such interesting conferences as this one on the subject of resource competition and sustainable development in eastern Africa. It gives me even more pleasure to add that this particular conference had been organised both by OSSREA and the ISS, the institute of which I have the honour to be Rector.¹

But that is not all. A workshop on a very closely related topic, 'The developmental problems and prospects of semi-arid areas in Eastern Africa' (9–13 April 1980, Nazareth) gave birth to OSSREA. Essentially, we discussed topics that would continue to preoccupy us here: desertification, environmental degradation in semi-arid areas in general, and the role of the state and other institutions addressing these problems. Actually, resource scarcity is the heading under which they all fall. And the fact that scarcity gives rise to resource competition, and even to interethnic and international strife, was the rationale for bringing us together, then as well as now. In the 1980 workshop I presented a paper on the links between institutional structures and environmental change in Botswana (Opschoor, 1980). I will resist the temptation of reviewing that paper here. Allow me rather to quote from the summary of the 1980 workshop as a whole, and to relate the contents of that summary to our conference in 1999 (Kiros, 1980).

The workshop observed and documented that semi-aridity, and the resource scarcity it gives rise to, affects the lives of millions of people, their economies, their cultures and their livelihoods. The associated developmental problems were recognised as being aggravated by humankind: by indifferent or ill-advised policies, by predatory forms of resource exploitation, and so on. The proceedings pointed towards the need for an integrated development approach, in semi-arid regions perhaps even more than elsewhere. At the time we still had the confidence to say out loud that this implied a need for planned development. And when in 1980, the workshop, after reviewing quite a bit of interesting and at that time absolutely original research results, came to the conclusion that there were wide gaps in our knowledge base preventing our full understanding of these issues and our better handling of the ensuing problems.

I was therefore delighted that a few years later, the Netherlands Ministry of International Cooperation gave OSSREA and the ISS the opportunity to implement a joint research project on Pastoral Resource Competition in Eastern Africa. The research facilities made available through this project were designed in such a way that they were capable of influencing policy formulation and decision making. As a matter of course, the project objectives aimed at capacity building in the interface between academic understanding and policy, taking into consideration pastoral resource management and resource competition under increasing resource scarcity.

This chapter emanates from the keynote address that I gave at the workshop. It responds to the objectives of this workshop dealing with the broader context of two timely and highly relevant themes: *resource conflicts* and *sustainable development*. I would further like to elaborate on the notion of *institutional failures* as causes of resource insecurity and resource conflicts, and on political–economic approaches to these failures.

RESOURCE CONFLICTS AND PASTORAL MARGINALISATION

We are all aware, and eastern Africans in particular, that resource scarcity often generates conflicts between different resource users such as between pastoralists and peasants, between modern agrarian activities and mining, and so on. Glancing at the region, one is immediately confronted with the unfortunate reality that eastern Africa is a conflict-ridden region. These conflicts range from inter-state conflicts, such as the Ethiopian–Eritrean conflict, civil wars such as in the Sudan, northern Uganda and the former Republic of Somalia, to localised conflicts. In many cases the increasingly shrinking resource base is one of the factors giving rise to, or aggravating, these conflicts. Pastoral groups such as the Somali, Room, Afar, Dinkier, Pokot and others continued to play a special role in these conflicts. Yet, the relationship between conflicts and resources does not get the attention it should.

There are several reasons which indicate the political and economic marginalisation of pastoralism:

- pastoralists' contribution to the national wealth is very scant less than 10 per cent of the gross domestic product (GDP) and less than 5 per cent of foreign export earnings for many east African countries
- pastoralists constitute a political minority of less than 10 per cent of the total population of eastern Africa.

In view of the above situation as well as the multiplicity of problems and economic forces that confront pastoralists, a better understanding of their governance institutions and the way they act, react or interact with these forces of change require pastoralists to play a key role in determining their own future and in shaping the future of the region as a whole. We cannot and should not underestimate their capacity to influence the outcome or their ability to cope with the forces that impinge on their lives. Therefore alternative policies concerning the pastoral question must, to a large extent, come from the pastoralists themselves. Because pastoral societies are not homogeneous it is important that we attempt to comprehend differences and understand the environmental, economic and political problems specific to each group and each context. That is what the project has set out to explore.

RESOURCE CONFLICTS AND SUSTAINABLE DEVELOPMENT

The pastoral resource competition project should not be considered an isolated event that deals with some fragmented concerns of a minority of marginalised peoples. In fact, this project is part of a much wider debate on sustainability in developing countries, a theme that has occupied my research interests for several decades.

Unsustainability of environmental use and resource management has been manifested in the form of degradation at spatial levels ranging from local to global. Often such manifestations are the result of causes operating at associated levels, but this should not be taken as the normal situation. On the contrary, unsustainability can also reflect the impact of driving forces that operate at different spatial levels, typically the higher ones, even if the manifest unsustainability is at the local or regional level. Environmental and other problems may also be manifested at the global level whereas their origins may be very local, or region-specific. Their solution may likewise require a sub-global approach because the authority to which these problems should be addressed is usually at lower levels: countries or regional associations of countries, enterprises, NGOs and individuals. Vulnerability to environmental degradation or vulnerability of socio-economic systems associated with degradation or its mitigation may also differ across regions, countries, groups and individuals.

I have been very actively involved in efforts to explore and address the links between globalisation and local or regional environmental degradation. Concerning globalisation I have focused on economic mechanisms and forces: the market, market-driven international trade and capital flow, changing patterns and levels of production and consumption, as well as their environmental repercussions (Opschoor, 1996a).

We have to begin our analysis of globalisation and its impact by realising that the economic system is embedded in a biophysical system: the biosphere. This biospheric environment provides humankind with a certain volume of 'environmental space'. I specifically use the term 'environmental space' in order to get away from one- or twodimensional notions such as 'carrying capacity'. The issue of entitlement to, distribution of and access to the utilisation of this 'environmental space' becomes crucial if environmental security is to be achieved and preserved as a precondition for sustainable global development. I heard an echo of this in Rio de Janeiro at the great UN Conference on Environment and Development in 1992, when people and organisations from the South called on the economies of the North, to 'make space for the South'. What was meant was that the North, or, in fact, the rich in general, should analyse the levels and the patterns of their claims on the hardly expanding 'environmental space', and compare that with the per capita access to that space by people on the less well-off side of the distribution of income and wealth.

Pastoralism in semi-arid regions is one form of land use and primary ecological production on that land. It provides a livelihood for a significant number of people in an environment that often seems suited for little else unless huge capital investments were made. The importance of pastoralism even goes beyond that; it positively contributes to cultural diversity and, depending on its activities, pastoralism is ambiguously linked to changes in biological diversity and to other environmental problems like climate change. Therefore the pastoral question cannot be isolated from global concerns with the sustainability of the biosphere or the socio-economic and environmental conditions it provides for various resource users. At the lower spatial levels, many of the problems that confront pastoralists today should be explained either as a result of: (i) a limited and even declining 'environmental space' in a context of market inaccessibility, or (ii) the interlocking anomalies of the power structures in (i).

In situations of conflict over natural resources and of environmental insecurity in general, the usual proposal to find a way out of these situations is: technological developments that try to raise productivity levels and/or otherwise push 'environmental space' outward. A second proposal is economic diversification. Very often a response to the latter is not possible due to the marginal aspect of the physical environment and the low degree of economic development of the communities concerned. That leaves intensification. To a degree intensification could be successfully embarked upon, but as my résumé of a lot of literature suggests, other difficulties are quickly run into such as failing markets and fixes at the level of power structures.

What has become increasingly clear over the past decades is that situations of insecurity and scarcity entail the need for much more profound reforms, particularly *institutional* reforms. Regional systems of resource use, such as pastoralism in many parts of the Horn of Africa, the design of new and appropriate institutional forms that allow cultural implementation of access to resources and property rights is required, as well as institutions governing the allocation over present and future stakeholders. At the global level, often regional or even multilateral agreements on these issues should be able to provide the framework for sustainable use of environmental resources while improving the economic position of the countries of the South.

Global environmental problems can be aggregates of local environmental problems. Pastoral societies in semi-arid areas have been the subject of much debate focusing on erosion and desertification with local manifestations and consequences (famine, drought, civil strife, etc.). But, as I have noted above, it is also linked to major concerns with the loss of biodiversity and climate change, which are globally relevant in terms of their consequences. The consequences of erosion and desertification are linked to larger global concerns such as the loss of biodiversity and climate change. If small pastoral communities are to squander the biodiversity resources available in their localities, they will undermine vital genetic resources necessary for the production of high-yielding varieties, medicines and other natural riches. In the long run these vital genetic resources could provide a base for the option of the seemingly unattainable economic diversification, now and in the near future. Moreover, such resources are not only the property of pastoral communities; they are also part of the human heritage that should be conserved for future generations.

INSTITUTIONAL FAILURES

A myriad of constraints must be confronted in the search for sustainable human development, not least the constraints of market failure and government failure. Especially in the neo-classical economic approach to economic development, there is a tendency to reduce every issue of concern to failures in market performance or the absence of markets. The social desirability of the outcome of the economic process is to be sought by improving existing markets and/or by creating new markets where until now they did not yet exist. In these days of classical economics market failures were seen as entry points for governments to ensure they were being taken care of. But in the course of the development of economics, especially in the latter part of the twentieth century, governments themselves were regarded as key sources of failure to realise the social optima that people and markets could or at least should be able to realise. Governments nowadays are often regarded as impotent or ineffective, even as counter-productive obstacles to achieving a maximum of social welfare. The prevailing patterns of globalisation reinforce privatisation and the reduction of state powers to intervene in the economic process by almost imposing liberalisation. If markets sometimes fail, the mainstream thinking seems to be, governments would fail more often. Governments should abstain from doing anything but to ensure the existence of a sound macro-economic environment and should be subjected to orthodox monetary views on what to do in the case of macro-economic imbalances. I do not myself adhere to such views. Such views are too shallow because they are reductionist, and often do not regard as important the historical or the contextual processes.

I would like to go beyond simple market failure and government failure and analyse these cases from a much wider and richer point of view: *institutional failure*. There are at least three categories of institutional failure (Opschoor, 1996b):

- transactional failure
- empowerment failure
- governance² failure.

These three types of failure are relevant to the manner in which the sustainability of pastoral societies can be achieved and represent institution-based causes of social problems.

To begin with, we have at least three kinds of *transactional failure*:

- market system failure, which includes both inefficient markets (or market failure in the strict sense) and absence of markets (as in the case of many environmental goods/products)
- failures in the negotiation of non-market transactions or agreements covering the situation where not all stakeholders are represented and where they suffer from bargaining power imbalances
- preference failures, due to inadequate knowledge and information, or in relation to a divergence between the socially desirable and individual preferences (for example, the use of drugs).

The first subcategory here corresponds to the traditional type of market failure discussed in mainstream economics, as something to be amended by improving the market system. The second one corresponds inversely to the Coasian bargaining approach of societal problems (Coase, 1960) and the literature that addressed that approach. The third one is an extension of notions put forward earlier by Musgrave (1959, 1969) on so-called merit and demerit goods. What this typology implies is a set of notions relevant to the understanding of social behaviour and social systems beyond the narrow economist view, including: the notion that individuals should not always be regarded as the sole and sovereign agents that *homo economicus* assumes them to be; and the idea that 'transactions' may go far beyond market-based interrelationships.

Secondly, *empowerment failure* may occur between the non-governmental and the governmental level:

- social mobilisation may be inadequate to enable optimal negotiation or demand-side market manipulation; countervailing power at the non-governmental level is then inadequate
- mandates by societies to governments may be sub-optimal for governments to be able to exert countervailing influences through policies. There may be too little interaction, often out of fear for governance failure, or too much, in terms of power imbalance vis-à-vis civil society or in terms of democratic control of the state.

Lastly, governance failure has at least three categories:

• correction failure: failures by governments to formulate policies that address unsustainability ('lacking policies'), and to coordinate externally their various efforts at managing their economic systems and processes (coordination failure)

- failures of intervention, which may be due to inappropriate target setting, lack of instruments or inadequate mandates, and more traditional features such as failures related to policies in other sectors or internal coordination failure
- administrative failure (lack of enforcement or implementation, inefficiencies in implementation, lack of internal co-ordination, etc.).

CAUSES OF INSTITUTIONAL FAILURE

Modern markets coordinate in an efficiency-oriented way the decisions of billions of economic agents on how to allocate the resources they can decide over. Their horizons are as wide in time, space and scale as the horizons of the economic agents themselves. Market mechanisms are therefore not inherently geared to overall systems' performance in terms of distribution aspects and sustainability. Inequity and scale issues may easily arise out of an economic process that is driven by market forces (for example, economic growth under such circumstances may push the economy outside the environmental space, and/or may lead to increased rather than diminished gaps between the rich and the poor). Without corrective or preventative social conventions and policies, the market system gives rise to cost shifting, which is another term for the tendency of economic agents to minimise the costs of their activities by pushing the adverse consequences of their activities on to others (given the legal environment including law enforcement regimes) without any compensation (Kapp, 1970).

The practice of cost shifting is facilitated by what is referred to as 'distance-related distortions'. There are three such distortions associated with different types of distance: distance in time, in space and in scale. The consequences or effects of environmental degradation in relation to economic activities is often manifested in the large distances from the source or agent causing them. There may be a distance both in terms of space and time (for example, DDT in polar ice caps, climate change, overgrazing and desertification). The effects of environmental degradation are thereby shifted on to other people, to future people and even to other species. (There is a third type of distance: the distance between an individual's influence and the problem that must be solved, which could be referred to as distance in scale or decision-level. Single actors in a multifaceted/multi-actor context may face situations where their privately optimal behaviour could lead to a socially or collectively undesirable overall outcome.) For example, countries sharing a common river basin where individual fishermen exploit a shared fish population,

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or pastoralists who share a common area of land. The absence of coordination, control and intervention may lead to an irrational level of exploitation of a shared or common property resource. This situation could develop into a gangland for pastoralists, leading to excessive pollution and so on. The reader will be reminded of the echoes of theoretical thinking on the 'prisoners' dilemma', the 'tragedy of the commons' and so on.

| I Transaction failure | 1 Market system failure | Missing markets |
|------------------------|--------------------------|---|
| | 2 Negotiation failure | Market performance failure Missing parties |
| | 2 Regoliation failure | Asymmetries in bargaining |
| | | power |
| | 3 Preference failure | Missing knowledge/ |
| | | information |
| | | Incomplete preferences |
| | | Time preference bias |
| II Empowerment failure | 4 Mobilisation failure | Missing/inadequate |
| | | countervailing power |
| | 5 Authorisation failure | Missing/inadequate |
| | | remit/mandate |
| III Government failure | 6 Correction failure | Missing policies |
| | | (environmental) |
| | | Lacking external |
| | | coordination |
| | 7 Intervention failure | Environmental policy |
| | | failure: |
| | | targeting failure |
| | | (inadequate objectives) |
| | | instruments failure |
| | | (quantitative, qualitative) |
| | | entitlement failure |
| | | Other policy failures |
| | | sectoral policies |
| | | macroeconomic policy |
| | 8 Administrative failure | Integration failure |
| | | (horizontal) |
| | | Intervention level failure |
| | | Enforcement/implementa- |
| | | tion failure |

 Table 1.1

 Classification of environmentally relevant types of institutional failure

Such external interests may not be adequately internalised because of the:

- absence of legally based property rights or access rights that would protect a damaged party, or the absence of liability/accountability regulations enforceable upon the causal agent
- absence of means to exert countervailing power through the political system (lack of voting power as in cases of transboundary cost shifting, or intertemporal cost shifting, or cost shifting on to other species), or through the market place (that is, lack of purchasing power).

Where such distance-based external interests prevail and the party on to which the burden has shifted cannot counteract this distance by pressing his interests, either mobilisation of similarly affected people or government intervention may be needed.

The shortcomings of political systems in responding to these failures is one of the reasons why these situations are not easily changed by installing more appropriate institutions or legislation. Governments and bureaucracies are also liable to time preference (whereby future effects and future interests are discounted), and may be oversensitive to present purchasing power or voting power, and therefore to predominant economic and political forces. Many European governments, for instance, due to strongly voiced sectoral interests, are still incapable of addressing the environmental problems agricultural development gives rise to.

In 'missing markets' situations there is both an absence of rights and an absence of the means to exert countervailing power, and where there is a long-term scarcity of a particular environmental component this is often dealt with as a free good. Future demand for environmental goods is often not reflected, property and access rights are not specified and can therefore not lead to claims, and so on. 'Missing parties' situations occur where decisions concerning allocation are taken without all the stakeholders being represented. Here again, future generations may be the most realistic element in the equation but other species could also be regarded as stakeholders in many of the economic decisions currently being taken.

Failure to correct or to intervene in the face of transaction failure or failure of empowerment is the first type of governance failure. At the most fundamental level, governments could 'go back' to society to renegotiate mandates, seeking correction of any kind of delegation failure that may have become manifest. However, given an adequate mandate, governments may still show correction failure in the sense that they could fail to come up with, for instance, an environmental resource or sustainable development policy. Governments that do decide to have environmental policies may fail in several respects such as the failure to intervene or administrative failures. The failure to intervene could be caused by environmental policy failures and other policy failures.

Government objectives may fail to express adequately considerations of sustainability. Governments may also fail to safeguard the preservation of an adequate 'portfolio' of environmental assets or ecological infrastructure for future generations. Governments may fail to redress imbalances concerning access to ecological resources by different groups in society. Another important matter is the (re)definition and allocation of property rights (both collective and private) and rights of access to and use of environmental assets, in the face of environmental scarcities. This could mean establishing entitlement concerning environmental resources, establishing liabilities for environmental damages and establishing grazing rights as well as the regulation of borehole drilling.

Prevalent policies relating to sectors other than environmental and resource management are often based on decisions in which ecological or environmental considerations have been given insufficient weight such as policies in the areas of energy and transportation. Macro policies also do not take sustainability issues into consideration. We will restrict ourselves to the latter. Current macro-economic policies could potentially fail if long-term environmental effects are ignored. The risks are that global society will be confronted with environmental costs that are either irreversible (species extinction) or very costly to redress (soil degradation or deforestation).

Finally, there is administrative failure. The most fundamental problem is the approach at an inappropriate level of intervention: either too low (the attempts of only one small country to solve the greenhouse issue) or too high. Intervention level failure may reflect empowerment failure, as is often the case with international, transboundary environmental problems where the sovereign and the subsidiary become relevant considerations. But even if appropriate administrative levels exist, they may not be used correctly. A second type of administrative failure is the lack of (horizontal) coordination or integration causing external factors to spill over into other compartments or sectors. Finally, impediments to appropriate enforcement and implementation can be mentioned.

ADDRESSING INSTITUTIONAL FAILURE

The above approach to the causes of unsustainability took us far beyond market failure and policy failure as traditionally understood. This richer analysis may help to find more sophisticated and more appropriate answers to the question posed above: *What are appropriate institutional settings from a sustainability perspective in relation to pastoralism?* My focus now will be to address the more general issues, and because of its prevalence in the general discussion, I will start with consideration of what the mainstream economics perspective has had to offer.

Standard economic analysis has suggested two basic roads along which one might proceed: (i) private negotiations and legal action including altering the structure of property rights, or (ii) policy intervention directly aiming at an alteration of market prices (through charges). Direct regulation (by licensing, zoning, standards, etc.) would be an alternative third way, but it is generally regarded by mainstream economists as less efficient – and hence less attractive – than the other two.

For road (i): private actions – the point of departure is usually the Coase Theorem on bargaining. Coase has suggested that a bargaining approach might suffice to reach a social optimum. Degraders and victims of environmental degradation alike are assumed to be able to negotiate concerning the optimal level of environmental degradation or of economic activity giving rise to it. The social optimum is where marginal profits from the environment are equal to marginal damage to the environment. If the victim has legal rights to an unpolluted environment, then the degrader might wish to compensate the victim. The Coase Theorem claims that regardless of who holds the property rights, there is an automatic tendency to approach the social optimum via bargaining. If this mechanism could be trusted to operate adequately in real world situations, then government regulation of externalities would be redundant. A number of criticisms of and complications with the Coasian approach have been identified and testify to the need for policy intervention. These include the lack of realism of various assumptions underlying the analysis such as the alleged market perfection, the level of transaction costs in actually negotiating and bargaining about the level of pollution, and difficulties in identifying and mobilising the relevant polluters and sufferers. That is why there are many reasons why bargains cannot easily be made.

In the absence of bargains a government could intervene (road ii). Government intervention has been one of the main foci of resource and environmental economics. Possible policy interventions based on economics include resource pricing, taxes/charges (cf. Pigou, 1920), and trading approaches applied to quota or other forms of entitlement granted to resource users. I will not go into these options here; there is a wealth of literature on the subject. I would prefer to assess the economic approach based on global experiences (Opschoor and Turner, 1994).

From a societal perspective an intervention strategy based on economic instruments implies a restricted, economic process-oriented approach rather than a broad approach which adequately addresses institutional foundations.

First, the approach is rather narrow and theoretical, as is borne out by empirical observations.

- Economic analyses do not always convincingly reflect economic realities. Real markets do not always work according to theoretical assumptions: car drivers respond to higher energy prices and other disincentives to private transportation. The efficiency and effective-ness arguments associated with economic instruments are not always applicable, as in the case of many applications of emission trading schemes and even fish or grazing quota.
- Non-economic instruments may perform equally well or even better than economic incentives, especially in terms of effectiveness, as is borne out by many cases of permitting and zoning to restrict the use of environmental resources. Combinations of legal and economic approaches may turn out to be more promising.
- Economic analyses and recommendations often ignore or play down realities typical to the political 'arena' in which (environmental) policy is shaped in reality. One aspect is the issue of the distributional implications of environmental policy and choice of instruments.

Second, there is no single generally valid optimal intervention strategy, because of two sets of institutional or 'contextual' aspects: (i) differences in structure (environmental, economic) of the interventions (the application context); and (ii) socio-political and cultural structures (the policy context). Governments' choices of policy instruments have a strong political basis and may be governed by a variety of considerations, some more rational than others. Besides the important notion of acceptability effectiveness and efficiency are economically more obvious considerations. Acceptability is defined here as the extent to which the instrument can be properly implemented and enforced without running into problems of non-concordance with existing regulations, principles and policies. Target groups or indirectly affected agents could resist on the basis of allegedly unfair or disproportional burden-sharing implications (equity considerations). Policy analysis shows that there may be grounds for assuming that the policy arenas in which, for instance, instruments for range, soil, water and air quality policies were shaped, might not be conducive to incentive based approaches, but instead might favour regulatory measures as these are less likely to lead to unsettling conflicts between the parties involved.

Third, given the deep-rooted causes of unsustainability, altering the stringency with which existing quantitative instruments are applied, or adding to that set of quantitative instruments, could be insufficient measures in terms of achieving sustainability. Frequently quoted impediments to internalising (environmental) externalities are: inequitable distribution of wealth and access to resources, lack of effective policies, lack of monitoring and enforcement capacities, poverty of major categories of relevant agents, financial constraints of governments, resistance of major actors (for example, industry), as well as resistance within governments to adopt measures that might entail reduced export revenues.

Basically, my analysis so far amounts to an argument in favour of institutional changes at the level of rights, responsibilities and power relationships, so that environmental quality claims and existence rights (of species) and so on are recognised. Recognition should be coupled with compensations to be made by those who impinge upon such rights. Compensation will have to follow new regulations on rights of property over (and/or access to) environmental resources, accountability and liability. The *polluter pays* principle could be extended or amended to a user pays principle, and a practically operational precautionary principle through which large-scale irreversible damage to ecosystems forming parts of people's life support systems must be avoided. These would have to be complemented by a well-elaborated right to development, as has also been incorporated in the Declaration of Rio that came out of the 1992 Conference on Development and the Environment. Each of these principles would have to be worked into the mandates and regulations of the major national and international institutions and new institutions would have to be created to ensure the interests of those stakeholders that have hitherto been neglected: those groups (in the present generation) with little purchasing power, voice and political clout; future generations; and perhaps even other species.

But such international changes in regimes may take too long, and may also be too socially costly in comparison with bottom-up approaches. In terms of the analysis of institutional failure mentioned above, *authorising* mandates to governments and transgovernmental or intergovernmental agencies may be less than ideal or not feasible at all, leaving us with the option of *mobilisation*: stakeholders joining force and thereby creating countervailing power. This is what can be observed nationally as well as internationally when empowerment in the face of threatening unsustainability and uncontrolled globalisation is considered.

Obviously, concerns with the triple failures of transaction, empowerment and governance are not exclusive to any particular human society in this globalised world. Pastoral competition can be and in fact is a result of such failures, which increasingly characterise the uneasy relationship between global and local actors or between global actors and the market, situations which, in most cases, have been mediated by the state. In relation to pastoralism which faces severe competition over resources, mobilisation and empowerment should be advocated and encouraged more. No doubt the research that preceded the conference will have identified, in the context of pastoralism in the Horn, a range of relevant considerations about the institutional evolution taking place as well as recommendations for new, security, stability and sustainability oriented strategies might be the result.

CONCLUSION

There is a need for institutional change and reforms, where global sustainability and pastoralism are concerned. Institutions and instruments (particularly legal ones in areas where peace and order are jeopardised by structural violence) capable of achieving fair and sustainable distribution of entitlement and power should be created or expanded. Institutional reforms must ensure that basic driving forces of unsustainability and conflict are addressed (effective reduction of poverty and insecurity) or neutralised (appropriate technological intervention).

Three sets of issues have dominated the current debate on resource competition and conflict resolution and continue to be of great relevance. I hope that these issues will be address further in the future.

First, it is important to examine the role of institutions and their capacity to mediate between the anomalies resulting from resource appropriation in the context of an accelerated rate of pastoral commercialisation, state withdrawal and environmental degradation.

Second, what we perceive as local resource competition could originate from global processes over which pastoralists have no control. Pastoral communities are interlocked in an interdependent world where no human society is immune from its positive or negative consequences.

Third, pastoralists are not passive accessories in the relationship between market, state and environment. They interact and react to institutional and developmental interventions in a variety of ways. Pastoralists continue to acquiesce to, adapt to, resist or are aloof to the interventions that they were subject to for a large part of the twentieth century and, indeed, are still undergoing in the twenty-first.

The research findings emanating from this project will contribute to generating an informed understanding of the incidence of resource competition involving and affecting pastoralists in eastern Africa. Beyond that, these findings will help to reassess the role and potential contribution of pastoralism in rural development.

NOTES

- 1 This chapter is a revised version of the keynote address delivered at OSSREA's workshop on Resource Competition and Sustainable Development in Eastern Africa.
- 2 When speaking about governance I refer to both formal and the informal, both the modern and the traditional forms of hierarchical dealings with issues of the organisation of society and the distribution of its proceeds.

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2

Sustainable Development and Resource Conflicts in Botswana

M. B. K. Darkoh and J. E. Mbaiwa

The main objective of this chapter is to examine the concept of sustainable development and how it relates to conflicts in the use of natural resources in Botswana. Botswana is one of the few African countries still endowed with a variety of natural resources such as rangelands, arable land, wildlife habitats, minerals, forests, surface and fossil groundwater resources. Conflicts over resource use arise when several interest groups use resources differently within the natural system or geographical location. Poverty implies fewer assets and hence fewer options, which in turn implies increased competition, and conflict and degradation of existing assets, including natural resources. Shortages of natural resources also lead to competition which may result in conflict and land degradation. State actions and policies affect natural resource use and may sometimes give rise to conflicts. Furthermore, security and control over natural resources, or the lack of these, may prevent appropriate management of natural resources, exacerbate dissatisfaction, competition, and worsen conflict and the unsustainability of resource utilisation. The linkage between natural resource utilisation, sustainable development and conflict is strong and needs to be explored by social scientists.

A SUSTAINABLE DEVELOPMENT FRAMEWORK

Two issues will be highlighted as the theoretical background to this chapter. The first concerns the concepts of sustainable development and sustainable use of environmental resources. The second relates to 'natural resources' and their preconditions.

The concepts of sustainable development and sustainable use of environmental resources are interrelated. These concepts are a result of the concern about the depletion of environmental resources that all nations around the world have been experiencing in the last two to three decades. The World Conservation Strategy (WCS) in 1980 gave birth to the sustainable development concept which became a global issue with the final launching of the World Commission on Environment and Development (WCED) in 1987. The WCED (1987, p. 8) defined sustainable development as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'.

This definition has two key issues, that is, the issue of needs in which priority is given to the world's poor and that of limitations imposed by the state of technology and social organisations on the environment's ability to meet present and future needs. Sustainable development, therefore, builds development strategies to manage natural resources so that they provide for the needs of today while ensuring the resources for tomorrow (Moyo *et al.*, 1993).

In defining natural resources, Zimmermann (1933) states that neither the environment as such nor parts of the environment are resources until they are, or are considered to be, capable of satisfying human needs. Man, not nature, defines resources. It is, therefore, human ability and need which create resource value, not merely the physical presence of the environment and its constituent parts. Rees (1995) states that before any element can be classified as a resource, two basic preconditions must be satisfied. First, knowledge and technical skills must exist to allow its extraction and utilisation, and second, there must be a demand for the materials or services produced. If none of these conditions are met, then the physical substances remain 'neutral stuff' (Zimmermann, 1951).

Mitchell (1989) elaborates on Zimmermann's definition by stating that resources are defined by human perceptions and attitudes, wants, technological skills, legal, financial and institutional arrangements as well as by political customs. Resources can thus be said to be cultural; what is a resource to one group of people might not be a resource to another. In such a scenario, it is appropriate to say that natural resources are those elements of the environment on which man places value depending on the respective culture and technological ability as well as on the knowledge of how to utilise them for his own benefit.

Since individuals have a different approach to natural resources, and what is a valuable resource to one might not necessarily be of value to another, abuse and conflict are likely to arise. This therefore calls for an effective institutional and policy situation to integrate the resource use and ensure sustainable development. When these conditions are satisfied, sustainable natural resource management can be seen to be representing the actual decisions concerning policy or practice regarding how resources are allocated and under what conditions or arrangements resources may be developed. This approach can provide a framework on which resource use conflicts can be minimised. Therefore, the answer to sustainable development of natural resources lies in education, policy, institutional development and law enforcement.

STAKEHOLDERS AND LAND-USE CONFLICTS: A CASE STUDY OF EAST NGAMILAND DISTRICT

As already explained, conflicts over resources arise when several interest groups see or use resources differently in the same natural system or geographic location. A study of the prospects for sustainable wildlife resource utilisation and management recently conducted in East Ngamiland District by Mbaiwa (1999) used a stakeholder analysis to identify land users and land-use conflicts in the area. This technique of analysis is primarily used to identify stakeholders (or interest groups) and the areas of actual or potential conflict. The stakeholder analysis has been found to be a useful method of clarifying conflicting sets of expectations and understanding conflicts among stakeholders. The method was first developed and applied to business (IISD, 1992) in promoting corporate accountability for sustainable development performance, but has been found to be applicable and useful to natural resource utilisation.

The findings from the East Ngamiland District study indicate that the major land-use stakeholders can conveniently be categorised into two groups: traditional and emerging stakeholders. These are:

- the traditional stakeholders, including local communities such as Basarwa, Bayei, Basubiya and Batawana
- the emerging stakeholders, including the different government ministries and departments, the private tourist sector and the wildlife conservation groups such as Kalahari Conservation Society, Okavango Peoples Wildlife Trust and Conservation International.

POLICIES, INSTITUTIONS AND RESOURCE CONFLICTS

Botswana, like many other countries of the world, has developed policies and institutions geared towards the management of her natural resources. However, these policies appear not to be properly coordinated or integrated with the result that they have led to natural resource use conflicts. Examples of these resource policies and resultant conflict situations follow.

Tribal Grazing Land Policy (TGLP)

The Tribal Grazing Land Policy was introduced by the Government of Botswana in 1975 on the understanding that pastoral production in communal areas is inherently unproductive and ecologically destructive and, therefore, in need of major reform (White, 1993; Mazonde, 1994). It is important to note that Hardin's (1968) theory of the 'Tragedy of the Commons' also played a significant role in the rationale behind the TGLP. The theory presupposes that pastoralists in communal areas, driven by a selfish individualistic desire to maximise gains, decide to put extra livestock on the pasturelands which in the end becomes overgrazed and degraded. All farmers as a result suffer rangeland degradation.

Through the TGLP, the government therefore aimed at increasing livestock production by commercialising the livestock industry and at the same time pursuing the appropriate utilisation of the grazing resources. Such measures were considered necessary to ensure conservation of the country's rangeland resources (Barnhoorn et al., 1994). The policy implied the subdivision of tribal land into commercial, communal and reserved land. This land policy assumed that the creation of TGLP ranches would remove a large number of cattle from the communal grazing lands and thus reduce pressure on these areas. It was believed that the granting of long-term leases for TGLP ranches would encourage improved ranching methods leading to better rangeland conservation and increased livestock production (Harvey and Lewis, 1990). The land boards were to be responsible for the allocation of ranches and the control of overstocking rates in cooperation with the Ministry of Agriculture and the newly established Agricultural Resource Board. This was perceived as an appropriate tool for managing rangeland in a sustainable way. Another important component of the TGLP aiming to promote sustainability in resource use was the creation of reserved areas. These areas were intended for future livestock expansion and for uses such as wildlife and crop cultivation.

The TGLP, however, failed to live up to its objectives. A major problem of the TGLP ranches was dual grazing rights. Ranch owners did not give up their traditional grazing rights of the communal lands. TGLP ranchers moved their cattle between their ranches and the surrounding communal grazing land in order to maximise the grazing. This then put even more pressure on the surrounding communal grazing land. Overgrazing of the rangeland was not contained, hence soil erosion was exacerbated.

Despite incentives such as long-term leases and cheap loans for ranch development, the new ranch owners were not able to adopt modern management practices and raise livestock productivity. White (1993) described this by citing the example of the Ncojane ranches, which are overgrazed with most of their fences broken down. He noted that almost all the ranches are overstocked and observes that there is little attempt at rotational grazing or water reticulation. Land disturbance as a result of trampling around water points is severe. Cooke (1985) admits that the ranching programme has been an economic failure. Tsimako (1991) argues that the implementation of the ranching programme has been problematic, bedevilled by problems of drought, water availability, absentee management, poor cooperation between group ranches, poor infrastructure development and gross overstocking. The TGLP actually attracted large government investments towards ranching, leading to the elite obtaining exclusive rights to rangelands and building up large herds of cattle which further degraded the rangelands. When the TGLP failed, the Botswana Government decided to adopt another version of through the introduction of the new Agricultural Development Policy in 1991.

The new Agricultural Development Policy (ADP)

The Agricultural Development Policy was a wide-ranging policy covering both the arable and livestock sectors. Its adoption in 1991 by the Botswana Government was a further step in the process of privatisation of rangelands to improve productivity and promote soil conservation. Under the National Development Plan VII (Government of Botswana, 1991a), the government's aim was to shift from a policy of food sufficiency to food security. These appeared to be the thoughts behind the new ADP, which recognised that many problems had been encountered in the implementation of the TGLP. As a result, a shift or modification of the TGLP was needed. According to Government Paper No. 1 of 1991 (Government of Botswana, 1991a, p. 11) the TGLP would be modified and expanded to cover all production systems. Farmers would be allowed, where feasible, to fence livestock farming land either as individuals, groups or communities to improve productivity of the livestock subsections and ensure sustainable use of range resources.

Like the TGLP, the ADP assumed that communal rangelands were unproductive and severely degraded. Conservation of the rangeland and increasing productivity became the main focal issues. However, most of the ADP's attention was focused on the controversial plan to allow fencing of communal grazing lands. Sigwele (1992) noted that through the Fencing Policy, the government of Botswana intended to encourage agricultural production where the land and the climate were suitable and where the market was available for products. This would ensure sustainable use of the rangelands.

The ADP stated that fenced-off community areas would be targeted for special government assistance, including economic assistance for poor farmers as well as conservation and rehabilitation programmes to protect scarce range resources (Government of Botswana, 1991a). Fencing of pastureland by individual farmers or syndicates around boreholes was encouraged and was said to be in line with sustainable development. The proposed fencing of communal grazing lands caused widespread opposition in the circle of the wildlife industry since most communal grazing areas contained many migrating wildlife species that depended on the availability of water.

The ADP, like the TGLP, has not solved the problem of the degradation of rangelands as many parts of the country are allegedly overstocked. This is mainly because of the traditional attitudes to cattle farming. Attempts to reduce stock numbers in communal areas by creating commercial farming areas through the TGLP and ADP have not resolved the problem of overstocking.

Veterinary fences in Botswana and wildlife management

The expansion of rangelands and the need for watering cattle has forced the wildlife populations into smaller and less favourable habitats (Barnhoorn et al., 1994). Livestock farming and wildlife compete for the use of marginal land and scarce water resources. Perkins and Ringrose (1996) attribute the conflict between the wildlife industry and the livestock sector in Botswana to government livestock polices which promote the erection of veterinary cordon fences in wildlife areas. Veterinary fences have been erected to control foot-and-mouth disease in order to ensure Botswana's beef access to the European Union markets. This phenomenon remains central to any explanation of the dramatic deaths of migratory wildlife species that have occurred in the country. Thousands of kilometres of such fences introduce an entirely artificial constraint upon wildlife movement that is historically unprecedented, in terms of scale, magnitude and extent of impact. That is, traditionally, many game species depend for their survival on seasonal migration between rangelands and water sources. The decline in the country's wildlife species is further accentuated by the absence of any meaningful liaison between veterinary services within the Department of Animal Health and Production and the Department of Wildlife and National Parks. These factors, therefore, have remained central to the conflict between wildlife and the cattle industry in the country.

While all veterinary fences in the country conflict with the wildlife industry, there are some outstanding ones, which appear to be at the centre of the conflict. One of these is the Kuke Fence, which runs south of the Okavango Delta from west to east. The fence has effectively blocked the route of migrating wildebeeste from the Schwelle area in the Kalahari System to northern Botswana or to the Okavango Delta region. This interference has in most cases forced the wildebeeste to move towards the area around Lake Xau. Many thousands of wildebeeste have died from exhaustion on the long journey to the lake, which dried up during the drought period of the 1980s (Barnhoorn *et al.*, 1994). Furthermore, the Lake Xau area is primarily used for livestock grazing and game animals are usually seen as unwelcome intruders competing for scarce range and water resources.

The Buffalo Fence that runs along the south of the Okavango is the second of the major cordon fences that has caused environmental conflicts between wildlife and tourism sectors and the cattle industry. The fence is recognised for its effectiveness in controlling the spread of foot-and-mouth disease transmitted or carried by buffaloes to cattle. Buffaloes as a result are not expected to mix with cattle. They remain in the delta area while cattle are supposed to stay away from the delta in the livestock land-use zone. One other advantage of the Buffalo Fence has been that in drought seasons, it has prevented the movement of livestock especially cattle into the delta. As a result, the aesthetic value, the biological diversity and the ecology of the delta has been preserved. However, the Buffalo Fence has been an obstacle as it has prevented the movement of migratory ungulates like wildebeeste and hartebeeste from the Schwelle in Kalahari District into the delta during the dry periods.

The third veterinary cordon fence that has been viewed as problematic is that of the north east Central Kalahari Game Reserve. It has also blocked movements of wildebeeste, hartebeeste and zebras migrating from the game reserve into the Boteti–Makgadikgadi area. The fencing of the eastern Central Kalahari Game Reserve means that the game reserve or the Kalahari wildlife system is now completely isolated from the Boteti River system. This development is therefore a cause of concern to the wildlife industry and wildlife conservation groups in the country.

In 1995, Botswana was attacked by cattle lung disease, which was brought under control two years later. When the disease was finally controlled, Ngamiland District, which had been severely affected, was left with a number of fences that continue to be detrimental to wildlife migratory species. Examples of destructive fences erected at the time are the Setata and the Northern Buffalo Fences. However, with the continued pressure from conservationists, the government agreed in July 1998 to remove some of the cattle lung disease fences including the Setata. The government also promised to conduct an Environmental Impact Assessment (EIA) on all existing veterinary fences in the country.

Since it has been proved that wildlife populations are declining (except for the elephants and impalas) mainly due to livestock expansion

into wildlife areas and veterinary cordon fences, it appears logical to conclude that livestock policies in the country support livestock at the expense of wildlife resources. This situation has made the issue of sustainable development in the wildlife sector problematic.

The Ministry of Agriculture has also introduced measures in arable agriculture that try to ensure sustainable development of land resources. The aim has been to improve and increase productivity in the sector. One of the measures is the Arable Lands Development Programme.

Arable Lands Development Programme (ALDEP)

The Arable Lands Development Programme was introduced in 1979 with the aim of increasing small-scale arable production. The emphasis of the programme was on improving the productivity of small-scale arable farming by providing subsidised input packages such as fencing materials, drought animals, ploughs and cultivators. This was thought to be a good measure in reducing poverty in the country. It was hoped that poverty alleviation through ALDEP would reduce pressure on other limited environmental resources like fuel wood which is gathered to sell.

ALDEP failed to live up to its objectives. The complicated loan and subsidy conditions of the packages discouraged many farmers to make use of the scheme. ALDEP was not able to reach the poorest farm households. The availability of draught power was a condition for receiving subsidies for most agricultural implements. As a result, poor farmers could not afford to have these implements since they did not have cattle. Poor farmers therefore continued to put more pressure on available land resources like fuel wood. Fuel wood depletion, which is associated with the low-income groups in rural areas, has been found to be a problem in Botswana around village settlements in the south east, Kgatleng, Southern and Kweneng Districts (Barnhoorn et al., 1994). The majority of the poor in Botswana have commercialised fuel-wood production, hence the depletion of wood resources around big villages in the country. Although ALDEP later on provided donkeys instead of cattle for draught power, this did not help the poor communities of Botswana. They remained poor and more pressure was put on the environment as a result.

The Accelerated Rain-fed Agricultural Programme (ARAP)

The Accelerated Rain-fed Agricultural Programme was started in 1985 in order to assist all medium-scale crop farmers in recovering from the long drought of the 1980s. ARAP provided farmers with a cash subsidy for

de-stumping, ploughing and weeding. The programme aimed at increasing the cultivated area, in particular through tractor ploughing which would result in improved crop yields.

However, ARAP proved not to be compatible with wise utilisation of land resources. The scheme was not successful in improving crop production. It exacerbated soil erosion because all the areas that were ploughed were not actually cultivated (Barnhoorn *et al.*, 1994). Since the scheme was initiated, rivers and dams were reportedly clogged with large amounts of silt due to soil erosion. The de-stumping subsidy resulted in farmers clearing the land of the trees leaving the land bare and exposed to soil erosion, especially during the drought period. The ARAP therefore only succeeded in increasing land degradation and caused conflict between the Ministry of Agriculture and environmental groups.

DEPLETION OF WOOD AND FOREST RESOURCES

The National Conservation Strategy in 1990 stated that one of the serious environmental issues in Botswana is the depletion of wood resources. In fact, trees are overharvested, not only for firewood, but also for fencing, building materials and handicrafts manufacture. Land clearing for arable agriculture and bushfires also contributes to wood depletion. Because of these activities large areas around major settlements in the country are experiencing severe deforestation.

Fuel-wood depletion in Botswana is mostly associated with the wood requirements of low-income groups in both rural and urban areas. According to the Botswana National Report for the United Nations Conference on Environment and Development of 1992, firewood provides at least 60 per cent of domestically supplied energy (Government of Botswana, 1992b). The report further states that consumption is increasing as a result of rapid population growth in some areas, especially in eastern Botswana where large settlements are found and where an energy crisis is already being experienced. This therefore suggests that as long as poverty is not minimised in the country, wood depletion will remain a cause of concern to environmental conservation.

The other main cause of wood depletion in the country is the overharvesting of timber by commercial logging companies. This is mostly predominant in Chobe District where wood harvesting has caused forest depletion leading to the government of Botswana suspending the commercial activities of timber production in the area. The depletion of wood resources in the country has been the main cause of conflict between conservation groups such as the Forestry Association of Botswana and Kalahari Conservation Society on the one hand, and the government on the other. These conservation groups view wood depletion as one of the primary causes of desertification and they are putting pressure on the government to stem the problem.

PRESSURE AND CONFLICT OVER WATER RESOURCES

Water is a very scarce resource in Botswana. The country has both surface and groundwater supplies, but groundwater has become a most important resource in the country's economy. Groundwater plays a vital role in supplying water for domestic, industrial, mining and livestock needs and becomes even more important during droughts as surface water sources dry up. There are currently about 14,000 registered boreholes, which meet about 60 per cent Botswana's total water demands (Government of Botswana, 1991a).

Groundwater sources are limited and most of those in the western and northern part of Botswana are saline. Opportunities for developing surface water resources within the country are fraught with constraints. The rapidly growing demand for water, driven by population growth and economic development, is creating considerable pressure to develop Botswana's limited water resources (Government of Botswana, 1991a). It is believed that fossil groundwater resources are extracted at a rate that exceeds the recharging rate. What this means is that, eventually, with continued population increase and demand for water, well fields will be completely depleted in the near future. At present there is an unsustainable use of water in the country.

Although Botswana has a National Water Master Plan (Botswana National Water Master Plan, 1991) that is supposed to regulate water use, there are no laws that regulate water use in the country. Water pollution is also slowly becoming a major problem in Botswana. Groundwater nitrate pollution, especially around Mochudi and the south east of Botswana, is reported to be high (Lagestedt, 1992). Arntzen (1989) notes that pollution is limited to nitrate pollution of groundwater around large settlements. Arntzen and Lagestedt are agreed that Botswana has a problem of nitrate groundwater pollution, which represents a threat to the limited water resources.

One significant source of conflict in the country and the region is the Okavango, the only permanent water body in northern Botswana. The Okavango is attractive to various types of interest groups. Arable farmers prefer the Delta because the soils are better and water supplies are sufficient for *molapo* cropping (this is crop cultivation done on the Okavango River floodplains by local communities). Pastoralists use it as an area to fall back on for dry-season grazing. Likewise, wildlife

converges on it in the dry season. The area is also preferred for human settlement because of water availability. Conservation groups are interested in it because of the diversity of the flora and fauna. The government and the private sector are also interested in it partly because of the opportunities it gives for the promotion of tourism. The Okavango is also a subject of international dispute between Namibia and Botswana. At present both the governments of Botswana and Namibia are planning major water development projects which could change the present environment and destroy the balance between man and nature when such schemes come into operation. Although the members of the Southern African Development Community (SADC) have responded to the issue of water resources in the region with a protocol on shared river basins (SADC 1995; Pallet, 1997), the Okavango, is likely to continue to be a source of strategic local and regional conflict in southern Africa. The SADC Protocol on Shared Watercourses of 1995 (SADC, 1995) addresses issues relating to the utilisation of water resources of international character. It is one thing to sign an agreement, it is another to implement it. The Protocol is rendered ineffective in that national water acts in SADC member states are silent on the environmental considerations and interactions with other riparian states. The national water acts also do not define criteria to ensure equitable use of water resources by all user groups. Moreover, the region lacks both the institutional management structure as well as the experts who have a better appreciation of the socio-economic aspects peculiar to the region. Foreign experts are usually contracted on water management issues in the region. If practical measures are not taken to address the issues outlined above, the Protocol would remain nothing more than a political statement. The conflict on the use of the Okavango waters is likely to continue between Botswana and Namibia. There is need for a long-term development plan of the Okavango Basin as a whole that would meet the needs of all stakeholders in the region.

CONFLICT BETWEEN WILDLIFE RESOURCE UTILISATION AND LOCAL COMMUNITIES

As already noted, Botswana has enormous wildlife resources. In particular northern Chobe District and the Okavango Delta contain large concentrations of game, but also the Kalahari region is an important habitat for wild animals. These wildlife resources provide an important source of food and income through subsistence hunting, safari hunting and photographic tourism. In the interest of wildlife conservation and utilisation, nearly 39 per cent of the country's land surface area has been designated as wildlife area, of which 22 per cent is wildlife management area and 17 per cent is national parks, game reserves and forest reserves. The Department of Wildlife and National Parks (DWNP) in the Ministry of Commerce and Industry is responsible for wildlife policy formulation and administration in Botswana.

However, there are conflicts between local communities in wildlife areas and wildlife management in the country. As noted, DWNP is the institution charged by the government with wildlife control in the country. This centralisation of power in the hands of DWNP has made the local communities in wildlife areas view it negatively. Local communities are neither allowed to benefit directly from wildlife in protected areas nor to hunt freely in their communal areas. However, wildlife control is likely to remain with DWNP and this may neither change nor improve the department's image. Local communities view it as a state police department established to deny them access to wildlife use. Ironically, state control of wildlife resources is inadequate, especially since most of the control emanates from urban centres, which are dialectically and geographically detached from the rural areas. This therefore suggests that effective management and monitoring of wildlife resources requires the involvement of those living within the resource areas because they are best placed and could be economically motivated to monitor it effectively on a daily basis.

CONFLICT BETWEEN LOCAL COMMUNITIES AND THE WILDLIFE TOURIST INDUSTRY

There is also conflict between the expansion of human settlements in wildlife areas and the tourist industry. The booming wildlife tourist industry in the country ignores community development. Instead, local communities like those of Khwai and Xade are viewed in tourist circles as a wildlife management problem. The Khwai and Xade community settlements are considered by the Botswana Government and the tourist industry to be within a wildlife and tourist area (the Central Kalahari and Moremi Game Reserves respectively). As a result, both the government and the tourist industry have agreed that the settlements must relocate elsewhere, away from both the Central Kalahari and Moremi Game Reserves. Because of this, the government has embarked on a programme of suspending the provision of all social services such as water, clinics, shops, schools and communication facilities in the hope of forcing the people to consider relocation. The approach was partially successful in Xade where the Basarwa community has recently been moved to a new settlement called New Xade, but it has failed to yield any positive results

in Khwai. New government initiatives to relocate the Basarwa are also disturbing the Basarwa economic lifestyles of hunting and gathering, with the result that many Basarwa continue to be over-dependent on handouts in the form of food rations and clothes. The Remote Area Development Programme (RADP) has settled the Basarwa on infertile land unsuitable for arable agriculture thereby creating problems for sustainable environmental management. It is worth noting that when the RADP started in the 1980s, fertile lands for arable agriculture and suitable grasslands for cattle were already taken by cattle-rearing dominant groups in the country. Arable farming or livestock farming is therefore not a viable option for Basarwa. This means that the majority of Basarwa can only use land for residential purposes. Most recently, the Basarwa settlements have been cynically referred to as 'economic refugee camps' for the relocated and unemployed (Gaborone, 1997).

CONCLUSION

To conclude, it is important to note that resource use conflicts in Botswana are largely a result of land use policies and institutions that are reactive instead of proactive in conflict situations. Therefore, in the light of these conflicts, a proactive land-use conflict-resolution mechanism needs to be put in place. This can be done by creating an effective institution or policy which deals specifically with land-use conflicts. Such an initiative needs to be the collective responsibility of all the land users in the country and should especially involve local communities. The local communities should, where possible, administer the enforcement of such laws through local institutions. Laws and institutions become sustainable if they serve the needs of local people and if these people are involved in their enforcement.

Related to the issue of land-use conflict resolution, is a need to review the Ministries of Agriculture (MOA), Commerce and Industry (MCI), Local Government, Lands and Housing (MLGL&H) and Mineral Resources and Water Affairs (MMR&WA). Such a review should lead to the establishment of the Ministry of Natural Resources and Tourism which should harmonise all natural resource management institutions and policies (Mbaiwa, 1999). At present, the natural resource institutions and policies are fragmented across various government ministries and departments and their policies often conflict with each other during implementation. The MOA is currently responsible not only for arable and livestock production, but also fisheries, forestry and veld products. There is need to make a clear distinctions between the management of agricultural production in the form of arable and livestock production and the management of other natural resources such as fisheries, forestry and veld products. The institutional review should consider the possibility of confining the MOA to economically sustainable livestock and crop production only. All the other renewable natural resources, such as veld products, fisheries, forestry, water and wildlife, and institutions such as the National Conservation Strategy (NCS), the Agricultural Resource Board, and the Departments of Wildlife and National Parks and Tourism should be placed under one ministry. This new ministry (the Ministry of Natural Resources and Tourism) should therefore be set up in such a way that it will harmonise and provide effective coordination of all natural-resource-use institutions and policies in the country.

An alternative would be to place natural resource use institutions such as the Department of Wildlife and National Parks and the National Conservation Strategy in a senior ministry such as Finance and Development Planning. Such a ministry would then control the budget and provide information for the secretariat of other interministerial committees. It could therefore ensure effective coordination between ministries with natural resource interests.

One way in which some of the conflicts between ministries could be addressed is through land-use zoning. This could establish biodiversity reserves to maintain genetic resources, anthropological reserves to protect communities with particular local knowledge skills, as well as providing guidelines for natural resource ministries concerning the most appropriate land use in different parts of the country (Suitcliffe, 1992). While some zoning of land use could be helpful, there are always problems of enforcement. This should only be undertaken around genetic, anthropological, and forest reserves, and in these cases, efforts should be made to ensure that there are benefits for the local communities. Elsewhere, land-use zoning should not be enforced by government direct but encouraged and negotiated through discussions supported by extension advice, land management demonstrations and policy and pricing measures (Wood, 1993). The government should create a favourable policy environment to encourage land uses which are appropriate and sustainable, leaving final responsibility for natural resources and their use in the hands of the community.

The current livestock production policies in Botswana are also in need of review. Livestock production policies in Botswana conflict with wildlife management policies especially where the Buffalo Fence in Ngamiland District is concerned. It is recommended that there should be a review of all current livestock production policies (for example, the TGLP and the Fencing Policy) since they do not consider wildlife as a viable land-use option. The review should take into account social and environmental implications of agricultural policies in the country. Appropriate Social Impact Assessments (SIA) and Environmental Impact Assessments (EIA) need to be carried out in all existing veterinary cordon fences such as the Buffalo Fence. SIAs and EIAs should precede all future building of veterinary fences as mitigation measures. Due consideration could be given to the removal or realignment of the Northern Buffalo Fence, Kuke Fence and the North East Central Kalahari Game Reserve Fence after a thorough study of the impact has been carried out.

The rights of local communities living in wildlife management areas must be recognised. This applies mostly to Xade and Khwai. However, settlement expansion in these areas needs to be part of the land-zoning exercise mentioned above. This suggests that the government should recognise the already existing settlements in wildlife areas and find ways of making them more viable with regard to new developments such as tourism. This also means that settlements in wildlife areas need to be provided with the necessary social facilities such as clean water supplies, communication facilities (for example, good roads and telephones), health facilities (for example, clinics) and shopping facilities (for example, grocery and clothing shops), rather than being forced to relocate in less favourable environments.

Regarding the conflicts over the Okavango Basin, national water acts need to define the criteria that will ensure the equitable use of water resources by all user groups on a sustainable basis. There is also need for SADC states to engage in capacity-building. This means that the advice of local experts, who have a better appreciation of the socio-economic aspects peculiar to the region, is important if the Okavango waters are to be used by riparian states with the minimum of conflict.

Finally, the integration of policies and institutions dealing with land and resource utilisation in Botswana appears to be *a sine qua non* in offering a lasting solution to resource conflicts in the country. Resource management integration can be achieved if the suggestions made above are taken into consideration.

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Participation and Governance in the Development of Borana: Southern Ethiopia

Johan Helland

A sense of crisis is a common theme running through all contemporary reports and descriptions from the pastoral societies of eastern Africa. Pastoral societies, once robust and vigorous, are disintegrating. They seem no longer able to contend with the challenges posed on them by the environments in which they must exist, by the ecological foundations of their economies, or by the effects created by their interrelationships to the larger social, economic, political, military contexts in which they find themselves. The structures and institutions of pastoral societies are apparently no longer able to maintain these societies as going concerns (cf. for example, Fratkin, 1997; Squires and Sidahmed, 1998).

The most pessimistic outlook asserts that pastoralism as a way of life in eastern Africa has outlived its own well-established successes and that pastoral societies now are locked in a downward spiral of ecological crises, famine, dependency and permanent destitution. The outcome of these processes can only be the disappearance of pastoralism as a way of life. Pastoralists in eastern Africa today have become permanent beneficiaries (as the NGOs are fond of calling them) of various famine relief schemes. The once much admired, proud, self-contained and fiercely independent pastoralists, are today conceptualised, particularly in the development lexicon, as helpless paupers and perpetual famine relief clients. The pastoralists have long specialised in survival on marginal lands; these days they are being pushed to the margins of larger society in a social and political sense as well. The pastoralists' loss of economic autonomy and their relegation to the famine relief camps has silenced them and denied them influence over their own situation. There is more or less total disregard on the side of the national authorities and the more charitable helpers alike for the views and interests of pastoralists, even in matters that are of central importance to their lives and their way of living (Hogg, 1986).

The ecological mastery of the pastoralists, in adapting to the harsh fringes of the land resources of eastern Africa, with a resource base so meagre that nobody else can do it, is well known and well documented (Galaty and Johnson, 1990; Barfield, 1993). The most persuasive affirmation of this skill is twofold. On the one hand, pastoral societies have survived in this resource-poor environment for hundreds of years, which strongly suggests that the ecological adaptation of pastoralism is a viable way of using these resources capable of maintaining quite large populations in such marginal areas. On the other hand, the utter failure of most consciously designed, modern development interventions to improve on the ability of the pastoralists to make a living from this land is an indication that there are not too many other options available with regard to sensible use of these resources. Isolated innovations, like modern veterinary services and water technology, have certainly had a major impact on pastoralism over the past few decades, but the consensus now seems to be that these interventions have reduced, or even undermined, the viability and sustainability of the pastoral enterprise and pastoralism as a way of life (cf. Prior, 1994; El-Shorbagy, 1998).

The challenges now facing pastoral societies in eastern Africa (and the nation states that have assumed responsibility for pastoralists as their citizens) is to restore pastoralism, to make it capable once again of using the resources of marginal lands, and to cater to the needs of the pastoralists. There do not seem to be many other places for pastoralists to go and there seem to be few alternative ways of using their lands.

PASTORAL DEVELOPMENT

Pastoral development projects, however, are themselves becoming a contradiction in terms. Projects to develop the economic potentials of pastoralism have been thoroughly discredited. More often than not, they have caused far more problems than they have solved and have shown poor (mostly negative) returns on the investments made. Projects aimed at the productive sector in pastoralism are becoming increasingly rare and the main interest now, as far as development projects are concerned, seems to be focused on making pastoralists less dependent on famine relief and outside assistance and more responsible for their own fortunes.

Development projects in pastoral settings in eastern Africa at first saw the integration of pastoralism into the national economy as a major goal, on the assumption that the pastoral economy contained a surplus which could be used for various national purposes, such as boosting foreign exchange earnings or providing inputs to other parts of the national economy. Even so, it was believed that there was room for improvement in the productivity and output of pastoralism, and this first phase of the development history in pastoral societies saw the introduction of innovations and presumed improvements like veterinary services, water development, rangelands management, genetic upgrading and improvement through cross-breeding schemes, and supplementary feeding and fattening schemes. Most of this has been to little or no avail. The expected effects and benefits have more often than not failed to materialise. Neither the national economy nor the local community have benefited from these massive investments. On the contrary, failed schemes and the unintended consequences that they produced are by now quite well known. Water development has become particularly famous as a development intervention that has done a lot of harm in pastoral contexts. In far too many cases, the introduction of water in formerly dry places has altered land-use patterns in ways that have turned out to be highly destructive to the environment. Water development has, in fact, often contributed to increase the vulnerability of the pastoralists to the very problems they were intended to solve, like drought. Water projects have in many cases caused the unintentional rearranging of social relationships as well. Local views on appropriate distribution of rights and management of resources have been disregarded to the extent of threatening mutual assistance networks and other socially constructed means of averting risk in this high-risk environment (Sandford, 1983; Simpson and Evangelou, 1984).

The efforts made in pastoral development underwent a major change in strategy and direction after the devastating droughts in the 1970s and the 1980s, which in dramatic and unprecedented ways revealed how vulnerable pastoral societies across the drylands of Africa had become. In former times, pastoral societies were able to handle one or two failed seasons without too many problems. Although there were hardships, they were nevertheless generally successful, in carrying people and livestock herds large enough for breeding and regeneration through to the next good season. They were now faced with utter destitution after the failure of a single rainy season. Even temporary delays in the onset of the normal rains seemed to create great problems. The main issue in pastoral development has now become the concern that pastoral societies have apparently lost their ability to handle droughts, or at least that pastoral societies are facing much lower thresholds to famine and destitution than before. As far as pastoral development strategy is concerned, rather than providing a net contribution to the national economy, pastoralism and pastoral societies have now become liabilities that have come to rely on the regular supply of free famine relief food for their survival.

In the aftermath of the experiences of the 1970s and 1980s, the outlook on pastoral development has changed. Rather than mobilising and developing pastoral resources as a contribution to the national economy, the main purpose now seems to be to restore the capacity of pastoral societies to feed themselves. Rather than addressing and manipulating the factors of production in the pastoral enterprise, with a view to increasing production and herd off-take, development projects have now become much more concerned with issues like local food security and local self-reliance. Great importance seems to be attached to fostering popular participation and strengthening local institutions. This particular concern often takes on an aspect of resurrecting organisational capacities undermined or even denied by administrative subjugation in earlier times. Local communities are now to an increasing extent expected to be responsible for their own welfare. Food security and public services which the government can either no longer afford or is incapable of supplying the pastoralists, such as human and animal health services, education, water and roads have now become the responsibility of local communities.

The earlier approach to pastoral development usually entailed considerable public investments, with projects being implemented by one or more government agencies with statutory responsibilities for the livestock sector, the pastoral communities or the dryland areas in which pastoralists live. The new approaches are much less clearly focused and far less technical in nature than the former pastoral development projects. The new projects are often seen as reflecting the much-reduced range of responsibilities which governments now wants to assume in the pastoral areas, although it must be said that clear-cut government policies stating what these responsibilities should be are often lacking. The new approaches are usually not linked to government investments. Government agencies previously charged with the responsibility for pastoral development are being scaled back and public funds for investment in pastoral projects are dwindling.

A notable change, which has taken place concurrently with the increasing influence of the new 'participatory' outlook on pastoral development, is the growing presence of various voluntary groups and non-government agencies in the pastoral areas. As government agencies redefine their ambitions and divest themselves of responsibilities in the pastoral areas, the NGOs seem increasingly to take over both social welfare and the development agencies of the government. The NGOs cannot directly replace government agencies, since they cannot assume the full range of responsibilities they had, but they operate on the basis of cooperation with 'grass roots communities'. Furthermore, the purpose of this cooperation is usually 'popular participation' and 'self-reliance' within numerous fields, which earlier were the responsibility of government agencies, for example, public infrastructure, health, water, educa-

tion, agricultural extension and food security. Although NGOs may often provide technical services on a par with government agencies, there are a number of unresolved questions regarding the presence of NGOs in the pastoral areas.

The issue of responsibility is a major one. The NGOs arrive on their own accord and are usually only answerable to themselves in their operations (cf. Edwards and Hulme, 1995). NGOs may be requested to report on their activities to various national and local bodies, but important issues like the extent and stability of funding or strategies guiding NGO activities are less frequently discussed. There are too many examples of NGOs simply leaving pastoral projects long before 'selfreliance' has been achieved, or project objectives have been reached, for reasons totally unrelated to the pastoral community in which they work.

THE BORANA

The Borana of southern Ethiopia is one of the many pastoral societies in eastern Africa that has gone through several phases in the history of pastoral development. The Borana share many features with other pastoral societies in eastern Africa. They have in the course of the last century moved from a situation in which they were entirely responsible for all aspects of their society, through a period of loose administration and little interference from the central government, on to a situation involving large, classical pastoral development projects (involving water development, demarcation of ranches and feed-lots, directed rangemanagement interventions and rotational grazing, veterinary services, marketing), concurrently with an intensification of government control. In today's situation the Borana find themselves more or less on their own again. They still have to face the problems, which have always affected the lives of pastoralists in this part of the world, but must now also face the consequences of a failed development approach. The presence of the government (now the Oromia Regional State rather than the central Ethiopian government) is concentrated on routine administration with an emphasis on public security. Government development services have been retrenched and have to a large extent been replaced by NGOs. But NGOs are neither willing nor able to fill the gaps made by the large-scale government projects, and some of them have simply left.

Many pastoral societies in eastern Africa have histories that have taken similar trajectories. Many also contain historical experiences that are unique to a particular pastoral society. But there are many striking similarities. These have, to a large extent, grown out of similar ecological adaptations to similar environments as well as to a relationship with a

dominant state which, in a process of state integration, has marginalised the pastoralists in social, economic and political terms. In a contemporary perspective, perhaps some of the most widely shared experiences arise from large-scale development projects that were designed without taking local interests into consideration. There is no doubt that pastoral societies still have greater difficulties than others in articulating their particular interests in national policy contexts as well as in national administrative structures which are clearly biased in favour of agriculture or politically volatile urban populations. Pastoralism is frequently regarded as inherently primitive, as a way of life that must be changed and modernised, even if the alternatives are not obvious. Pastoralists have little influence when decisions are made, but must bear the full brunt of the consequences when things go wrong. Pastoralists have become, or are on the verge of becoming, second-class citizens in their own lands, living on the margins of society (for an excellent journalistic account, see G. Monbiot, 1994).

But in spite of the pervasive theme of crisis which colours all accounts on pastoral societies these days, it is obviously too early to declare the end of pastoralism as a way of life in Borana or elsewhere in eastern Africa. Resilience is an intrinsic quality in pastoralism and the drylands of eastern Africa still contain significant populations who continue to live there, with or without famine relief. The basic premises remain: only pastoralists can make a living in these marginal areas, and pastoralists have nowhere else to make a living. This goes for the Borana as well as the other pastoralists in eastern Africa.

A CRITICAL JUNCTURE IN HISTORY

There can be no doubt that Borana society today finds itself at a critical juncture in its history. A number of comparatively recent events, which have occurred more or less coincidentally in the last few decades, have exerted profound influences on Borana. In isolation these events would probably have been manageable and would have produced fewer consequences, but in combination they seem to have overwhelmed the capacity of Borana society and Borana institutions to respond adequately. A proper understanding of today's crisis in Borana can only be gained by taking these events fully into account.

Land

The Borana pastoralists have probably lived along the borderlands of southern Ethiopia and northern Kenya for several hundred years. For a

long time within this period the Borana were the local hegemonic power in a region that extended quite far beyond, deep into present-day Kenya and Somalia, up to the Tana and Juba rivers. Although these are low-lying drylands with little permanent water, the Borana in this period had access to large areas that could be used quite intensively in the wet season. Yet over the last 150 years the Borana have been pushed back from these lowlands, primarily by various Somali groups moving in from the east. Why this has happened is not clear, but the success of the Somali probably rests more than anything else on differences in social and military organisation. The successful westward expansion of the Somali, at the expense of the Borana, has continued up to the present. The main check on this expansion has actually been the Ethiopian state, which at an early stage of its presence in southern Ethiopia saw the need to contain the Somali. A similar policy was adopted by the British in Kenya. Although much of the land lost to the Somali over the past century and a half is much more suitable for Somali camels than for Borana cattle, competition for land resources between the Somali and the Borana is a constant theme in local politics. The latest issue has been the inclusion of large tracts of contested lands into the Somali Regional State when the new regions were demarcated (Helland, 1996, 1999).

Finding a relative balance between wet-season and dry-season grazing is important to any pastoral society and changes in this balance may produce far-reaching and usually unforeseen effects. The pressure on the Borana land resources continues to this very day. The competition from pastoral neighbours is relentless, but equally serious are the effects that political and ecological processes within Borana have on access to land. The best lands within Borana have been taken over by agricultural communities established in the wake of the incorporation of Borana into the state of Ethiopia. At present, there is an expansion of agriculture into the more marginal arable areas. The pastoralists have also been denied free access to land set aside for various public or commercial development projects. There is an ongoing process of privatisation of pastures as well, with range enclosures becoming increasingly common. And finally, the ecological processes underlying bush encroachment (affecting approximately 40 per cent of the available rangelands in Borana) threaten to make inaccessible or unusable a large part of the remaining resources.

Administrative structures

At the end of the last century, in 1897, the Borana were incorporated into the Ethiopian empire of Menelik II. A large number of Borana elders submitted to a military column sent by one of Menelik's generals, *fitawrari* Hapte Georgis, to occupy the area. Emperor Menelik II had laid claim to land areas as far south as the Tana River and the Indian Ocean and *fitawrari* Hapte Georgis received Borana as his fief in reward for valour in the famous battle of Adua in 1896. The Borana had experienced the effects of modern firearms only a few years earlier and were thoroughly terrorised. They did not have access to firearms at that time, and quickly agreed to pay tribute to Hapte Georgis. He appointed local representatives from the clans of the semi-sacred *Kallu*¹ of the Borana, who were responsible for keeping the peace and collecting tribute, but by and large left the Borana to run their own affairs. The tribute was of course onerous enough, and a number of people moved temporarily to northern Kenya to escape this burden, but the Borana pastoral system as such was robust and productive enough to sustain this additional load and was not threatened.

This feudal model of local administration remained in place up to the Italian occupation in 1936. After the war and with the restoration to the throne of Haile Selassie, the provincial administration was modernised, in the sense that feudal structures of land privileges, retainers and tribute, were replaced by a paid, professional bureaucracy answerable to the state, which collected taxes on behalf of the state. Although Borana probably had a higher calibre of provincial governors than most districts in Ethiopia (due to its location on the border with Kenya), this period, from the end of World War 2 up to the Ethiopian Revolution of 1974, was more than anything else characterised by benign neglect as far as the Ethiopian state was concerned. The paid bureaucracy consisted of representatives of the state and state interests. Local administration, particularly in the rural areas, was still left to the Borana themselves. The former feudal representatives (balabbat) continued in their role as mediators between the state and local communities. Interaction between the local communities and the state was still largely restricted to paying taxes and maintaining the peace, particularly between the various competing pastoral groups in the region.

Beyond this, access to Borana was difficult and the area, its people and its resources were not prominent in national politics. This situation started to change, however, towards the end of Haile Selassie's era. The last few years of this period saw the construction of improved roads in Borana, and the first pastoral development projects (consisting mostly of pilot water development projects) were begun. But up to 1975, the Borana were by and large free to order their own affairs through their own institutions, as long as they kept the peace and paid their taxes. The presence of the central government was restricted to the small towns in the area, and along the border.

Peasant/Pastoralist Associations

The Ethiopian Revolution of 1974 and in particular the Land Reform Proclamation of 1975 and the so-called Development Through Cooperation Campaign that was implemented, implied a great upheaval of this rather placid state of affairs. Land issues, oppressive tenancy and share-cropping arrangements and were not as important in Borana as elsewhere in Ethiopia, since most of the area is unsuitable for arable agriculture: the Land Reform Proclamation affected comparatively few people. Some land grants had been made within pockets of good land in the imperial era to soldier-settlers from other parts of Ethiopia, but at the time of the Revolution the Borana as a whole depended entirely on pastoralism. But the most significant impact of the Development Through Cooperation Campaign in Borana arose from the rearranged structures for local administration in the rural areas of Ethiopia that the campaign put in place. According to the Land Reform Proclamation all agricultural land in Ethiopia was to be held in usufruct by newly established peasant associations (PAs), which also became the basic unit for all other administrative purposes in the rural areas. In the pastoral areas these basic units were initially called pastoral associations, but this distinction was soon forgotten as the revolutionary government consolidated its position. Administrative control and repression of opposition soon became far more important tasks for the pastoral associations than land management.

The new reforms were put in place in Borana by students from the Development Through Cooperation Campaign, who were eager to replace what they saw as backward and corrupt local administration run by corrupt local representatives of the Borana clans with a 'modern' system of local administration based on the pastoral associations. The pastoral associations' structure, based on territorial units and staffed by (semi-)educated people whose primary loyalty was to the new state, was superimposed on the Borana political system. The Borana political and administrative system is based on male assemblies and the authority and reputation of clan elders mediating between the interests of lineage members and laws and customs of the Borana (aada-seera Boorana). Territorial units carry little significance. The pastoral associations' structure devised by the Development Through Cooperation Campaign, however, had no interest in the Borana system already in place and in all cases where interests and jurisdiction overlapped, the pastoral associations claimed pre-eminence. The pastoral associations, for instance, attempted to abrogate the authority of traditional well councils to allocate watering rights, and to impose a system of movement permits for pastoral

herds crossing into the next pastoral association. After a first period of enthusiasm, however, it became clear that is was impossible to extend the authority and legitimacy of the pastoral associations' leadership to all these 'traditional' areas of jurisdiction. Decisions made by the pastoral associations with respect to water and pasture, for instance, were simply ignored and the pastoral associations did not have sufficient coercive resources at its disposal to enforce them. The pastoral associations' leadership was therefore gradually restricted to the authority it received by mediating in relations between the community and the state. In Borana, as in many similar situations elsewhere in Ethiopia, the pastoral associations basically became an instrument for state repression and control and the pastoral associations' leadership soon concentrated their efforts on tasks which were important to the party and the state, rather than to the local communities within the pastoral associations. These concerns included the recruitment of young men for the war effort, the collection of 'voluntary contributions' for various causes and the imposition of production quotas in agriculture, which in Borana meant the delivery of livestock to the state purchasing agency at predetermined prices. In these matters the pastoral associations' leadership could count on the full coercive capacity of the state to enforce compliance. In matters of less importance, the pastoral associations had to tolerate the resurgence of the local political and legal system and the local structures for, for instance, management of natural resources and the resolution of conflict (Helland, 1997, 1998).

Contemporary developments

There were attempts during the Mengistu period to involve the pastoral associations in development work. The most important rural development initiative in Ethiopia in this period was the policy of collectivisation and the relocation of villages. This policy was primarily designed for the agricultural communities and it often implied relocating villages to new sites, with a view to easier provision of services. The policy of collectivisation was envisaged as a gradual process, in which farmers would first form various cooperatives that would evolve into fully-fledged collective farms. The policies to relocate villages were not popular anywhere in Ethiopia and caused a lot of hardship, but fortunately they were never implemented in the pastoral areas although the first modest attempts at creating cooperatives were made, in the form of cooperative shops, under the auspices of the pastoral associations. These shops enjoyed privileged access to important consumer goods which were in short supply, such as sugar, soap, kerosene and so on. The

pastoral associations' shops sold these goods at government-controlled prices to pastoral associations' members only. Although access to the pastoral associations' shops was an important privilege, this also provided the pastoral associations with one of their most effective means of control. Suspension or withdrawal of this privilege was a threat that members of the pastoral associations usually took seriously. None the less, in commercial terms the cooperative shops were generally failures. They came increasingly to serve as retail outlets for the large, centrally managed state corporations in charge of supplying domestic goods, and did not respond to local needs at all. Shops were allocated quotas for goods in high demand as well as for goods for which there was no demand at all, and tried to clear their stock by linking the two. A high-demand item like sugar would be linked to items that the shop had received, but were unable to sell. For example, in Borana at one stage sugar could only be obtained in the pastoral associations' shop if the customer also bought a pack of playing cards! In addition to a poor response to the market, the pastoral associations' shops also suffered from outright mismanagement, theft and embezzlement, often at great cost to the pastoral associations' membership who had to contribute money to these ventures.

Towards the end of the Mengistu era there were some attempts in Borana to move beyond the pastoral associations' shops as far as collective effort towards betterment was concerned. The pastoral associations had been completely discredited as a development institution. Therefore, a small number of (pilot) service cooperatives, which did not use the pastoral associations as the basis for membership, were organised. The idea was that these cooperatives should provide both domestic goods at controlled prices as well as other services, in particular veterinary drugs. These service cooperatives were the first examples of the new or participatory approach to pastoral development in Borana, in which pastoralists were expected to look after their own needs, with minimal involvement from the government. However, this initiative was soon overtaken by other events. The service cooperatives had not been established well enough before the change of government in 1991 swept them away (Hogg, 1990).

Since the change of government in 1991, the pastoral associations' structure has undergone some changes, as part of the large-scale political and administrative reorganisation of Ethiopia that took place with the introduction of regional devolution. Borana had become a separate administrative region in 1987, with an administrative and party structure dominated by various educated Borana. With regional devolution Borana lost this status and was joined to a number of non-Borana administrative

districts (wereda). The educated Borana elite who had dominated the local administrative and party structures under the Derg regime was removed from positions of influence. Even in the weredas clearly dominated by Borana in demographic terms, the administrative posts were now filled by non-Borana, many of whom came from various ethnic minority groups living in Borana. The educated Borana, many of whom had been influential in local affairs during the Mengistu era, were now perceived as a politically unreliable group. Some of them called for armed resistance to the new regime, but this was never seen as more than a minor irritant. Relations between the educated elite and the new regime were poor. The removal of the sons of Borana from positions of authority exacerbated the confrontation between the Borana and the state, and also removed communication links between the Borana, the *wereda* and the zone's administration. An administrative reorganisation of the pastoral associations, which created larger local units by joining several pastoral associations also contributed to increase the distance between the Borana communities and the new administration.

Communications

The Land Reform Proclamation of 1975 meant an unprecedented intensification of state presence and state control in the rural areas of Borana. This was to a large extent made possible by the great improvement in communications that had taken place on the eve of the Revolution. Two all-weather roads had been constructed in the late 1960s/early 1970s, one as a strategic investment in Ethiopia's ongoing suppression of Somali irredentism and the other as part of an international trunk road between Nairobi and Addis Ababa. The two roads have been of great importance to the Borana and have laid down important preconditions for the events that were to unfold in Borana later on. In addition to the role these roads have continued to play in the political and administrative integration of Borana into the Ethiopian state, their main importance is related to increased commercial transactions and economic integration into a larger market. There can be no doubt about the great importance of the roads in terms of promoting trade and commerce, in particular of livestock (and at one stage, smuggled trade goods from Kenya) out of Borana and consumer goods and grain into the area. Although it is difficult to find empirical data to demonstrate this conclusively, improved road communications have most probably played a decisive role in maintaining the favourable exchange ratios between livestock products and grain that Borana has enjoyed in most of the years since the Revolution.

The roads have facilitated famine relief operations after droughts, as well as military operations in the Somali–Ethiopian war of 1977–78. The many different development interventions would have been difficult and far more costly without these roads. The roads have been decisive in the provision of services like health and education and to the general integration of Borana into Ethiopia. This integration, for better or for worse, has been of great importance to the Borana.

Development interventions

Finally, the importance of improved communications must also be emphasised in relation to the development administration that made its way to Borana in the late 1960s and to the famine relief programmes of the 1970s. The first pilot projects for pastoral development were organised in Borana at this time, as a precursor to the large-scale Southern Rangelands Development Unit (SORDU) project that started in the mid-1970s. The SORDU project was part of Ethiopia's Third Livestock Development Project, which provided pastoral development services in the Afar and Somali areas of Ethiopia as well. These were classical, large-scale pastoral development projects, with a clear emphasis on improving rangeland conditions and herd productivity for purposes of taking animals out of the pastoral areas, either as feeder stock for livestock fattening schemes elsewhere in Ethiopia or for export. In Borana, SORDU first and foremost provided water development, marketing and veterinary services. SORDU never imposed any largescale rangelands management schemes (at the time, rotational grazing and stock culling were common prescriptions in the prevailing pastoral development strategies) but demarcated three large ranches in Borana, to be used for various purposes, including experiments and interventions to increase the availability of fodder. SORDU was a multifaceted project, but in retrospect it is primarily remembered for water development.

Its impact in this regard is undeniable. Before SORDU, the pastoral system in Borana relied on a system of split-herd management with clear seasonal movements of the herds. Small herds of milk cows and their calves were kept near the semi-permanent villages located close to the permanent water sources that consisted of a number of deep wells. Dry herds moved on independent grazing circuits, relying on the deep wells in the dry season and temporary surface water in the wet season. This allowed for seasonal resting of the crucial dry-season pastures, as well as burning to control bush growth. Before SORDU, Borana was famous in the context of east African pastoral societies for exceptionally rich pastures without the usual signs of overutilisation and degradation found

elsewhere. Most of the Borana rangelands, in particular in the dry-season areas, are sensitive to overgrazing, however. The good condition of the Borana rangelands therefore means that stock rates in the sensitive dry-season pastures had somehow been kept down which most likely had been achieved because the capacity of the system to water livestock in the wells was below the capacity of the dry-season pastures, which again was below the capacity of the wet-season pastures. This pattern of course pointed to water as the main overall bottleneck to herd growth, increased herd off-take and development in Borana.

SORDU itself constructed a number of water pans and stock ponds, in particular in the former wet-season pastures. Initially these were designed so that they would only prolong the grazing period in the wet-season pastures, with their abundance of fodder, for a few additional weeks into the dry season, thereby conserving the more restricted resources in the dry-season pastures. This design was changed, however, due to the war between Ethiopia and Somalia in 1977–78, when the Somali threatened to invade large parts of the dry-season pastures in Borana and pushed the Borana away from the permanent wells. The size of the water pans in the areas farthest away from the Somali incursions was increased, initially as an emergency measure, but thereby also allowing permanent settlement throughout the year in the wet-season areas. As these areas became permanently occupied, seasonal movement out of the dry-season reserves also became difficult. Over the years this new situation, set in motion by water development, has erased the former clear distinction between the wet-season and dry-season pastures in Borana. Borana herds are now therefore much more restricted in their movements, and all pastures are grazed all the year around. This is a high-risk strategy, however, with those occupying the former wet-season pastures exposing themselves to water shortages if there is a poor rainy season with poor recharge of the stock ponds, while the dry-season pastures are being worn down through heavy and constant use.

Heavy demand for water in the dry-season pastures has also led the Borana herd-owners to invest considerable amounts of money in re-excavating collapsed wells, often by hiring machinery from SORDU, thereby achieving even more intensive use of the pasture resources. The latest innovation in water development is the construction (with the assistance of NGOs) of privately owned cement-lined water tanks in the dry-season areas, to collect surface water. It should be noted that this latest development has also had an impact on the reduction of mobility, and land tenure. The catchment area of these private tanks must be protected, and access is restricted by enclosures.

At about the same time as these developments were set in motion, the

administration in Borana introduced a ban on range burning. Burning every three to four years was a commonly used technique to control bush encroachment of the pastures in Borana. At the time, it was believed by the administration that range burning destroyed resources. Initially the ban was upheld through administrative policing by the pastoral associations, but in a situation where people and livestock do not seasonally move out of the dry-season areas to allow the build-up of combustible materials, range burning became difficult anyway. Range burning in Borana was therefore abandoned for many years, and attempts to reintroduce this practice have met with difficulties. The main problem is that the pastures are now so heavily used that the Borana pastoralists cannot afford to close them off for the length of time it takes for enough fuel to build up for successful burning. An equally important problem rests on the issue of whether the Borana are today capable of reaching the kind of collective decision necessary (and implementing it effectively) for range burning to be reintroduced.

The other main impact of SORDU (in combination with other initiatives) has been within animal health. The SORDU veterinary project, together with the regional vaccination campaigns, has succeeded in controlling the main killer diseases (first and foremost rinderpest) in the Borana herds. There can be no doubt that this has had a major impact on herd growth, but precise figures to demonstrate this relationship are not available (cf. Coppock, 1994; Helland, 1994).

Outside SORDU, the other main development initiatives in Borana have been implemented by NGOs. Their presence in the area has for the last three decades been closely related to famine relief operations, but many of them have also undertaken development work (usually under the label of 'rehabilitation') in Borana in post-drought situations. Few of the NGOs have actually worked with the pastoral population in Borana, however, concentrating rather on town dwellers and the few agricultural communities found in and around the small towns of the area. To the extent where the NGOs have worked with the pastoralist communities at all, they have invariably concentrated on water development.

Famine relief

The main area of operations of the NGOs has been within famine relief. The first large famine relief operation ever to take place in Borana was organised in late 1973 and early 1974. Small amounts of relief supplies had occasionally been distributed at the few health clinics in Borana previous to this time, but famine relief was not something the Borana expected in times of crisis. Since 1973, however, famine relief in one

form or other has been distributed in Borana every year.

There can be no doubt that there have been several periods since the 1973 crisis when large-scale famine relief has been needed to feed large parts of the Borana population. The famines of 1984/85 and 1991/92 are often given particular mention. Likewise, there can be no doubt that there always are poor people in Borana who need help and who have come to rely on famine relief programmes. Conditions in Borana are also such, however, that in between the dry years, with a definite need for famine relief, there have also been good years, and periods with several consecutive good years, with abundant rainfall and excellent range conditions. Famine relief, typically in the form of various food-for-work schemes, was also distributed in Borana in these years.

Famine relief can be distributed not only to correct temporary food security imbalances but for a variety of other purposes and reasons as well. In Ethiopia, as in many other African countries, famine relief has become a permanent feature in society. Many individuals and both government and non-government agencies have developed vested interests in famine relief operations. There seems to be little doubt, for instance, that political motives have played a large role in Borana. The popularity of the government is often related to the amount of famine relief it provides. The administrative structures in place (both within and outside the government) in Borana also have an interest in famine relief. Some structures (for example, the former Relief and Rehabilitation Commission) have especially been designed to distribute famine relief; hence jobs and careers depend on continued operations, while other parts of the bureaucracy benefit in other ways. Famine relief activities are usually better funded and have easier access to all kinds of additional resources than the regular administrative establishment. Poorly funded government services in the outlying rural areas often have to depend on famine relief operations for things like transport, new equipment, repairs and maintenance. Hence, many and diverse interests are often brought to bear to mobilise famine relief operations. This has also happened in Borana.

The most important aspect of famine relief operations is obviously that they should be efficient and well organised, to be able to offer help to those who need it as quickly and as cheaply as possible. But famine relief operations must also be evaluated in a different context, where the effects of famine relief on other features of society must be considered.

It is, by now, quite commonplace to be wary of the effects of free food distribution on production incentives and price formation in local agriculture. It is well known that free famine relief will undermine prices for locally grown food and that continued famine relief beyond the most

strictly necessary periods could have very serious negative implications for local farmers. The same level of caution does not seem to be applied to famine relief operations in pastoral settings. The interrelationship between the free distribution of famine relief grain and production incentives in pastoral production is not as immediate and as obvious as in agricultural settings. None the less, it is important to keep such linkages in mind: the first effect of free famine relief food is the reduced consumption of other foods. Reduced consumption of pastoral foods (milk, meat blood) in a pastoral setting always implies increased investment in herd growth. The milk that is not consumed goes directly back into the young animals in the herd and the animals not sold or killed will remain in the herd, and in many cases, even produce offspring. This linkage between famine relief and reduced consumption is well known to the Borana pastoralists. Local praise songs dealing with various people and events relating to famine relief specifically mention how famine relief has allowed households to keep animals, rather than take them to the market. From the point of view of the individual household this is of course a very good thing.

The livestock statistics from Borana are incomplete and it is not possible to trace empirically the growth and/or decline of the livestock population in Borana over the past 30 years. There have been some highly favourable periods in these three decades, in which the number of livestock has increased significantly, but there have also been several disasters in this same time span, in which animal numbers have declined dramatically. One may argue, from first principles, that the persistent provision of famine relief in situations where this has not been warranted by food security considerations has in effect been a significant subsidy to the local livestock economy in Borana. This must have affected herd growth rates. There have been other events counteracting herd growth (like drought and local security problems), as well as events contributing to it (such as vaccination campaigns and consecutive years with good rains), and in sum the result has probably been a net growth in the numbers both of people and animals in Borana over the last 30 years.

Population growth

Population growth in African pastoral societies was previously believed to be quite low. This was also the case for Borana. Surveys in the late 1960s seemed to indicate a growth rate of between 1.5 and 1.8 per cent per year, and at the time it was thought to be related to a set of rules in the $gaada^2$ system of the Borana that had the effect of delaying reproduction. It was also believed, however, that fertility rates in African pastoral societies were generally lower than in societies based on agriculture. These assumed low population growth rates were primarily believed to have been maintained by a combination of comparatively high mortality rates and comparatively low fertility rates.

Far too little is known about the demography of African pastoral societies, but the contention that they have inherently lower fertility rates than their agricultural neighbours must be questioned (Lindtjørn, 1991). Research from Borana indicates that although birth spacing to some extent is still maintained, the fertility rate is not exceptionally low. Even if the assumption of low fertility rates were true, a decreasing mortality rate will affect the overall growth rate. There can be no doubt that the integration of Borana into the wider nation has contributed to lowering mortality rates. Food security has improved, in great part through the regular provision of famine relief. Better market access, better prices and stable exchange rates between pastoral and agricultural products may probably be ascribed to improved communications. Improved health services, including the inoculation of children, is a result of better national integration.

Again, there are events and characteristics that counteract the decreasing mortality rate, but overall there is no doubt that the Borana population has grown over the past three decades.

BORANA TODAY

The overall features of Borana today follow a pattern that is not unusual in other pastoral societies in eastern Africa. The land areas available to the pastoralists are shrinking, as a result of competition from highland farmers or other pastoral groups. The Borana have lost most of their land to competing Somali groups, but within the remaining areas there is still a relentless pressure to use land for purposes other than pastoralism. This has been exacerbated by the ecological process of bush encroachment that has been taking over even more land from pastoral land use. The remaining areas will be used even more intensively.

At the same time that the resource base is shrinking, the demands on the available resources are maintained at a high level. The human population of Borana is most probably growing at between 2 and 3 per cent per annum and this population will depend almost exclusively on the remaining land resources. The livestock population has been maintained at high levels, most likely due to a combination of development interventions (like water development and veterinary services) and famine relief that has reduced the pressure to sell or consume animals.

The current situation of the Borana pastoralists may now be summed

up under the following three separate, but interdependent headings. Borana today is characterised by a recurrent, some would say permanent, food security crisis, which has led to the distribution of famine relief supplies in Borana every year in the last 25 years. Distribution has not always been warranted by extraordinary drought or widespread disaster, but there have always been poor people in Borana who have benefited from famine relief supplies.

Borana is still a pastoral society, but very few people in Borana today are able to subsist directly from the products of their herds. Most people have to exchange on the market expensive pastoral products for comparatively cheap grain. This has been a successful, but high-risk strategy. The supply of pastoral products depends on local conditions, but the prices and supply of grain depends on entirely different factors. Improved communications and increased market integration have probably contributed to keep local grain prices stable, but there have been incidents where the grain normally sold on Borana markets has, for various reasons, been directed to other areas. Furthermore, poor people sell milk, butter and young animals, and will therefore remain poor (because they cannot invest in herd growth), while rich people can afford to consume more pastoral products and sell cull animals, ensuring reinvestment, herd regeneration and growth. The market dependency strategy therefore contributes to a polarisation between the rich and the poor in Borana. Fortunately, the rates of exchange between pastoral products and grain have in general been favourable to the pastoralist over the past two or three decades, with some exceptionally dry years in which the market for livestock crashed.

Although famine relief has, from time to time, also been distributed for other than purposes strict food security needs, the shortfall in food production and the inability of the Borana to feed themselves must be related to an ecological crisis, the main feature of which is the process of bush encroachment which now affects close to half of the Borana rangelands and which severely reduces the availability of fodder for the Borana herds. Although many aspects of this process remain unclear, it was most likely set in motion by water development projects initiated some 30 years ago, and the concomitant introduction of an administrative ban on range burning, which was the most common indigenous technique for range management and bush control. The altered management regime is probably the most direct cause for the resource degradation taking place in Borana, but factors like the loss of large land areas to pastoral competitors and continued encroachment from agriculture into the best parts of Borana must also be mentioned. Herd growth and increased exploitation of pastures is no doubt a factor as well, but one that is difficult to assess. One should note, however, that water development, in addition to making additional areas available to the pastoralists, has in Borana erased the former distinction between wet-season and dry-season pastures. The seasonal resting of pastures used to be an important management technique in Borana but is now no longer possible.

The Borana resources are therefore being exploited at a much higher rate now than before. A return to the old management system seems difficult. Both of these crises, and the possibility of actually doing anything about them, must be related to an institutional crisis, which is characterised by the failure of Borana institutions to come to grips with developments and trends in Borana society over the past few decades. This is partly due to the unequal relationship of the Borana to the state institutions that have increasingly claimed hegemony and exclusive jurisdiction in Borana, at the expense of Borana institutions. But there are also a number of more insidious processes at work. New events have generated new patterns of behaviour because those who wield political, administrative or economic control in Borana have neither trusted nor understood the existing, indigenous local institutions. A lot of lip service is paid to the notion of using local institutions for all sorts of development purposes, but this is never put into practice.

New events and opportunities influence local patterns of behaviour in ways that eventually have far-reaching repercussions. Up to quite recently, for example, the sale of water in Borana was inconceivable, but these days this is done quite openly in cases where individuals want to recover the costs spent on private water tanks. Such practices, once established as legitimate in the case of private tanks, could easily spread to wells. The current ritual custodians of the individual wells – that is, they are said to own the well in a strictly ritual sense – could assume ownership in an economic sense as well, which would undermine the whole notion of guardianship of water resources and the management system which rests on it.

Another example concerns the currently extensive practice of enclosing parts of the common rangeland and reserving it for individual use. In former times lush patches of forage near a village would be reserved for the calves of the village and itinerant herders would respect this. As the authority of village and clan elders crumbled, calf patches had to be physically protected. The enclosures, which are increasing in size and number, pose threats to both the ecological adaptation of Borana pastoralism as well as to each individual Borana's constitutional rights of access to common pasture.

AFRICAN PASTORALISM

PARTICIPATION AND GOVERNANCE

The events and processes leading to the current situation in Borana, may in many respects be seen as the consequences of the incorporation of Borana into the Ethiopian nation state. The process of incorporation has no doubt had a number of positive and beneficial effects, such as state protection from the westward expansion of the Somali and the provision of valued services such as famine relief, water development, veterinary services, and health care. The main point to note is that the political developments and the administrative changes central to the process of incorporation have taken place without reference to the situation of the Borana. All the fundamental decisions mediating and structuring relations between the Borana and the state have been made without involving the Borana. Nonetheless they have had far-reaching consequences for Borana society. The pastoral association structure, for instance, was intended as the main point of contact between the local community and the state and the main arena for popular participation in Ethiopia. In Borana, this structure cuts across existing Borana institutions and concerns, to the extent that the pastoral association structure was only relevant to the Borana within a narrow band of issues. Issues such as contributions to the war effort, which are important to the state, are much less important to the Borana themselves. The pastoral associations structure remains a structure for political control and top-down management, and is not an arena where local issues can be articulated. The Borana have to take their own concerns and problems elsewhere.

Interventions specifically focusing on the Borana situation have been made without involving the Borana. Development interventions are planned for the Borana, on their behalf and for their benefit – but done by outsiders. There are usually consultations to gain acceptance for various initiatives and activities, and information campaigns to convince the local people of the benefits. The large-scale SORDU development projects were organised in this way, on the basis of ideas current in the development community at the time. NGOs pride themselves on being more sensitive to local needs and local views, but still communicate with the Borana through a structure of local development agents, site facilitators and the like. The Borana institutions in which public concerns are discussed, courses of action evaluated and agreements formulated are sidelined also by the NGOs. This is partly the case because the authorities insist that the NGOs should use the pastoral associations as the basic units for interacting with the Borana, but also because the NGOs either do not trust or do not understand the institutional set-up in Borana. The NGOs

are often staffed by young, educated Borana who frequently have a pronounced modernisation agenda as a backdrop to their work.

Some may see the current situation in Borana as the inevitable outcome of processes of modernisation and national integration. Even so, the situation poses some major challenges in terms of how the Borana will face the future. Irrespective of where the problems have come from, it seems clear that the Borana themselves now will have to come to grips with the contemporary realities on their own. The crucial issue is how well Borana society is equipped to handle this task.

I want to argue here that the institutional crisis referred to above is the most serious outcome of the course of events that have taken place in Borana in the last few decades of its history. In this context, social institutions may be seen as the means needed to do something about the other problems facing the Borana. There is no doubt that the Borana have had social institutions capable of handling large-scale issues of great complexity, which is what the current issues of course are. I have maintained elsewhere, for instance, that the success of Borana pastoralism has depended on institutional capabilities to mobilise and coordinate labour and resources across individual management units, particularly in relation to water management. Accounts from the unfolding of the different cycles in the gaada system provide compelling evidence of how the Borana manage to coordinate complex events in time and space, periodically bringing together hundreds, if not thousands, of people for specific purposes, marshalling the necessary resources to support the effort for long periods of time. Such capabilities in turn depend on central elements in Borana culture, such as a shared insistence on pan-Borana solidarity, on the orderly resolution of conflict and a general subscription to the normative precepts of the customs and the laws of the Borana. This is not to say that Borana culture is monolithic and immutable and that all parts of it are equally important to the business of making a living in Borana. The aada-seera Boorana is capable of change and adjustment and has accommodated pressures and new impulses, but for many years now, the aada-seera has been made irrelevant by those who have wielded military, political, administrative or economic power in Borana. For many years the Borana have been disenfranchised on their own land by government and non-government organisations alike, in most matters including those which matter most to the Borana.

It is a considerable paradox that the Borana are now expected to handle the outcome of these processes on their own. In many respects the Borana are still disenfranchised. The government in power has installed its own loyal followers in all influential formal positions all the way down to the lowest levels of the administrative system. The NGOs, which for most practical purposes have taken over the local development administration, seek the support of community leaders for their projects, but allow them little real influence over the resources at their command. Important policy decisions are still made far away from Borana and the local community must simply learn to live with the results. Local concerns are still simply overlooked or, if they run counter to official policies, actively suppressed.

CONCLUSION

The period of administrative consolidation and later on, the development era in the pastoral societies of eastern Africa have set in motion processes which are difficult to track and control. On the whole there seem to have been few, if any successes in terms of development projects improving the livelihood of the pastoralists. There are probably more and more complex problems facing the pastoralists now than ever before. This is not in itself a critical issue. The most ominous feature of the current situation is that the state, after having deprived the pastoralists of the capacity to look after their own affairs, have now left them to their own devices. Apart from the administrative subjugation of the pastoralists, government and non-government development agencies alike have introduced, more or less forcibly, misguided development policies for the pastoral areas. The legacy of this era of development is now becoming apparent across the dry lands of eastern Africa. Interventions at one stage believed to be for the greater common good are now clearly seen as the causes and origins of some of the most intractable problems facing the pastoralists. But instead of taking on these new challenges and bringing to bear on them the same amount of energy and resources as was originally expended to develop pastoralism, the development agencies are withdrawing. At best, famine relief is provided as a palliative to a shirking responsibility, but as pointed out above, famine relief in pastoral societies causes as many problems as it solves.

The new outlook in pastoral development has put popular participation and self-reliance at its centre. This is all well and good, even if there are still only a few examples of how this works in practical terms and what is actually meant by these terms. At best this may be a move to grant the currently disenfranchised pastoralists a stronger voice and greater influence over events taking place in their societies. The new approach is definitely not a magic bullet. The pastoralists still live in overcrowded, resource-poor environments from which there are no easy ways to a better future. Central governments cannot simply ignore the pastoralists. There are acute needs for both policy reforms and public investments in the pastoral areas. The search for solutions, whether they are technical or organisational, must continue. The pastoralists still need friends and partners as they start looking for solutions to the problems that they face.

NOTES

- 1 Usually translated as 'high priest'.
- 2 The *gaada* is a complex generation-grading system with important political, religious and ideological aspects.

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Conflict Management, Resolution and Institutions among the Karrayu and their Neighbours

Ayalew Gebre

The pastoral, agro-pastoral and cultivating groups in the Middle Awash Valley Region have undergone continuous changes in their ethnic composition, their territorial boundaries and their processes of interaction. These changes are mainly the result of the policies promoted by succeeding Ethiopian governments. Over the years, the central administration has pursued the policy of incorporating these groups into the state apparatus in order to be able to exercise greater control over their resources.

The first major step taken in this direction was the adoption by the imperial government of the river valley development policy in the late 1950s. The penetration of foreign capital into the region in the following years had a tremendous effect on the traditional resource-use patterns there. The biggest single impact was, and continues to be, that groups who, in the past, would have had free access to unlimited natural resources, are now subject to limited access to the natural resource base. The resulting fierce competition for the remaining scarce forage and water has greatly affected the interaction of the groups, with noticeable consequences to their system of transhumance, settlement patterns, traditional boundaries, as well as their ethnic make-up. Most important of all, the developments have profoundly changed the nature of interethnic relationships by bringing the groups into a spiral of conflicts characterised by new dimensions in the cause and nature of the disputes. In this chapter, I will try to show the various facets of resource-based interethnic conflicts against the background of persistent state policies that favour the development of irrigated commercial agriculture in the region.

My view is that herding populations, particularly in the Awash Valley, are the underdogs in the political and economic policy environment that is biased towards developing large-scale mechanised farming and crop cultivation and against the less controllable, more mobile pastoral groups. This state of affairs has not only made pastoral lands extremely vulnerable to encroachment and appropriation by outsiders, but has also drastically brought about changing patterns of resource use and intense competition for resources which, I suggest, is

the principal cause for the increase in interethnic tensions and conflicts as well as the deterioration of the ecology in the region.

Due to heavy dependence on their cattle and herds for their livelihood, various nomadic pastoral groups inhabiting the Awash flood plain have frequently clashed with one another over the best grazing lands and water points. The Karrayu as well had problems with some of their neighbours while they were at peace with others. The Afar and Arsi Oromo, for instance, have long been traditional enemies of the Karrayu, Ittu and Issa Somali. On the other hand, the Karrayu have enjoyed peaceful relationships with the Ittu and Issa Somali mainly as a result of their goal of solidarity against their common enemies, the Afar and Arsi Oromo (Ephrem, 1989). The Issa Somali for their part, are said to have acted as a bridge in the flow of firearms and ammunition to the Karrayu and Ittu (Wondwossen, 1987). The Karrayu are also hostile neighbours to the Argoba agro-pastoralists. The Ittu have historically been good friends with the Karrayu, their peaceful and harmonious relationships being further strengthened by closer links through intermarriage and mutual alliance against their common enemies. As will be discussed later, the hitherto amicable relationships between the Karrayu and Ittu have recently been soured as the influx of more and more Ittu into Karrayu land continues unabated, resulting in intense competition for land.

Hostilities among the nomadic pastoral groups in this region have largely been aggravated by the expansion of large-scale irrigated agriculture and an extensive network of conservation areas for game/tourist parks. For instance, between two divisions of the Afar – the Debine and Weima – on the one hand, and the Karrayu on the other, conflicts were intensified as the Afar encroached further south into the Karrayu territory following their displacements from the north by the development of concession agriculture at Malka Saddi, Malka Warar and Awara Malka. Similarly, hostilities between the Karrayu and Arsi Oromo grew more acute as a result of the Awash National Park that took away most the Karray's territory forcing the group to move further south into the Arsi Oromo-controlled resources. The Arsi Oromo have also been forced to encroach on the Karrayu wet-season grazing areas following their displacement by the ever-expanding Nura Era Plantation. Thus, starting in the early 1960s, a period during which the expansion of irrigation agriculture was intensified in earnest, there have been a series of raids and counter-raids among these groups and the interethnic warfare that took place at times has inflicted heavy losses of life and property on the competing pastoral groups.

Plans by the agricultural schemes to further dispossess the Karrayu of their remaining land, and the Awash National Park's persistent

demand for the evacuation of the pastoralists from parts of its 'gazetted' territory, will most likely heighten the interethnic antipathy between the Karrayu and their neighbours. This will in turn force the Karrayu and Ittu further north and south into what the Afar and Arsi Oromo respectively regard as their territory. In time, even the relatively under-utilised pasture lands in distant migration areas (*beka deda*) will be subject to overgrazing with serious consequences for livestock production, and the ultimate well-being of the pastoral population. In this chapter, therefore, I will examine in some detail the relationships of the Karrayu with their neighbouring groups, with emphasis on resource-based conflicts and the traditional mechanism employed to redress them. More specifically, the chapter has a twofold objective:

- to explore the competition for scarce pastoral resources and the intensification of conflicts of the Karrayu with their neighbouring groups; and
- to identify the traditional Karrayu peace-making institutions as self-regulatory mechanisms of conflict management.

THE PEOPLE

The Karrayu, who have been the indigenous inhabitants of the Metehara Plain and Mount Fentale area are Oromo-speaking transhumant pastoralists. Apart from livestock herding, the Karrayu, who inhabit certain home neighbourhoods, have also started practising both rain-fed and irrigated agriculture. This is a recent but growing tendency which emerged in the early 1980s and has continued to develop ever since. It began mainly as a response to the expropriation of their pastoral land and the subsequent weakening of their pastoral means of livelihood.

The Karrayu area is located on the edge of what may be referred to as the Middle Valley of the Awash River Basin.¹ It lies at an altitude of not more than 1000 metres above sea-level falling to 955 metres at Metehara Plain and rising as high as 2007 metres at Mount Fentale, which is the highest elevation in the region. An important topographic feature of the area, besides the Metehara Plain and Mount Fentale, is the existence of the Kesem and Awash River valleys to the north and south of the mountain respectively. Accordingly, the Fentale Mountain forms two basic drainage systems to the north and south, namely, the Kesem and the Awash drainage systems. Fentale District and its neighbourhood lie in what is termed in Ethiopia a hot semi-arid, or *Qolla*, climatic zone, where the annual temperature is between 18°C and 27°C and mean annual rainfall between 400 and 700 millimetres. Until the downfall of the military regime in 1991, the region inhabited by the Karrayu was part of what used to be known as Eastern Shoa Administrative Region (Yerere and Karrayu) particularly within Fentale District. Since the establishment of the federal government, the territory of the Karrayu constitutes part of Fentale District in the East Shoa Administrative Zone of Oromia. The district is geographically located between 30°:30'-40°:11' longitude east and 8°:42'-9° latitude north. The capital, Metehara, is accessible by a first-class asphalt road at 200 kilometres south-east of Addis Ababa. The neighbours of the Karrayu are the Afar Debine² in the north, Arsi Oromo in the south, the Awash National Park in the east and beyond the park the Ittu of west Harerghe, the Argoba in the west, and the Amhara in the District of Berehet in the south-west.

CONFLICTS WITH THE ARSI OROMO

The Arsi Oromo, who are also predominantly pastoralists, are the southern neighbours of the Karrayu. The relations between the two groups, as described by their respective elders, have historically been characterised by varying degrees of cooperation and confrontation, changing from one to the other according to circumstances.

Nevertheless, increased tensions resulting from competition over key but scarce grazing and watering resources gradually led to minor misunderstandings between the two pastoral groups which later developed into frequent interethnic clashes. The main reason for the scarcity of resources and the resulting competition, as far as the Arsi Oromo are concerned, is the expropriation of a large part of their grazing land by the Nura Era Plantation. As a result, the Arsi Oromo were forced to move into the traditional territory of the Karrayu who had themselves lost some of their pastoral land to the same farm and much more to the Metehara Sugar Estate and the Awash National Park. Thus, the encroachment of the Arsi Oromo onto Karrayu-controlled pastoral resources could hardly be tolerated in view of the remaining resource base, which was on a consistent decline. The situation was further aggravated by the recurrent droughts that had hit the region on numerous occasions.

According to the accounts of the Karrayu elders, a major conflict was sparked off by the death of a respected elder of the Arsi Oromo named Boru Gelchu caused by the hands of certain Karrayu men in October 1976. The Arsi Oromo reacted by organising and launching an all-out attack against the Karrayu in the Nura Era area at a place called Enkolle. Reportedly, there were 120 deaths on both sides as well as the raid of large quantities of camels and cattle by each group from the other. After that relationships between the two groups continued to deteriorate with frequent skirmishes taking place from time to time up to 1991.

As Karrayu elders reported, the Karrayu suffered heavier losses of life and livestock, especially camels, as a result of the conflicts with the Arsi Oromo than the conflicts with the Argoba and the Afar.

These conflicts also affected the existing trade relationships as the groups stopped visiting one another's local markets for fear of retaliatory attacks. According to Nura Era Plantation employees belonging to neither group, Karrayu and Arsi Oromo farm-workers consciously avoided meeting each other around the office compound for reasons of possible revenge. Some were even said to have sent their wives instead of going themselves to collect their wages fearing confrontation and provocation that could result in outright attack.

In a clash that took place in 1982 at a locality called Lugo located along the Awash River bank between Abadir and Nura Era, 35 men of the Karrayu, including several of their elders, were reported to have been killed. An unspecified number of people also died from the Arsi Oromo group in the same incident. The Karrayu believe that some of these deaths were inflicted by government troops as they tried to stop the fight.

Later, in 1989, the Arsi Oromo, with the support of the Argoba, launched a series of cattle raids on the Karrayu that lasted for about a week. The raids took place at the Hariebonna and Karra cattle camps within the Abadir area. In the incidents, the Karrayu related, great numbers of their camels were taken away although there was only one death. The Karrayu attribute the significant fall in the number of their once large camel population to the frequent raids of the Arsi Oromo. They claim that the raiders changed the skin marks and scarifications (*semuda*) made on the Karrayu camels for identification and sold them at remote market places.

There have also been conflicts, as both sides have reported, over the grass that the Nura Era Plantation allows them to use after the harvest of citrus fruits. The cause of the conflict is often a question of claim of traditional possession of the area and competition over grazing resources that do not sufficiently accommodate the livestock of the two groups.

Likewise, the surplus water flow from the irrigation canals of the Nura Era Plantation has been a source of friction between the Karrayu and Arsi Oromo cultivating pastoralists. Misunderstandings and clashes resulting from the attempt to monopolise such water was manifested when some members of the two communities embarked on crop cultivation. Therefore, what has been said so far is to further strengthen the argument that where agreements for access to resources could not be made, or were not made due to increasing competition, excessive use was made of areas which were previously avoided either because they were contested or because they were held in reserve for dry-season and drought grazing by the different stake-holding groups. This generated conflict, as did simply utilising grazing land without the consent and permission of the traditional 'owner'. In the event of such conflicts, the pastoralists employed aggressive encroachment and defence tactics based on supremacy of force, and these were especially acute in the dry season.

Efforts made by government officials of the imperial and the military Ethiopian regimes to resolve the interethnic conflicts through arbitration failed to bring about sustainable peace between the groups involved. Nevertheless, attempts to settle the problem continued through local leaders. A number of elders and 'elites' took the initiative to reconcile the conflicting parties. As a result, members of the communities came together for a traditional peace-making ceremony held at the compound of the Metehara Sugar Estate on 21 July 1991. The two sides established a *modus vivendi*, restored their ties and have lived in relative peace since.

CONFLICTS WITH THE AFAR

The tribal group of the Afar known as the Debine, are the northern neighbours of the Karrayu. As with the Arsi Oromo, the Karrayu have been in constant conflict with the Debine Afar. One of the major factors contributing to this problem is the continuing decline of the resource base for livestock, brought about by the expansion of commercial farms in the region as well as the migration of other groups (the Ittu and the Weima Afar) into the Karrayu and the Debine Afar territories.

The area in question was inhabited traditionally by the Debine Afar to the north, and the Karrayu to the south of Mount Fentale. Meanwhile, the Weima Afar were consistently pushed further and further away from their traditional habitat by the Issa Somali and kept moving into the Debine Afar territory. Other Afar groups too were evicted from their settlements by the expanding Malka Saddi and Malka Warar concession farms migrating under pressure into the area of the Debine Afar. Besides, the Awara Malka mechanised State Farm at Sabure had expropriated large areas of grazing land from the Debine-controlled territory for the production of cotton, fruits and vegetables. Squeezed from all sides into a much narrower and more marginal area, the Debine Afar would have liked to shift further east to the Alleideghii Plain, a realm of abundant pastureland in the Middle Awash. However, their migration was prohibited by the presence in that area of the Issa Somali, their age-old enemies. The only alternative left was for them to push further south into the traditional migration areas (beka deda) of the Karrayu. This brought the Debine Afar into conflict with the Karrayu over grazing and watering resources largely located in the south-eastern quadrant. As a result the dry-season grazing areas of Sifie, Silkie, Tafie and the banks of the Kesem River, which were already densely stocked and settled, have become points of confrontation with interethnic clashes between the Karrayu and the Debine Afar. During the study period the researcher observed heavy concentrations of livestock belonging mainly to the Afar and Karrayu in the aforementioned migration areas. Increasing confrontation due to dwindling grazing resources has also contributed to the degradation of the environment as the concentration of more and more displaced herding populations in limited areas will further aggravate the problem of overgrazing, the major effects of which include the reduction of ground cover, the trampling of vegetation, and erosion by water and wind.

As has been repeatedly stated, the Karrayu had become victims of land expropriation by a number of commercial farms and of overcrowding due to the arrival and settling in their territory of other groups, mainly the Ittu and Somali. Subjected to such pressures, there have also been times when the Karrayu crossed over into the territory of the Debine Afar resulting in friction between them.

The Karrayu also come into conflict with the Debine Afar over the Gebaba Plain between the great and little Fentales to which they resort when forced out of the Arole rangelands by the Argoba. The dry-season grazing areas inside the Awash National Park boundaries (Beleadi, Aroretti and Dinkuku Pond) are also locations of frequent clashes between the Afar (referred to as 'Adal' by the Karrayu) and the Karrayu as these migration areas border closely on the territory of Debine and Weima Afar. In such circumstances, the Karrayu pastoralists often send scouting parties (*selfa*) before they graze their livestock there and water them at the Dinkuku Pond.

When there is confrontation and the possibility of clashes between members of the two pastoral groups, particularly in the neighbourhood of the Dinkuku Pond, luxuriant grazing and abundant watering resources remain unutilised and an opportunity is wasted. For instance, the two wet seasons of 1996 and 1997 were marked by an absence of rains in the Karrayu area and as a result the herders suffered a great deal from the drought situation and lost several heads of cattle while some of the highly nutritive seasonal grasses lay unused not far away. The principal reason for the hesitation of both groups to use these pasturelands is the mutual fear that one side will launch an attack on the other. Therefore, there is a feeling among the Karrayu that the imperial government of Haile Selassie constructed the Dinkuku Pond at this confrontational border point to keep both the Karrayu and the Afar out of the area of the National Park. According to them, the Park's strategy was that the two hostile groups would keep retreating backwards to avoid confrontation and so would not peacefully share the pond and the surrounding pasture. This would prevent them from crossing over the boundary into the Park when grazing resources around the pond were used up.

Dinkuku Pond came to be a point of tension and conflict between the Karrayu and the Debine Afar when the two pastoral groups started watering livestock there sometime after its construction in 1972. As years passed by however, particularly from 1978 onwards, the conflict over the pond and the surrounding pastureland became a conflict between the Karrayu and the Weima Afar. Members of this Afar tribal group were dislocated from their original settlements in West Harerghe, from places called Afdem and Alleideghii Plain by the Issa Somali. The Weima Afar finally settled down around the Awash town close to the Dinkuku Pond bringing them into conflict with the Karrayu more than with the Debine Afar. Hostilities continued between the two groups for over a decade until 1990 when they critical point was reached. The Karrayu and their Ittu allies launched a major attack on the Weima killing a large, unspecified number of their men.

CONFLICTS WITH THE ARGOBA

The relationships of the Karrayu with the Argoba, who are their western neighbours, are marked by resource-based conflicts. The Argoba who practise agro-pastoralism get involved in confrontations with Karrayu herdsmen as a result of competition between the two groups over declining natural forage and water for their livestock.

The Arole rangelands situated to the east of the Sabober Plain where both groups graze their livestock, are the main areas of confrontation leading to conflict and warfare involving livestock thefts, personal injuries and loss of lives. The specific localities collectively referred to as the Arole rangelands are: Edo, Haya, Ledi Roba, Harro Hubo and Harro Harba.

Another site of conflict between the Argoba and the Karrayu is the area of pasture along the banks of the Kesem River. As the Karrayu put it, the Arole rangelands have traditionally been dry- as well as wet-season grazing sites of particularly the Dulecha Karrayu. However, the Karrayu settlers have been displaced from their home villages

(*onnétosso*) at Arole due to repeated encroachment into the area by the Argoba. Therefore they took up other settlements at localities called Sabober, Kereri, Debiti and Harro Kerssa. In spite of the retreat by the Karrayu, these rangelands continue to be vital dry- and wet-season grazing habitats for both groups, leading them to compete over the scarce resources, with armed clashes often taking place.

To avoid such confrontation and to protect themselves against attacks, the Karrayu usually send scouting parties to the area to check and follow up the safety of the territory for grazing. During grazing, a force is assigned to guard the area with arms ready to fight off any intruders while others take care of the livestock.

The Karrayu explain that, particularly during the military regime, repeated and intense cattle raiding occurred on both sides resulting in quite a number of fatalities. In fact, far more lives are said to have been lost as a consequence of hostilities between the Karravu and Argoba than between the Karrayu and any one of the other groups. According to informants, the problems were not as serious prior to this era because the Karrayu had been granted use rights over a vast area of the surrounding land, including the Arole Plain which had previously belonged to a certain landlord called Dejazmatch Woldegebrial Abaseitant. The grant was compensation for the sizable portions of grazing land that the Karrayu had lost to the Awash National Park. As a result, the Karrayu considered themselves to be legitimately entitled to this part of the area by virtue of imperial permission, which enabled them to have free access to the resources. However, with the issuing of the land proclamation of March 1975 and the subsequent abolition of landlords, new developments set in the region. Other groups in the area, especially the Argoba, encroached en masse into what the Karrayu assumed until then to be part of their territory. As a result of continuing incursions, the Dulecha Karrayu were displaced and pushed further east towards the settlements of the Basso Karrayu.

The Karrayu also have their own versions concerning the cause and nature of the conflict between them and the Argoba on the one hand and with the Arsi Oromo and the Afar on the other. Conflicts resulted when either the Karrayu or the Arsi Oromo or the Afar encroached into each other's territory in search of pasture. Concerning conflicts with the Argoba, however, the issue is more of a claim to territory than competition over grazing land. Hence, the desire for territorial expansion and annexation has been the principal factor behind the problem between the Karrayu and the Argoba. The Karrayu complain that even some of their localities have been renamed by the Argoba with the intention of seizing and retaining them as their own territory. For example, traditional Karrayu places such as Beru Boda (Sabober Plain), Eddo Guddo, Karra Suta, and Korqe have been renamed by the Argoba as Shelim Gara, Netche Sar, Suta Ber and Awra Godana respectively. To realise their intentions, complain the Karrayu, the Argoba try to use the influence of members of their group engaged in business in the surrounding towns (Metehara, Awash station, Malka Jillo) and in local and regional government structures. By exploiting the current policy of regionalisation, the Argoba are continuing with their efforts to incorporate the renamed localities as part of their administrative *wereda*.

Despite repeated efforts by local government officials and community elders to resolve the conflicts, confrontations still continue between the two groups. In sum, the bone of contention between the Karrayu and the Argoba, unlike that of the Karrayu versus the Arsi Oromo and the Afar, is a question of land possession and not so much of interterritorial encroachment initiated by the search for wet- and dry-season grazing.

CONFLICTS WITH THE ITTU

Before the establishment of the Awash National Park, the Ittu used to be the eastern neighbours of the Karrayu. The Ittu, who were the immediate eastern neighbours of the Karrayu, migrated over into Karrayu territory in two ways. First a few Ittu pastoralists started to cross over into the territory temporarily by agreement with the Karrayu to find pasture for their cattle. This pattern of getting into – and out of – the Karrayu territory continued until the final days of the Menelik era. Insignificant numbers of Ittu also established permanent settlements there through marriage, bond friendship and ties of affinity. The second wave of Ittu migration began to take place in the early years of the Derg regime precipitated by the droughts of 1973-74 and 1984-85 and by the recurrent interethnic clashes with the Issa. The migrants included pastoral and agro-pastoral Ittu from as far away as West Harerghe mainly from Habro District, from particular localities called Mulu, Measso, Assobot, Kora and parts of Bordedie. The greatest series of Ittu migration occurred in the last 30 years, as Karrayu elders have reported, a period that overlaps with the time of severe drought in the original area of the Ittu. Over the years, the number of Ittu migrants to the area kept increasing, and according to some sources (Lane et al., 1993; Futterknecht, 1996) their number at present is close to that of the Karrayu. Such pressures forced several Ittu village groups to settle in the Karrayu localities of Koboo, Sogido, Mogassa, and Gara Dima. They moved and penetrated these areas by permission of the Karrayu who originally accepted it happily, as pressure on land and resources was not

severe at the time. The historical relationships of intermarriage and affinity between the two groups was the other important factor, which contributed to the Karrayu acceptance of the Ittu migrants.

In recent years though, tension has begun to develop among them, as resources became scarce and the Ittu occupied more and more of Karrayu land. The constant waves of migration accompanied by the increasing numbers of livestock resulted in the overcrowding and overstocking of the ever-shrinking territory, with serious effects on the natural forage resources in the area. In the present situation, the traditional system of land use and the pattern of transhumance have been distorted with the livestock of one home village (*onnétosso*) grazing on the grounds of another. The following paradigmatic case illustrates how the existing pressure on land has caused tension to build up and almost explode between the Karrayu and the Ittu.

THE CASE OF THE GEBELLA

A major misunderstanding and confrontation took pace between the two groups in 1996. The cause of this tension, as described by both Karrayu and Ittu elders, was linked with the practice of rain-fed agriculture by the Ittu on a traditional Karrayu ritual site (*Gebella*). *Gebella* refers to the practice and site connected with the settlement of the elected gaada leaders.³ When a given gaada assumes leadership responsibilities it is commonly referred to as having taken up a settlement or *Gebella*, which is regarded by all as the centre of power. Therefore, after Karrayu political, ritual and military leaders are elected at the gaada ceremony which takes place every eight years, these men move to a chosen locality where they settle with their livestock until the end of the eight-year period. One of the home localities, which serve as a seat of administration for the incumbent gaada leadership, is Koboo.

The Karrayu argue that the locality of Koboo is traditionally a settlement of elected *gaada* leaders (which they view as sacred) and should not be used for cultivation. Moreover, not only will crop cultivation by the Ittu put pressure on livestock grazing of the Karrayu *gaada* leaders, but problems will also arise if the cattle get into the fields. The Ittu, however, insisted on ploughing the land against the will of the Karrayu saying that they have no other place for cultivation. In addition, they showed an inclination to politicise the matter by arguing that the government encourages farmers to be self-sufficient in food. It appears that the Ittu had intended to capitalise on the official bias towards the practice of agriculture in particular and farmers in general. At this point, the Karrayu mobilised themselves from practically all their

localities, ready for an armed attack against the Ittu. The confrontation was building until it seemed that open warfare was about to break out. Neither the elders of the groups nor local government officials were successful in resolving the disputes. It was the interference of neutral elders from the Arsi Oromo who arbitrated and brought about relative peace between the two sides. Temporary peace was made by dividing up the area into two sections in one of which the Karrayu *gaada* leaders graze their livestock, and the Ittu carry out their farming in the other.

The above case is illustrative of the competitive and antagonistic nature of the issue involving the pressure on land and the scarce grazing resources. It is so sensitive and delicate that tensions and hostilities are prone to crop up even between the historically friendliest of groups like the Karrayu and the Ittu, just as well as those not so closely attached to each other. In fact, the Karrayu now regret, as has been bitterly reiterated by my ethnographic informants, having accepted the gradual inflow of the Ittu migrants into their territory considering their present numbers and the extent of the land they now occupy.

As for the aforementioned interethnic conflicts, the Karrayu had a long-running institutional mechanism which was meant to settle these problems or prevent their further aggravation. Below, I shall examine the nature, operation and present state of this mechanism.

Arrarra – the traditional conflict-redressing institution of the Karrayu

Traditionally, the Karrayu have an institution through which they deal with interethnic conflicts. The institution is known as *Arrarra*, which refers, first, to the body of peace makers called *Jarssota Arrarra*, drawn from among senior community elders as well as former or incumbent *gaada* and ritual leaders. Secondly, *Arrarra* also refers to the actual process of reconciliation and peace-making ceremonies.

Members of the peace-making body (*Jarssota Arrarra*) act in this capacity for as long as they are alive, and as such constitute the traditional conflict-redressing institution which is an in-built component of the Karrayu *gaada* system.

Tekulli Jillo, a Karrayu informant who has served in this institution for many years, described for me how the system operates. When conflict arises between the Karrayu and another neighbouring group, one of the parties involved usually initiates the process of reconciliation. In a situation where the Karrayu side is the initiator, the *Jarssota Arrarra* send especial messengers to their counterparts of the other party to propose a joint meeting and thereby redress the conflict. The role of messenger is played by one of two groups in the community. The first group is comprised of women who are considered to be no cause for danger on account of the cultural beliefs associated with femininity. Females are believed to inflict no harm and are not, therefore, themselves regarded as targets of retaliatory attacks. The other group who plays the role of messenger are known as the *Halekie*. These are rich pastoralists who settle in disputed grazing areas, which have been temporarily abandoned as 'no man's land' by two conflicting parties for fear of possible counterattacks. The *Halekie*, who create bond friendships and grazing alliances with the people of the other side, are in a sense neutral members of one or the other of the conflicting groups. Hence, by virtue of their amicable relationships with members of one or the other of the conflicting sides, they are commonly viewed as fit for the role of messenger to propose a peace initiative.

The messengers, in consultation with the elders of the other side in the conflict, arrange a date on which the two parties actually come together to hold a peace-making ceremony. Usually the ceremony takes place exactly at the site where the conflict started, which quite often, happens to be a grazing ground or watering point (malka). Accordingly, the Karrayu Jarssota Arrarra and their counterparts from the conflicting party sit together to talk about the misunderstandings and what should be done to redress them. Both parties reach a common agreement that neither of them benefits if the conflict heightens and the government has to intervene to settle it. They therefore decide to resolve the case between themselves on the basis of their cultural beliefs and practices. The values of mutual trust firmly rooted in oath-taking rituals lay down the cornerstone for an enduring process of reconciliation and peaceful coexistence. As a show of mutual commitment, each side makes a pledge to remain loyal to the other concerning the terms of the oath. Guilty individuals are pinpointed and the wronged party compensated depending on the extent of the human and livestock loses suffered.

If a group has suffered casualties in the course of a conflict, the responsible side will pay blood money (*guma*) according to the number of deaths inflicted. Similarly, all livestock losses as the result of raids will be retrieved as part of the conflict redressing process. The blood price for an individual killed in the conflict amounts to one hundred heads of livestock, including cattle, camels and small ruminants.

At the climax of the peace-making ceremony, a bullock is slaughtered and its skin pierced right through the middle. As a symbolic gesture of getting rid of enmities, elders of both sides and households who have lost a member in the conflict shake hands through this hole in the skin. After partaking of the bullock's meat, participants of the ceremony swear oaths over the eating utensils as a sign of joint commitment to abstain thereafter from acts of provocation and retaliation. Before the elders are dispersed and as a confirmation of the peace deal, herdsmen of the conflicting groups are made to settle together in the same migration area (*beke deda*) so that they share common grazing and watering resources for their livestock.

In the final phase of the peace-making process, representatives of the groups involved let the government authorities know of the reconciliation. They confirm that justice has been done with the guilty parties penalised, blood prices paid for victims, lost livestock retrieved and thus peaceful relations restored. Thus, with this knowledge, government officials are asked to accept the peace agreement and cease to pursue the case.

Karrayu elders believe that *Arrarra* provides effective and enduring solutions in a situation where the magnitude of the damage done to the groups involved in the conflict is more or less proportionate. If, however, one side appears to have inflicted a higher degree of human and livestock losses on the other, the chances of reconciliation and peace become very slim. Even though the group with the upper hand in the conflict initiates reconciliation, the underdogs usually decline the offer as they wait for an opportune time to retaliate. Therefore, a group proposes *Arrarra* if it assumes that the losses inflicted on the other side are either proportionate or not so heavy as to make the peace proposal unacceptable. Therefore timing becomes important when a conflicting party is contemplating a peace initiative by means of the *Arrarra* institution.

In earlier times, restored peace and reconciliation through the traditional practices of *Arrarra* used to last and, hence, proved effective. Obviously, the practice exerted considerable force on the communities concerned. From the stand point of Karrayu elders, the strong bonds of mutual trust among the members and the spiritual values associated with it and deeply embedded in the psychology of the adherents explain the enduring effects of the process. The ceremonial oaths also had special powers by virtue of the fact that they were generally and unquestioningly believed to be binding on everyone involved. In addition to these deterrents, the transparency with which the *Arrarra* process takes place acts as a strong factor in making the peace vows continue to hold.

However, with the passage of time and interference by government authorities, the *Arrarra* institution gradually became undermined and lost some of the effectiveness it had once enjoyed. Karrayu elders attribute the erosion of the *Arrarra* institution to a number of factors. During the era of the Derg in particular, the institution was hijacked as it were and taken out of the hands of the *Jarssota Arrarra* and began to be presided over by local people whom the government installed as its representatives. Increased involvement by the authorities brought pressures to bear on the locals and deeply affected the trust and openness that had characterised the practice before.

Moreover, the fear associated with cultural beliefs weakened, with the result that the validity of the ceremony began to deteriorate. Coupled with this, the non-involvement of accepted and legitimate community figures as well as failure to address various aspects of the conflict all meant that any government-sponsored peace deal was nominal and short-lived at best. The worst thing, according to Karrayu elders, was that community members acting for the government failed to bring conflicting parties together to settle their disputes in an amicable manner, as was the case before. Far from this in fact, strong complaints were voiced that government-appointed elders collected bribes from the guilty side, who then obtained the cash from the sale of raided livestock. As a result of the corruption and distortion of the traditional *Arrarra* values, offenders now get away, blood prices remain unpaid, and the guilty and innocent often go unnoticed owing to the obscurity that surrounds the handling of the conflict.

With the situation getting ever worse from the time of the Derg onwards, offenders seemed to gain from the conflicts, deliberately caused or otherwise. As a result, incidents continued to multiply and spread throughout the region, making it vulnerable to recurrent armed clashes between various pastoral and agro-pastoral groups. Instability prevails at the moment to a degree higher than it ever did in preceding years and the indication is that the state of insecurity will continue to reign, given present circumstances.

A good case in point is the most recent conflict, which broke out between the Karrayu and the Afar, and which continues to cause serious confrontations leading sometimes to bloody retaliatory incidents. I have found this case material to be illustrative of what has been mentioned before with respect to the undermining of the *Arrarra* institution. I have, therefore, chosen to present the case and discuss its implications at some length. The data was supplied by a former Karrayu *gaada* leader, Hawas Jillo, who is now trying hard to get the two sides together for peace and reconciliation in the manner in which the *Arrarra* institution used to operate.

A common cause for conflicts between neighbouring groups is the competition over scarce grazing and watering resources. On a smaller scale, cattle thefts also lead to incidents which often result in a spiral of vendettas between the households involved in the case. Such clashes usually spread and then develop into large-scale interethnic conflicts.

A grazing site where conflicts are frequent is located in the vicinity of the Kesem (Bulga) River. Karrayu, Ittu, Afar, Argoba, and to some extent the Minjar Amhara, are the groups that compete for resources in this area, particularly at the height of the dry season. Problems are still felt here since incidents of theft and bloody clashes recur two or three times each year. As a result, herdsmen go about their grazing and watering routines accompanied by armed scouting parties (*selfa*). Frequent clashes between the Karrayu and the Afar take place around this site. The Karrayu versus Afar incident of May 1999 is only one in a long-running series of conflicts. Directly involved in this particular case are the two tribal sections, the Kite (Inseteffa) of the Afar and the Dulecha of the Karrayu. These groups have waged retaliatory attacks on each other on average twice annually for the last five years.

The current conflict started when Afar herdsmen crossed the Kesem River and drove their camel herds far into one of the Karrayu migration areas (*beke deda*) called Halem. Karrayu herdsmen acted to prevent the incursion, and in the course of the clash that ensued a person was killed from the Karrayu side. In the counterattack, Karrayu herdsmen inflicted three casualties on the Afar. In the process, three droves⁴ of camels numbering about two thousand which belonged to the Afar were seized by Karrayu herdsmen. Repeated attacks were waged later on by the Afar to retrieve captured camels resulting in ten further deaths on their side. Only two herdsmen from the Karrayu have so far been apprehended by local government authorities.

Following this incident, a maximum degree of confrontation continued for three days as each side mobilised, launching an offensive on the other. However, a group of government-armed men interfered to ease the tension momentarily. A joint committee drawn from members of the Karrayu's and the Afar's local administration also worked without success at the recovery of the seized camel herds. Of the approximately two thousand heads of camels lost, only forty were actually restored. Similarly, weapons captured from the dead Afar herdsmen have not been handed in. As a result, the Afar are at the time of writing bracing themselves for a major act of retaliation. Further complicating the problem is the failure by members of the two local administrations to decide which side should actually bear the responsibility for the crisis. It has been observed that local administrations show partisanship in favour of their own group, and this tendency affects the transparency of the conflict-handling process and the credibility of those engaged in it.

On the other hand, other tribal sections, the Afar Meffa Debine and Basso Karrayu who have a long history of conflict were able to settle theirs through the Arrarra traditional peace-making ceremony conducted ten years ago. Not only have the two groups coexisted peacefully ever since; they have also been sharing resources inside one another's territory. For instance, the Karrayu have access to the Afar local market at Sabure and so do the Afar at the market of the Karrayu in Metehara. Similarly, both sides equally utilise grazing resources found around the migration areas of Fuluha (hotspring), Gebaba, Tino Fentale, Chelelka, places which come within the territory of one or the other of the two groups. To water their livestock, however, both groups use Fuluha located inside Afar territory. Intermarriage too is practised widely between the two groups as a result. Interestingly enough, even the conflicts between the Dulecha Karrayu and Inseteffa Afar have had no impact on the peaceful relationships between the Basso Karravu and Meffa Debine, despite their respective tribal affiliations with the concerned hostile groups.

As stated earlier, the Dulecha Karrayu and the Inteseffa Afar regularly clash with each other over the waters of the Kesem River and the pasture found to the north and south. Dry-season grazing areas are located on the Afar side of the territory and north of the river are Ajjo and Taffie. To the south are grazing areas of the Karrayu called Arttu, Halem, Delewe, Dodotie and Kurkura. Incidents also occur between the Argoba agro-pastoralists and Minjar Amhara cultivators over the same places where these groups come in search of grazing resources for their livestock. In the event of mounting tension, the clashing groups graze their animals under surveillance (*sokkie*) by armed individuals whom they send ahead of the herdsmen to check for possible threats from the other side.

In the years when the *Arrarra* institution was still active and strong, all four groups used to utilise the resources in these places by solving their disputes through the traditional peace-making ceremony. As a result, they were for a long time able to use a common local market at a locality called Kollu situated near a watering point along the banks of Kesem River. However, with the continuous decline of the *Arrarra* institution and the resulting intensification of conflicts, the groups gradually ceased to go to a common market. Instead, acts of provocation with the intent to retaliate have became the order of the times. As Karrayu elders relate, it has been nearly 25 years since the four groups stopped going to the same market. This period marks the length of time that the *Arrarra* institution has come under increasing pressure with the ultimate result of a much weakened state as it is now. Remnants of the

institution can still be witnessed, though, in the sporadic practices that take place every now and then. Nevertheless, the last 25 years represent the period of time since the institution began to lose the ritual powers and the cultural significance that had once made it a viable and reliable conflict-redressing mechanism.

NOTES

- 1 The classification of the Awash River Basin as the Upper, the Middle and the Lower valleys was made by the former Awash Valley Authority (AVA) in order to oversee the various agro-industrial projects that operated in the area.
- 2 Debine one of the biggest federations of Afar clans inhabiting the south-west rangelands in the Middle Awash.
- 3 See Helland, this volume, note 2, page 79.
- 4 A drove consists of between 500 and 700 heads of camel.

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Ranchers and Pastoralists: The Restructuring of Government Ranching, Uganda

Frank Emmanuel Muhereza

The focus of the governments since the colonial period on the development of commercial livestock ranching disregarded the significance of the traditional livestock production sector. Even before the ranching schemes were started, there existed contestation between prospective landowners and nomadic cattle keepers.¹ After they were started, there were attempts made to galvanise local interests to oppose the establishments of the ranching schemes.² In Buruli, the Buganda government compensated the people in the areas it undertook to develop the Buruli Ranches. However, some refused to move away and remained on the ranches, and continued practising subsistence agriculture while others kept cattle.³ There was a similar problem in Mawogola⁴ and in Singo.⁵ It was in northern Uganda where government ranching schemes had been earmarked as land for ranch development during phase two that a lot resistance to ranching schemes was registered. The Ministry of Veterinary Services and Animal Industry tried to develop a ranching scheme in Akokoro areas, but the local people refused to quit the area.⁶

The first five years of the operation of the ranches (1962–68) saw major developments in commercial milk production. The number of exotic or cross-bred dairy cows increased from almost nothing to 20,000 which produced 7000 gallons a day to 18 dairy plants. Production expanded on a daily basis. Similarly, from one commercial ranch in 1962, with 400 herds of indigenous cattle for beef production, the number increased to over 70 ranches with 30,000 head of beef cattle, of which one-third were exotic, exotic crosses, or Boran. The Ankole-Masaka Ranching scheme alone, the biggest development in ranching, had 13,000 head of cattle by 1968.⁷ For phase II ranches especially in Kabula, initial developments including perimeter fencing, valley dams and dip construction were carried out by Uganda government and an American fund. These ranchers were given an initial probation period of five years, which they all passed and were given a full-time lease of 49 years. The majority of them performed to the satisfaction of government which in some cases had to come in and regulate the number of beasts on any given ranch.

Government ranching schemes in Singo, Buruli and Bunyoro were operational by 1974. A lot of animal breeding was taking place on the departmental ranches. Many of the ranches had mixed breeds of livestock for beef. The peak in livestock production in terms of cattle population was reached in 1978 and then livestock numbers began to decline in all the sub-sectors of livestock production. The worst affected were the departmental ranches, which is a reflection of the government's crumbling administrative machinery, especially veterinary extension and input service delivery.

Idi Amin, in an attempt to indigenise the economy, had expelled Asians in 1972 and nationalised all foreign-owned business enterprises. The nationalised enterprises were allocated to political and military supporters. The ensuing economic mismanagement and political isolation grievously affected the livestock sector. By 1975, the handling of ranches had already gone to disaster. Cabinet ministers and other authorities in these ministries gave away ranches to their political supporters, and repossessed others in a most absurd manner. USAID suspended its financial support to livestock sector development. Idi Amin turned to the Arab world, and managed to secure a line of credit from the Kuwait Fund for the first five-year Beef Sector Ranching Development Project (1975-80). However, funding from Kuwait for beef ranching development could not take off due to the liberation war that started in 1978. All the materials that had been procured to develop these ranches were looted at field stations. Ranching infrastructure was destroyed because of lack of maintenance. Livestock on the ranches began to die because of lack of disease control facilities and chemicals.⁸

CIVIL WARS AND LIVESTOCK PRODUCTION

As the ranches were beginning to pick up during the Obote I period, a civil war broke out, starting the Luwero Triangle, covering much of the cattle corridor. The different livestock production sub-sectors had been affected differently by the 1979 liberation war. During this war, a lot of cattle were stolen, some crossed to Tanzania while others were eaten by soldiers. The cattle that had survived the war died because of a breakdown in disease control facilities. All the ranches were affected, although in varying degrees. The protracted struggle against the Obote II government by the National Resistance Army (NRA) led by Museveni started in 1980. The ranching schemes in the Luwero Triangle, especially Singo, were affected.⁹ Maruzi ranch was also affected by the civil wars.¹⁰

The political instability resulting from the civil wars that started from the 1979 liberation war to 1985 led to a shortage in foreign exchange, and the resulting poor economic performance led to severe deterioration in disease control, upon which government policy for livestock improvement had been anchored. There were a number of problems for livestock production associated with these difficulties. On the ranches where the breeds included the exotic and crosses, there was increased resurgence of East Coast Fever and Trypanosomiasis because of a severe shortage of drugs and acaricides. This led to significant losses of stock. There was a reinfestation of tsetse flies in the belt between the Kiryana/Kyempisi-Bunyoro-Maruzi ranches and the majority of the ranches were in areas that were considered insecure. Many veterinary extension staff were not at their stations and those who were, had very low morale because of poor facilitation and the general run-down of support services. The implementation and monitoring of disease control was greatly hampered by the breakdown in communication services, including the road networks and telecommunication.

LIVESTOCK DEVELOPMENT UNDER THE NATIONAL RESISTANCE MOVEMENT (NRM)

When the National Resistance Movement (NRM) came to power in 1986, one of the daunting tasks it faced was the resettlement of displaced people, including the cattle keepers who were dispossessed when the ranching schemes were started in the 1960s, but who continued roaming the entire stretch of the dryland grassland Savannah that stretches from Ankole, through Masaka, Kabula into Singo through Bunyoro and eastwards into Teso-Karamoja. Others had been evicted from Lake Mburo in 1982 when it was upgraded from game reserve to national park status.

Pressures mounted from different political pressure groups for the new government to recognise their contributions by assenting to their demands. The cattle keepers represented one such source of pressure on the NRM. During the Obote II government, the majority of cattle keepers were harassed because they were suspected to be sympathetic to Museveni who was waging a war against the government. Faced with harassment, many joined the NRA in the bush for their survival. Others sent their sons and daughters to fight the government or sacrificed their property to support the bush war from wherever they had taken refuge. After the NRM captured power in 1986, they represented a very formidable pressure group against the government. One of the key demands from the cattle keepers was to resettle in the ranching schemes. Those who had been displaced from the areas where ranches were established, especially the areas where ranches were set up in the late 1970s, such as the Singo and Bunyoro ranching schemes, were demanding to be resettled in the areas where they had been displaced.

After assuming power in January 1986, the NRM government formulated an economic recovery programme focusing on, among other things, improving and transforming the existing livestock production systems. This was undertaken through the involvement of pastoral communities in disease control, the improvement of diagnostic facilities, intensified veterinary extension and private veterinary practice, the training of community animal health workers, supporting private sector participation in the marketing of livestock and their products and provision of water and other infrastructure to address pastoral nomadism (MAAIF, 1996). After 1996, the NRM government came up with an agricultural modernisation agenda, as a fulfillment of President Museveni's 1996 presidential campaign pledge. In the agricultural modernisation strategy (1996–2000), the government undertook to promote the specialisation of agricultural activities based on agro-ecological zones (MAAIF, 1996). The main objectives of the strategies adopted for the livestock sub-sector in the modernisation agenda included reversing the decline in livestock numbers by improving disease control; adopting other productivity enhancing measures; and increasing the availability of water for livestock with the construction of water harvesting facilities (Republic of Uganda, 1997).

One of the main strategies adopted by the NRM has been the settlement of nomadic cattle keepers. From the point of view of the government, the strategy of settling pastoralists is considered a panacea to resource management problems associated with the practice of nomadism, which the NRM considers to be among the leading obstacles to the development of the livestock production sector in Uganda. Justifying the government's concern and need to settle landless cattle keepers who were squatting on ranches in and outside the government ranching schemes, the then Minister of Agriculture Animal Industry and Fisheries, Professor Mondo Kagonyera argued in 1990 that the contribution of squatters to the country's economy was not insignificant. He said:

there is nothing wrong with the government being concerned for social or economic reasons and even legal reasons. Because these people could challenge any government at any one time for having abused their human rights!¹¹

By 1998, the contributions by the squatters were still no less insignificant, as they owned a total of 60,000 heads of cattle. Two major policy intervention by NRM to settle pastoralists have included the establishment of the Kanyaryeru resettlement scheme following the degazetting of part of the Lake Mburo National Park (LMNP), and the restructuring of former government-sponsored ranching scheme, through both of which land was made available for the settlement of former landless cattle keepers. It has been the strong belief of government that settling pastoralists provides the required incentives for hitherto landless cattle keepers to invest in the improvement of the land, which they own privately. This leads to the adoption of improved pastoral resource management practices.

THE RESETTLEMENT OF LANDLESS CATTLE KEEPERS

Immediately on assuming power in 1986, the NRM set up the Lake Mburo Task Force, whose terms of reference were to iron out the issue of settlement in the Lake Mburo National Park. The area around Lake Mburo is endowed with a unique ecosystem which provides conditions capable of supporting a variety of habitat types, unmatched in many places of the world. While it provides a habitat to a multitude of fauna (both large and small wildlife stock), in the dry season, it is the only area (that is, around Lakes Mburo and Kachera) that retains permanent water, which creates a lot of competition for pastures and water between cattle keepers and their livestock, and the park management and their wildlife. The magnitude of such contestation increased in the 1970s and 1980s mainly because of a population explosion of cattle keepers who began to live with their livestock near the boundaries of the park, and eventually moved inside the park boundaries. At the same time, the number of pastoralists who encroached on the park also increased, especially as poorly maintained water sources in the government ranching schemes began to dry up earlier than expected during dry seasons.

The Lake Mburo Task Force recommended in 1987 that 150 square miles be cut off from the park for ranching, cultivation and resettlement of landless cattle keepers displaced from the Luwero Triangle, leaving the park with 100 square miles, less than half its original size. This led to the creation of the Kanyaryeru resettlement scheme. However, the creation of this resettlement scheme did not ease the pressure on the Lake Mburo National Park (LMNP) over grazing and water, especially during the dry season. This was because as recently as 1991, private ranches occupied 50 square miles of prime grazing lands in the Lake Mburo ecosystem. The Nshara government ranch occupied 30 square miles, Kanyaryeru resettlement scheme 30 square miles, with 40 square miles occupied by private ranches and already existing agricultural settlements. The Kanyaryeru resettlement scheme, therefore provided only a limited respite for grazing pressures, especially for cattle keepers who remained largely excluded from the larger areas under government and private ranches.

Meantime, pressures on the NRM government were mounting in not only the Ankole ranching scheme, but also in the other four ranching schemes of Bunyoro, Buruli, Masaka/Mawogola and Singo. Around the time the NRM was busy planning the resettlement of landless cattle keepers in the degazetted section of the LMNP, there was the report of an organised resistance against rancher-landlords by landless squatters in the Bunyoro ranching scheme in November 1986. This resistance followed an attempt by the NRA to evict some squatters from a ranch in order to start an NRA ranch in the scheme.¹² The squatters blocked the road and refused to allow an army truck from proceeding to its final destination. Attempts by the army to occupy a ranch heavily settled by squatters were successfully resisted. It was then that it was announced that the government was in the process of reviewing all government ranching schemes. In the meantime the squatters were told to stay wherever they were.

The resettlement of landless cattle keepers in the Kanyaryeru resettlement scheme increased pressures from other cattle keepers on the LMNP and the other ranches in the government-sponsored ranching scheme, as well as private ranches in the area. Even threats by the government to prosecute pastoralists for practising nomadism did not succeeded in dissuading them from encroaching on the park. It was at that time that the government was forced to a find a long-term solution to the problem of landless cattle keepers by way or reviewing government policy on the ranching schemes started in the 1960s. This was because, to ease the pressures on the now greatly reduced LMNP, the government made promises to cattle keepers to resettle them elsewhere – outside the LMNP and the Kanyaryeru resettlement scheme. The government started making appeals to cattle keepers who had been living inside the LMNP boundaries to accept to be compensated and resettled in government ranching schemes elsewhere, mainly in Singo.

THE COMMISSION OF INQUIRY INTO THE GOVERNMENT RANCHING SCHEMES

By the end of its first year in power, it was apparent to the NRM government that government policy on the ranching schemes was no longer clear, in the light of increased pressures on the government ranches by squatters, the failure of many of the ranch owners to fulfil development conditions contingent on the lease offers, and the political and economic problems arising from two decades of civil wars. At the beginning of 1987, the government set up a nine-man Commission of Inquiry to look into the setting-up, management and working of the 207 ranches in the five government-sponsored ranching schemes of Ankole, Buruli, Masaka, Singo and Bunyoro, with a view to effecting reforms and improving the efficiency of these and future ranches. The commission was designated by the government under Legal Notice Number 5 of 1987, Section 2 of the Commission of Inquiry Act (Cap. 56).

In its report published in December 1988, the commission recommended, among other things, that the ranches be individually scrutinised in order to find land to settle the squatters. The commission recommended that the government repossess 53 of the 96 ranches from individuals, companies and cooperative societies in Ankole, Masaka, Buruli, Singo and Bunyoro which had performed badly, and these would provide about 55,200 hectares of land on which the squatters should be settled (Republic of Uganda, 1988). The owners of these 53 ranches had become telephone ranchers, owning large pieces of undeveloped land. Some of them had acquired the ranches fraudulently. A total of 43 ranches were identified as having shown minimal development, but due to genuine problems of instability, could not achieve much. These ranches were to be given twelve months to show concrete development. Thirteen of these ranches were in Masaka.¹³

The cabinet discussed the Commission of Inquiry report no fewer than six times, and adopted it with slight modifications. The government's decision was based on a white paper written by the ministry, which recommended to government that the commission's report be adopted with its recommendations. The report sparked off wide-ranging debates with implications on the future of the ranching schemes in general and the relationship between ranchers and squatters in particular, especially on those ranches which had squatters on them.

THE REPOSSESSION OF RANCHES IN GOVERNMENT RANCHING SCHEMES

When the National Resistance Council (NRC) sat to deliberate on the report of the Commission of Inquiry into the ranching schemes following the outbreak of violence, a number of policy issues were discussed. The commission's recommendation to repossess only those ranches which had performed poorly had originally been upheld by government. At that time it was established that out of the 53 ranches to be repossessed which had failed to honour the conditions given to them by government during the initial allocation of the ranches, only three ranches were in Ankole, 19

were in Masaka, nine were in Singo, two in Buruli, while 20 ranches were in Bunyoro (Ranch Restructuring Board, 1994).

In Ankole where ranching schemes began, government provided almost all the requisite ranching infrastructure including the following: perimeter fencing, valley dams, dip tanks. Those who were allocated the ranches tried so much to fulfil the development conditions set up by the government. After Ankole, the government established the Masaka ranches. Here up to 50 per cent of the required infrastructure was provided. By the time the ranches were established in Kabula (Mawogola and Lwemiyaga), Singo and Bunyoro, allocatees had to do everything for themselves. Ranchers from Masaka and other ranching schemes said government was being sectarian; that was why it was reducing only three ranches in Nyabushozi. When the issue was put to cabinet, some cabinet members sympathised with the point of view of the Masaka ranchers.

The government went back to cabinet in light of the suggestions that it was targeting only ranches in Masaka and not those in Ankole, and recommended that all ranches be reduced across the board. The matter was tabled to the National Executive Committee (NEC) which endorsed the government's decision to have all ranches reduced to three (for the good performers), two (for moderate performers) and one (for those who had performed poorly, but were still interested in ranching, and the majority of the squatters). After this decision had been made, people from Lwemiyaga and Mawogola again told the president that, in their view, the government's previous decision to repossess only ranches which had performed poorly made more sense.

Government stood by its decision. The proposal in the commission's report was revised because it had a problem on the criteria it used for determining non-performing ranches. The commission of inquiry used only one criterion – that of number of stock, irrespective of how the ranchers had performed with regard to other useful indices such as perimeter fences, dips, water development, paddocking, bush clearing etc.¹⁴ The argument that Ankole ranches had been more developed than those in Masaka and Mawogola would not have been true if the criterion of ranch development had been widened to include other relevant performance measures.

The same people again complained that the first decision had been better. A series of high-level government meetings were convened. The NEC met on 14 and 15 July 1990 to review the recommendation of the government Commission of Inquiry, and decided to uphold the policy. A ministerial statement was issued to that effect. Between January and December 1989, tensions continued building up as alliances and counteralliances were formed between ranchers and squatters on one hand, with their sympathisers in the policy-making organs, government departments and especially the military, on the other hand. The ranchers had a very strong lobby. Many argued that they should be compensated, even those who had not developed their ranches or those who had been politically allocated ranches which they had not developed. There were also those in political circles who felt that ranchers who had appropriately developed their ranches should not be affected by the restructuring. Unfortunately, the majority in this category were in Ankole. Some started arguing that government was subdividing ranches outside Ankole to give land to Banyakole. Government decided thereafter that all ranches be subdivided. On 25 January 1990, government announced that it had repossessed 62 ranches in Ankole, Masaka, Singo, Buruli and Bunyoro.¹⁵

THE RESTRUCTURING OF THE GOVERNMENT RANCHING SCHEMES

The uprisings played into the hands of government. It provided government with 'an opportunity to recast this whole policy for the better and remove, once and for all, the friction between the ranchers and the squatters, as well as ensuring the introduction of uniform disease eradication methods for all the cattle in these areas'.¹⁶ The NRM government publicly criticised previous governments for having created the ranching schemes without thoroughly understanding the consequences of the policies for all sections of the population and the economy. President Museveni himself has been a frontrunner in the struggles to eliminate nomadism among his own Bahiima people. Starting in 1966, after completing high school, Museveni, together with several colleagues (most of them now dead), led a struggle to educate nomads about modern husbandry practices and to resist being displaced from land to establish ranches (Museveni, 1997).

The squatter uprisings had prompted government to convene a special session of the NRC to generate a consensus over what was to become government policy on the government-sponsored ranching schemes. In four days of closed sessions, the NRC deliberated on the relevant issues. The NRC resolved that government should repossess and restructure all ranches that had not been developed in accordance with the terms and conditions of the allocation. The NRC resolved further that the registrar of titles cancel all titles in respect of government-sponsored ranching schemes. This would be done on the grounds of non-fulfilment of the terms and conditions of ranch allocation.¹⁷

The Minister of Agriculture, Animal Industries and Fisheries (MAAIF) announced on 27 September 1990 that President Museveni had constituted a nine-member board to restructure government-sponsored ranching schemes in the central, southern and western regions. The names of the members of the board and technical committee appointed to assist it are appended. The Ranch Restructuring Board (RRB) was created under General Notice Number 182 of 1990, by the president in conformity with the NRC resolution dated 24 August 1990.¹⁸ The board was required to implement recommendations made by a special session of the NRC which discussed the issue of ranches between 22 and 24 August 1990, and recommend to government means of improving the ranches in order to ensure sustainable livestock production. The board would scale down the ranches to three, two and one square mile to resettle landless squatters and their livestock in those areas.¹⁹

Ranch restructuring was considered a lasting solution to nomadism, which was seen as the greatest obstacle to government's commitment to developing the livestock industry. The government had been nursing the idea of making it a criminal offense to engage in nomadism.²⁰ A MAAIF minister, in charge of Anti-Nomadism and Water Development was appointed in December 1994, and served until the May 1996 presidential election after which cabinet positions were restructured. Ranchers and settled former landless cattle keepers would be forced to dip their cattle, or face prosecution.²¹ Squatters and ranchers would be required to fence their pasturelands, clear bushes and effectively occupy their areas in order not to attract other encroachers.²²

THE BENEFICIARIES OF RANCH RESTRUCTURING

Government specified the categories of beneficiaries who would be allocated land by the RRB. The beneficiaries were expected to be people who had no land at all, but who had cattle and were living as squatters on government ranches or on private leasehold. Those who had land elsewhere and had sold it recently, with the intention of getting free land through the restructuring process, were ordered to move away from the ranches that were being restructured.²³ The beneficiaries had to be Ugandan citizens.²⁴ No bureaucrat or member of the military was expected to benefit. Despite the government's strong desire to prevent non-squatters (or the non-landless) from benefiting, insufficient monitoring mechanisms were put in place to enforce such a directive. The government directed that the ranchers and the squatters must remain in the locations where they had settled when the ranch restructuring exercise commenced, while a solution was being worked out to end their conflicts. Any kind of movement by squatters from one ranch to another was strictly forbidden. Local working committees were established for each of the ranching schemes and were composed of two representatives of the board and representatives of the ranchers, squatters and local administration and resistance councils. These local working committees were expected to maintain a daily study of the existing problems and take the necessary steps to prevent problems getting out of hand. However, the local working committees could not adequately monitor the movement of cattle keepers with their herds especially in the dry season.

In order to determine the citizenship of the would-be beneficiaries, the board designed a citizenship verification form for squatters, specifically to identify those who were citizens of Uganda. The facts indicated in the registration forms were cross-checked with local resistance committees in the ranching schemes, as well as with elders and chiefs. Where people claimed to be citizens while chiefs and local council committees knew them as non-citizens, the board would interview them. Ranch owners or other cattle keepers who had acquired land titles and whose lands were being subdivided were never subjected to citizenship tests because it was assumed that they were appropriately screened using the usual methods before they acquired the land titles. And as far as the board was concerned, the citizenship test applied only to squatters. From its findings, no obvious cases of non-citizen benefited from the restructuring exercise. Our findings indicate that the majority of the local council committees were comprised of squatters because they simply happened to have been the majority in these areas. The board unknowingly was confronted with squatter-dominated local council committees to decide the fate of fellow squatters. Even when there were non-squatters on the committee, the fact that this screening exercise occurred after the squatters' uprising indicates that a case of non-citizenship was unlikely to be mentioned, especially if it involved some of the feared squatters.

Our findings also indicate that non-citizenship was not the major source of contention in the citizenship issue, but dual citizenship. In Uganda, a number of ethnic Tutsis of Rwandese origin claimed citizenship in Uganda as Ugandan Banyarwanda without necessarily denouncing their other citizenship. Amongst those who benefited from the ranching schemes, there were a number of these categories of people who called themselves Banyarwanda. The board had no mechanisms of verifying double citizenship.

THE RATIONALISATION OF PRIVATE OWNERSHIP

Some ranchers retained much of the land they held before the restructuring exercise, and there are a few ranch owners who lost all their land. Of the 50 ranches in the Ankole ranching scheme, only one ranch owner (ranch number 22) retained all his land. 48 ranchers lost some of their land. Of the total land area available for redistribution in the ranching schemes, the former squatters were left with 45 per cent of the land in the Ankole ranching scheme; 38 ranchers (76 per cent) retained more than half of their former ranches, while only 16 per cent retained less than half the size of their former ranches. See Table 5.1.

| % of total ranch land retained by former ranchers | Number of former ranch owners | % of total | |
|---|----------------------------------|------------|--|
| 0 | 1 | 2 | |
| 1–19 | 2 | 4 | |
| 20–39 | 5 | 10 | |
| 40–59 | 19 | 38 | |
| 60–79 | 19 | 38 | |
| 80–99 | 3 | 6 | |
| 100 | 1 | 2 | |
| TOTAL | 50 | 100 | |

| Table 5.1 Amount of land | l retained by | ranch owners |
|--------------------------|---------------|--------------|
|--------------------------|---------------|--------------|

Source: Analysis of records of the secondary data from the RRB.

LAND ALLOCATION TO SQUATTERS

In the criteria used by the RRB to subdivide land, every individual head of a household registered as a genuine squatter was supposed to receive a minimum of 30 acres. To every head of cattle owned by such a squatter family, one acre was added, though not exceeding 270 acres. In other words, no squatter family would receive more than 300 acres. While the ceiling of 300 acres was never exceeded for squatter families, one squatter family ended up with an allocation of only 30 acres, the basic minimum earmarked at the beginning of the restructuring exercise. What this means is that this household was registered as a squatter household, though did not have any cattle! An analysis of land allocated to squatter households is given in Table 5.2.

| Land (acres) allocated to squatter households | Squatter households (% of total) | Approximate numbers of cattle at time of census |
|--|-------------------------------------|---|
| <30 | 2(0.2) | Zero |
| 30–59 | 231 (26.5) | 1–30 |
| 60–89 | 316 (36.2) | 31-60 |
| 90–119 | 152 (17.4) | 61–90 |
| 120–149 | 73 (8.4) | 91–120 |
| 150–179 | 36 (4.1) | 121–150 |
| 180–209 | 21 (2.4) | 151–180 |
| 210–239 | 11 (1.3) | 181–210 |
| 240–269 | 7 (0.8) | 211–240 |
| 270–299 | 7 (0.8) | 241–270 |
| >300 | 16 (1.8) | 271-300 |
| Total | 872 (100) | |

 Table 5.2 Land allocated to squatters in Ankole

Source: Analysis of records of the Secondary data from the RRB.

IMPROVEMENT OF ALLOCATED LAND

The land that was allocated to each family was never demarcated or surveyed immediately because of the following reasons:

- The RRB did not have the required resources to carry out such work.
- The RRB noted that some units could not be self-sustaining given the conditions in the area. The demarcation of land units for each individual family would leave some families without suitable sites for water, let alone pastures.
- The RRB recognised the fact that the allocatees were still poor and relatively backward and would therefore take time to adapt to commercial farming. This menat that government had to be responsible for providing infrastructure such as valley tanks and dams, roads, etc. The argument was that groups rather than individuals would optimally utilise such infrastructure.

When the demarcation started, every allocatee was required to pay a premium and ground rent plus all other charges towards securing the titles and maintaining the basic social services. The allocatees were required, for the first five years, to pay a premium per square mile of 1,000,000 Ugandan shillings (shs. 1,000,000) and ground rent per square mile of shs. 100,000 per annum. These payments were considered one way of making the allocatees develop a strong feeling

that the land that they had been allocated was theirs. It was argued by the RRB that free things tend to get abused, fought for and do not stimulate development. Payment of a premium and ground rent would encourage allocatees to put more commitment into developing and utilising the land allocated to them. It was also assumed that after paying fees for the land allocated, those who had more animals than the land allocated to them would normally sustain would have an incentive to sell some of their animals, thus reducing them to the desired numbers (Ranch Restructuring Board, 1997, p. 52).

Five hundred and thirty-eight squatter families (62.7 per cent) allocated land in the restructured ranches were actually cattle-poor households who owned less than 60 head of cattle at the time of restructuring. A total of 233 squatters, mainly cattle-poor households, were off-loaded onto the Singo ranching scheme, where they were advised to settle down and practise mixed farming (Ranch Restructuring Board, 1997, p. 47). Although the majority of cattle-poor squatters were relocated to the Singo ranching scheme, many remained in Ankole. These households would find it difficult to invest individually in the provision of ranching infrastructure because of the huge capital expenditures involved. This is the reason why there has been minimal investment in ranch development infrastructure in this initial postrestructuring period in Ankole. Even among the former ranch owners who were allocated land, many have not yet started investing in ranch infrastructure. On ranch number 9, the ranch headquarters in the portion of the former ranch retained by the ranch owner had dilapidated structures. At the time of writing, there was as yet no indication of any intention to rehabilitate the ranch.

However, the most common activities through which cattle keepers reduce unpalatable grass such as *Cymbopogon nardens* (*omutete* grass) and tree species such as the *Acacia hockii*, both of which had heavily encroached on pasturelands through years of neglect, include cutting down the trees for building poles and fence poles; new fences are erected in the restructured ranches. Charcoal burning and firewood collection are also common activites, and cattle keepers who were allocated land sell to the charcoal burners the rights to cut trees in a given location. These are usually areas which have had a high encroachment of bush and trees. The types of trees usually offered for charcoal burning include acacia, combretum and terminalia. Once wood for charcoal has been taken away, whatever has been left behind is sold as firewood. The cattle keepers therfore benefit twofold: first, they are paid for the trees cut down; second, the cattle keepers do not have to spend any money hiring labour to cut the trees in order to plant more nutritive pastures. Some cattle keepers hire labour to clear areas of trees and bushes, especially by uprooting the *omutete* grass. The incidence of *Cymbopogon nardens* is mainly being reduced by uprooting.

THE POLITICISATION OF RANCH RESTRUCTURING

While the government used the squatter uprising to restructure the ranches and reallocate the land, it should also be noted that there was a lot of opposition to the repossession of the ranches on account of the squatter violence.²⁵ The opposition came from a strong ranchers' lobby, both from within and outside the parliament. Nevertheless the government was able to press ahead with the restructuring process. Former landless cattle keepers became landowners in the former Ankole ranching scheme as a result of a political decision. The ranchers were compensated, not for the land taken away, but for developments they lost on the ranches. These developments included valley tanks, dip tanks, existing fences, spray races, buildings, boreholes and water pipes. Some of the former ranch owners have continued to protest against the subdivision of their ranches; they not only make political appeals but also taunt the settlers with the fact that the land was awarded them for political reasons, and suggest that the NRM government will, like all governments, come and go, at which time the settlers could become very vulnerable. Naturally, this has created a lot of insecurity among squatters resettled on ranches through the scheme.

The rationalisation of private land rights in rangeland resources cannot be regarded as the only solution to resource management problems created by the failure of private land holding in the former ranching schemes. The restructuring and allocation of ranches to former landless cattle keepers has not led to an eradication of landlessness. There are some cattle keepers who remained on parts of ranches which were not restructured, such as areas retained for the future construction of dams and valley tanks or service centres, or on government ranches such as the Nshara dairy ranch in Ankole. Large pieces of land were retained in almost all the ranches:

- In Ankole, the Ministry of Agriculture gave up block 4 of the former Nshara dairy ranch for restructuring and retained block 3 which it intends to develop as a model government dairy ranch.
- In the Kabula ranches of the Masaka ranching scheme, service centres covering a total of 61 hectares were retained on 5 ranches, while a total of 796 hectares were earmarked for dam construction, and this land is scattered on 14 ranches.

- In the Singo, Buruli and Bunyoro ranching schemes, no land was retained for dam construction, while 318.38 hectares, 62.5 hectares and 100 hectares were retained as service centres, respectively.
- In the Bunyoro ranching scheme, an additional 9,973 hectares covering eight ranches 15, 20B, 21B, 22B, 23, 28, 29 and 30 was surrendered to the Forestry Department for a Forest Reserve.

In, for example, the Bunyoro ranching scheme, which was mainly used as a dry-season grazing area by cattle keepers who would move from as far as Ngoma and Kijunjubwa, the rights of access were certainly not catered for. It is on these pieces of land that squatters who were not allocated land during the ranch restructuring exercise have remained as a new breed of landless cattle keepers (squatters).

Some of the pastoralists who were not allocated land in Ankole moved to other ranching schemes, where land subdivision and allocation had not started as early as it had in Ankole. These include those who had less animals than the minimum number required to qualify for allocation. While the majority actually moved on their own accord, many who had applied to the Ankole ranch restructuring committee were referred to other ranches, for example, the Singo ranching scheme. The district authorities in Singo, following earlier presidential directives on the subject on bona fide squatters benefiting from the allocation of land in the restructured ranches, refused to allow new entrants from Ankole and other parts to take up land in the Singo ranching scheme. This has meant a proliferation of some new forms of landlessness. In Buruli and Bunyoro, on the other hand, allocation was mainly based on either the length of time one had been squatting, or the genuineness of one's historical claim to the land on which the ranches were established.

This has resulted in a large number of landless cattle keepers whose rights to resources they previously had access to have been greatly constrained by the subdivisions and land reallocations. When the ranches were subdivided, the ranch owners were given an opportunity to decide which part of the ranch they would be interested in retaining. In the majority of cases, the ranch owners chose the parts of their ranches that were more endowed with resources than the other parts. These were usually areas with watering points, dipping facilities and better pastures. Squatters were allocated areas where they were dependent on the resources in the part of the ranch that had been retained by the ranch owners. The development of new facilities like water points is not easy. The costs involved are exorbitant. Where settlers have not pooled resources to construct water points on ranches where water is seriously lacking, settlers have had to rely on renting water or pastures from the ranch owners or elsewhere. This creates a form of landlessness that is defined by resource dispossession as well as proscription of access to previously accessible resources.

CURRENT PROSPECTS AND FUTURE CONSTRAINTS

The approach to water development by the Livestock Services Project (LSP) has involved the construction of new valley tanks and dams and the rehabilitation of existing ones using the District Veterinary Department. Here water development was supervised directly by the MAAIF, and was largely considered to have failed to produce the desired result because of the minimal involvement of local pastoral communities.

During the 1997/98 financial year, the MAAIF said it had constructed 19 large strategic water reservoirs in six drought-prone districts of the cattle corridor, with one reservoir in Ntugamo, eight in Mbarara, two in Sembabule, two in Nakasongola, three in Mubende and three in Kiboga. While considering the ministry's budget and policy statement, a number of complaints had been made to the Sessional Committee on the Ministry. For example, the Member of Parliament for Lwemiyaga in Sembabule explained that:

The Rwamakara dam claimed to have been constructed by the ministry during the financial year 1997/8 was an old colonial dam built in 1948. The farmers had wanted the dam rehabilitated by removing dirt, silt and dirty water, at the time mixed with cow dung and suspected to be causing disease to their livestock. The Member of Parliament lamented that the ministry's contractors had just cut into the dam wall, without removing any silt, cow dung or rotten plant material in the empty dam reservoir. They had laid pipes, built water troughs and increased the old dam wall by two meters, fenced the dam, and claimed their 99 million shillings and walked away.²⁶

Other Members of Parliament made the same complaint about draining old dams without de-silting them. The Nyabushozi Member of Parliament said that on Kishangara dam, shs. 117 million were spent. Mubende Members of Parliament said that shs. 178 million were spent on Dyangoma dam. All these three dams did not have water, and yet nearly shs. 400 million had been spent on them. At Nyakahita in Nyabushozi, shs. 149 million had been spent on the site, and there was nothing that looked like a dam anywhere around the area. In the rest of the country where cattle rearing was a major economic activity, there was no coverage by this project. While the technocrats have insisted that it would require an engineering audit to prove the allegations that there was no value for the money sunk into the water development under the LSP, the following were cited as having caused the failure of the project to realise its original objectives:

- The ministry did not provide adequate supervision to the project.
- There was limited input from the beneficiaries and other stakeholders, and the project was poorly designed.
- The management of the project and expenditure of funds which were borrowed from donors and the actual supervision of the project was largely dictated by the donors.
- There was a lack of technical and political direction and capacity on the part of the ministry.²⁷

PARTICIPATORY DEVELOPMENT OF WATER FACILITIES

The second approach has been used in the Ankole ranching scheme, where the Integrated Pastoralists Development Programme (IPDP), supported by the German Technical Cooperation (GTZ), has mobilised the cattle keepers to participate in water development and management directly. This approach has largely been a success. One of the major problems of livestock production is that of availability of adequate water supplies. Many cattle keepers often express this concern. Once a need has been identified, and interest in overcoming the problem expressed by a group of cattle keepers, the IPDP field staff convene a community meeting to determine potential beneficiaries, number of users and number of animals to be served by the water facility. The community, usually of between 40 and 50 families which share a common water facility, is asked to constitute a task force to identify sites for the water facility. A feasibility study is carried out by the IPDP to determine how much water is needed and what kind of facility would provide the required amount of water (tank sizing). This is then costed. The size of the water facility is determined by people's willingness to contribute local resources for its construction, the population of livestock and human beings to be served by the facility. Before any work can begin, the community formally writes an application to the IPDP for assistance. The local community signs a contract with the project, specifying the particular obligations and responsibilities of each of the parties involved. The contract is signed by the project technical adviser, sub-county council (LC3) chairman,

sub-county chief, and the representative of the cattle keepers and the project manager.

For much of the time, the project provides non-local material (cement, barbed wire, hand-pumps, pipes, etc.) and other inputs required to make water available such as technical advice for trough construction. The local water users provide all the locally available materials such as bricks, sand, physical labour or stone aggregates. When money is required, for example, to pay for fuel or to motivate the drivers of the earth-moving equipment, the amount to be paid usually depends on the number of cattle a family has. The cattle keepers pay at the rate of shs. 50 for each animal owned. As the water facility is being worked on, the task force is reconstituted into a Water Users' Committee (WUC). The WUC ensures that all targeted users make their contributions. The WUC nominates a person who is trained on how to maintain the water structure and all are educated in the best way to use the facility. After the facility is ready for use, by-laws are put in place by the community in consultation with the IPDP. There are six people on the WUC, including a chairman, secretary, treasurer, caretaker and two committee members. Although two of the members of this committee have to be women, many times, oftenit is not possible to find women in the area who were interested in joining. So far, only one ranch No. 7/11 has a well-established WUC and the appropriate by-laws in an advanced stage of development in place.

THE INCREASE IN CULTIVATION ON THE RESTRUCTURED RANCHES

The cultivation of food crops is expanding on land allocated in the restructured ranches, with bananas (*musa* spp.) being the most common. Other food crops such as sweet potatoes (*ipomea batatas*), maize (*zea mays*), cassava (*manihota esculanta*) and beans (*phaseolus vulgaris*) are also cultivated inside the ranches. From a casual point of view, the reasons given to explain why cultivation was being undertaken relate to the need to supplement the immediate households' subsistence requirements.

However, to understand the significance this increased cultivation has for livestock rearing, the cultivation of crops has to be linked to other agricultural activities. The cattle keepers also practise a land-use system where they grow woody perennial trees on the same piece of land as food crops (especially bananas), at the same time using the same piece of land for livestock rearing.

The tree species that are planted include: cashew nut trees (Azadirachta indica); shea butter trees (Butyrospermum porkii); edible figs (*Ficus gnaphalocarpa*); mangoes (*Mangifera indica*); avocados, etc. These trees grow tall with an open canopy that allows grass to grow right to their bases. Because they are evergreen, they prevent the total drying of the grass under them, and also provide shelters for the animals whose litter in turn improves the fertility of the soils for better pastures.

The cattle keepers plant deciduous tree species, which they use to divide their ranches into paddocks. Such species include: Acacia *nilotica* (tannin); Acacia *senegal* (gum arabica); and Acacia *seyal* (gum arabic). A thorny shrub called Key apple (*Dovyalis cofra*) is also grown. The combination of the deciduous trees and thorny shrub provides a permanent live fence.

Certain species of eucalyptus trees are planted to provide building materials (poles for the construction of houses and for fence posts) and firewood.

Forage trees and shrubs provide browsing, especially during the dry season when the grass has dried. These mainly include the edible fig, *Ficus gnaphalocarpa*.

Tree legumes increase soil fertility because of their nitrogen-fixing ability. These tree species include *Sesbania sesban* and *Sesbania grandiflora*.

Fruit trees, such as mangoes and avocados, are planted around the homestead and banana cultivation has provided a very important supplement for animals in terms of food and household income for purchasing other household needs.

While it may appear that food crops are grown for direct family consumption, they also serve another purpose, which enhances cattle rearing activities. The cattle keepers plant crops such as maize, beans and groundnuts, which, apart from their nitrogen-fixing abilities, also serve as standing fodder. Once the crops have been harvested, the crop stems are never cut down immediately. They remain in the fields and provide standing fodder for feeding livestock. As livestock browses on the standing crop residues, the soil nutrients are replenished by their urine and excreta. Once a mature banana crop has been harvested, the cattle keepers cut the stems into smaller pieces and scatter them in the fields to provide mulch to other crops and as a feed supplement for livestock.

The above gives an indication of what cattle keepers have achieved in terms of the integrated cultivation of trees, crops and livestock on the same pieces of land. This serves both ecological and economic functions being beneficial to livestock production in general. The increase in cultivation is not so much an indication of changing practice compared to settled farming or mixed farming, but an attempt to sustain cattle rearing further. This integration increases the productivity of the land, which helps to sustain it to a high level for a relatively longer period without degrading the total environment. Trees integrating in livestock production provides an important feed supplement for livestock. Tropical grasses have adequate protein content for only four to six months of the year (during the rainy season). As they mature, especially towards the dry season, they become fibrous and less digestible. During this period, browsing on trees and shrubs provides the required protein for the livestock. It has been argued (Ranch Restructuring Board, 1997, p. 60) that the level of protein in grasses can drop to less than 6 per cent, which affects the rumen microbes whereby the animals cannot make adequate protein to maintain themselves for growth and reproduction. This affects the animal's food intake, resultin in loss of conditions and decline in milk production.

CURRENT MANIFESTATIONS OF PASTORALISM

At the time when the policy of restructuring government ranching schemes was being discussed, it was government's strong belief that nomadism was the greatest obstacle to the development of the livestock industry. Because of this, the view was held that soon after the end of the ranch restructuring exercise a law banning the nomadic lifestyle would be introduced in parliament, and this would make it an offence for cattle keepers to continue roaming from one place to another. It was also anticipated that compulsory animal health measures would be introduced once former landless cattle keepers were allocated land. All beneficiaries of the allocation of land on the restructured ranches would be forced to dip their cattle, or face prosecution.²⁸ Similarly, the then Minister of Agriculture, Animal Industries and Fisheries indicated that after the ranches were restructured, animal safety would be ensured by making public the status of each herd in the different kraals. The government would enforce all the regulations on modern ranching and farming to check irregular movement of animals and their products to stop the spread of diseases that could wipe out the national herd.

Cattle keepers have constructed semi-permanent houses and a few permanent houses, but still have to move their livestock in search of water during the dry season and also, sometimes, pastures. The south-western parts of Uganda's cattle corridor experienced a drought that began in November 1988 and reached an alarming level in April of 1999, continuing to August 1999. Many cattle keepers were forced to move in search for water for their animals during this period of prolonged drought. Up to 200 families from Nyabushozi and Kazo counties in Mbarara District moved their herds to Lake Mburo National Park, while cattle keepers in Bukanga, Rujumbura and other counties in southern Uganda moved their herds to northern Tanzania's Kagera crescent. At the beginning of September, a few families returned to their homes after a short spell of rain. The rest were given the deadline of the beginning of October 1999 to vacate the LMNP. Because the rains were not sufficient, this deadline was extended to December 1999. Many of those who moved to the LMNP built permanent homes and settlements when they returned after the drought had ended.

During the dry season cattle keepers move their animals to places where they can find water for renting. They do not move away completely as part of their families remain behind. Those who move with their entire families return to same place after the dry season has ended. These cattle keepers are practising a system called transhumance. It is quite misleading to consider the movement of cattle keepers as a traditional cattle keepers' way of life. It has increasingly become a survival strategy for all categories of cattle keepers who lack pastoral resources during periods of critical scarcity, most especially the dry season. Even after land was allocated, the cattle keepers continued to track pastoral resources on a seasonal basis. This is partly because the movement of cattle keepers with their livestock, otherwise referred to as nomadism, is not primarily caused by a lack of private ownership of land. You do not need to own land as private property to be able to have access to requisite pastoral resources. Similarly having privately owned land does not automatically mean one has all the required resources for livestock to last throughout the dry season. The movement of cattle keepers and their livestock can only be minimised if requisite resources such as water and pastures are available in sufficient amounts throughout the dry season.

SOME CRITICAL POLICY ISSUES

During the debate as to whether all the government ranching schemes should be repossessed by government and restructured, there was a strong ranchers' lobby which argued that the political and economic problems from the mid-1970s to the 1980s had had adverse effects on the overall economy and the national way of life, which in turn affected the commercial livestock ranching sector (Republic of Uganda, 1988). It was argued that following the end of the civil war, given another opportunity, the ranchers would be able to rehabilitate their ranches, and thereafter develop them in accordance with the conditions specified in lease agreements. It was presumed in this argument that the principles upon which the ranches were established in the 1960s were still valid. This argument ignored changes in human and livestock populations and the historical fact that when the ranches were set up, traditional cattle keepers who had occupied these areas had been displaced. The arguments advanced to counter the claims by the ranchers lobby point to a problem underlying the very concept of commercial livestock ranching. President Museveni, reacting to the 'war affected the ranches' claim during the debate on the ranches in August 1990 argued:

... there was no fighting in Nyabushozi. There was no fighting in Mawogola, there was no fighting in Kabula, even in Buruli, there was no fighting in Buruli proper. The fighting was on in Singo. And fighting of course in Aswa, in Acholi ... I have been asking a question to the ranchers, you say you lost your cattle because of the war, but how about the squatters, they have also been living here? Why did they keep their cattle and you lost yours, squatters and people who had no land, who are moving, who are harassed, who are what, they still keep their cattle, and while you who has got every facility you lose yours? Now the ranchers say, because we were having delicate breeds, meaning the exotic – okay what does that mean? That may mean that ... maybe these animals were introduced prematurely!²⁹

The above implies that certain wrong assumptions were made about commercial livestock ranching as a solution to the problems of livestock production, and 30 years later, these assumptions are still fundamentally flawed. This suggests that for that long, part of the problem of livestock development has been the (premature) introduction of certain 'modern' methods which could not appropriately respond to the complexity of systems into which they are introduced. This complexity may arise from internal processes of change in these systems, but in this particular situation, they are mainly the result of an external situation of uncertainly created by political insecurity. Not surprisingly, the traditional cattle-keeping sector was better able to cope with these uncertainties. It is true that traditional pastoralism has been changing significantly, and as has been advocated by government, certain 'traditional ways' need to be either improved or transformed (Republic of Uganda, 1996). But at what point should these changes be introduced, so that in future, they are not judged as having been introduced prematurely? Increasingly, this points not only to the problem of conceptualisation, but also of the strategy. It has been argued that the reason the ranchers lost all their animals while the squatters did not was not only because of

the way in which the ranches were introduced – for they created a lot of friction between the squatters and the ranchers – but also because of the strategy adopted with regard to animal development. Commercial ranching was based on large-scale as opposed to small-holder cattle keepers.

For livestock development projects to succeed they must not only avoid creating social disharmony, they must also be socially acceptable by the different stakeholders, especially the cattle keepers in the traditional sector. These constitute a strong social power base because of being the majority, numerically. This means that livestock development projects should target them directly. To make this point Museveni gave his own experience:

As you know I have been hunted by two governments. I was hunted by the government of Amin, it was hunting me, they came to arrest my father and so on and so forth. I was also hunted by the government of Obote. I was a principal target. But I may be able to inform you that none of those governments has ever eaten my cows. Why? I am asking the ranchers to tell me. In fact, on two occasions, they came actually to eat my cows. And who hid the cows? My neighbours. But the ranchers, the problem is that as soon as there is a slight disturbance, a slight breakdown of law and order, because they have got enemies around them, and because the cattle are also delicate, all the cows are eaten by the time there is a war. So at the end of every slight disturbance we must sit down and say we must restock. We must restock, so you go to the Bank, you get a new loan, you restock. When you are beginning to restock, a slight disturbance, those are lost.³⁰

It is not surprising that the NRM government has focused livestock development policies on the smallholder cattle keepers who practise nomadic pastoralism. That was the logic of the ranch restructuring scheme – to make available land for resettling landless cattle keepers. However, the wartime period presents a janus-type experience for livestock production. Doesn't the ability of squatters to safeguard their livestock better than the owners of ranches during the civil wars, suggest that traditional pastoralist production systems allow the cattle keepers to take advantage of survival opportunities wherever and whenever these arise? During wartime, they can protect the herds of those who are in danger by concealing the identity of their owners. When the security situation worsens, they move their livestock away from danger. During the dry season, this movement, otherwise referred to as nomadism, is sometimes intended to enable herds to find more nutritive grasses in wetter areas. This movement away from less productive rangeland areas during the dry season to wetter areas also prevents degradation of the rangelands. Sometimes on a daily basis, the cattle keepers are able, through a system of mobile grazing, to walk their animals over large areas of the unproductive rangelands, and to retire to watering points at the end of the day. Faced with physical, social, economic and political uncertainties that translate into production constraints in the keeping of cattle, development projects will be unlikely to transform cattle keeping in a satisfactory manner, especially development that involves an end to continuous movement of cattle keepers and their herds, for whatever reasons this is undertaken. The way forward lies in strategies that are designed to tackle these constraints.

CONCLUSION

Since the colonial period, NRM is the only government that has tailored the development of livestock production to the need to directly transform the livelihoods of traditional pastoralists. Underlying the commitment by the government to transform the traditional cattle-keeping sector has been a conviction that the ways and practices of traditional pastoralists are ecologically destructive and economically untenable. The practice of nomadism, associated with traditional pastoralism, is believed to be a leading cause in the spread of cattle-related diseases, and through resource insecurity, leads to a larger herds, since there are no incentives to limit the size of herds; and overstocking leads to overgrazing.

There have been numerous internal and external pressures on the environment in which the cattle keepers live, and these have been used to justify the move to transform pastoralism from being inherently nomadic. The populations of both humans and livestock have increased tremendously, and much of the grazing areas previously accessible to the cattle keepers have been alienated as a result of an increase in settled crop cultivation, the establishment of private ranches, military installation and farming schemes, etc. This has made the traditional mobile grazing systems of seasonally tracking resources as and when they are available increasingly intricate. Yet it has allowed cattle keepers to use wetter and better-endowed areas only for critical dry-season grazing, and the drier areas during the rest of year.

The success of policy interventions designed to improve livestock production require an understanding of the underlying bottlenecks faced by the various categories of cattle keepers. The objectives of any such interventions also need to be clearly stated. For example, though the objectives of the ranch restructuring exercise were clearly stated, there were no viable strategies put in place to deal with some of the constraints that now hinder the functioning of the restructured units.

One of the main constraints is the availability of adequate and reliable water throughout the year for the livestock of the beneficiaries of the ranch restructuring process. Considering the topography, climate and run-off rates in the schemes, valley tanks and dams alone might not cope with the demand. (The experience in 1998/99 of the construction of valley tanks and dams under the LSP which could not collect any water is all too clear in our minds.) The problem calls for serious consideration of alternatives. In this regard, this study recommends the option of sinking boreholes to tap water reserves below the surface, though this might not provide a long-term solution for the acute water scarcity on the ranches. A more sustainable, but more costly, undertaking will involve the pumping of water from the rivers and lakes through pipes to a central reservoir that makes it possible for gravitational flow of water to a number of ranches.

The expansion of crop cultivation as a strategy to encourage the cattle keepers to appreciate the value of the land has a number of limitations as a form of intervention. The restructured ranches were divided into units of different sizes, with different resource potentials. Since the ranch owners had the opportunity of determining which parts they retained, they ended up with the best options. The majority of the former squatters who were settled on the restructured ranches normally ended up with potentially poor sections of the former ranches. Apart from the problem of greatly fragmenting land whose productivity (a function of soil structure and texture, and rainfall patterns) is considered marginal, crop cultivation is unlikely to prevent conditions that led to some of the problems associated with cattle keeping in the ranching schemes before the restructuring. From 50 former ranch owners, land ownership in the former Ankole ranching scheme has been transformed to 918 private landowners (including 872 former squatters and 49 former ranch owners). Ranch restructuring started about ten years ago. The number of livestock has also multiplied several times.

This means the increase in the amount of food crops harvested cannot be based on expanding crop cultivation because of small land holdings. In Ankole, the IPDP project has tried to help settlers improve productivity by introducing farmers to new farming methods such as contour-bunding to prevent run-off common in these sandy-loam areas. The use of organic compost manure, mulching, and agro-forestry techniques are also being popularised. Cattle keepers are taught how to tend their banana plantations and the proper spacing of plants and the importance of weeding. However, the diffusion rate of such techniques is not easy to establish when the cattle keepers are sometimes forced to move their animals away from the land they were allocated for as many as four to six months a year because of drought.

A new form of squatting and landlessness is emerging in almost all the restructured ranches, implying that the effects of the restructuring exercise on land tenure relations and the subsequent management of pastoral resources are profound. Areas which were not restructured in the ranching schemes but were retained for the future construction of dams and valley tanks, or service centres or for use by the government as breeding centre or demonstration centres, should be developed for whatever they were earmarked. Otherwise, such areas will continue to attract seasonal nomads.

It is crucial that the strategy for water development be revisited. More ingenuity and resources are required to make water available for an increased number of resource users in these ranching schemes. Without adequate water, easily accessible to all cattle keepers all the year round, the restructured ranches are likely to face problems with nomadism, just as the former ranching schemes did.

NOTES

- 1 In Ankole, for example, the enclosure of land for cattle keeping or agricultural purposes was already an issue of great concern by 1963, which prompted the Ankole Kingdom Land Board to instruct all county chiefs to stop land enclosures until the Kingdom land board approved it by issue of a certificate of occupation (see letter from the Chairman, Ankole Kingdom Land Board, of 8 October 1963, to all *saza* chiefs. Subject: Enclosure of Agricultural of Pastoral Lands, in File Lan 8: Land Policy – Minutes of Meetings and correspondences from Ministry Headquarters, opened 8 October 1963, District Administration Archives, Mbarara).
- 2 President Museveni, in his recent biography, says he tried to organise them to resist the setting up of the ranching schemes, but was not quite successful because his mobilisation of cattle keepers to oppose a government policy was seen as being anti-establishment, and met with a lot of dissent from local Ankole politicians who were associated with the first Obote government (Museveni, 1997).
- 3 Minutes of the meeting of ranchers in the Buruli ranching scheme and the RVO, Buganda held at Nabiswera, Buruli on 7 May 1971, in File No. C.40: Singo and Buruli Ranches. The minutes were signed by Ananias L. Iga, RVO Buganda and the meeting was attended by owners of ranches 1A, 1B, 1C, 1D, 2A, 2B, 3A, 3B, 5A, 5B, 5C, 7B, 8A and 8B.
- 4 Ref. C.41 of 20 March 1974 from B. B. Mayanja, Commissioner VSAI to

Commissioner Lands and Survey. Subject: Compensation of Evicted Tenants, File No. C.108/C, opened June 1970: Mawogola Ranching Scheme.

- 5 Ref. C.40/33 of 7 February 1972 from J. H. Kagoda Comm. Veterinary Services and Animal Industry to Commissioner for Budget, Ministry of Finance. Subject: Compensation in Singo Ranches, in File No. C.40: Singo and Buruli Ranches.
- 6 See C.2/10 of 6 December 1969 from J. H. Kagoda Commissioner VSAI to DVO, Lango, in File No. C.2, Correspondences – Maruzi Ranching Scheme, MAAIF, Entebbe.
- 7 See Hon. J. K. Babiiha, M. P., 'Opening Address by His Excellency the Vice-President/Minister of Animal Industry, Game and Fisheries, Uganda', in Sacker and Trail (1968).
- 8 In Ref. C.40 loose minute by B. B. Mayanja, Deputy Commissioner Veterinary Services and Animal Industry of 28 October 1978 to Commissioner Veterinary Services and Animal Industry. Subject: Trip to Singo ranching Scheme on 25 October 1978, in File No. C.40: Singo and Buruli Ranches.
- 9 By December 1982, Singo ranching had not been operating normally because of insecurity. The government ranch number 16 in the Singo ranching scheme was looted in November 1982, and was abandoned thereafter (see C/MUB/KBG/45 of 17 December 1982 from Jonan Tumwebaze-Kabachelor, ADC, I. C. Kiboga sub-district, to Commissioner, VSAI. Subject: Singo ranching scheme, in File No. C.40: Singo and Buruli Ranches).
- 10 All the cattle on Maruzi ranch were looted in late 1983. The soldiers first occupied the ranch in 1983, and thereafter, the ranch was occupied by different successive groups of soldiers until 1986 when the ranch was again looted on a large scale (ref. C.2 of 10 August 1989 from office of the Commissioner to Deputy Minister (Research), MAAIF. Subject: A Brief on Maruzi Ranch, in File No. C.2, Correspondences Maruzi Ranching Scheme, MAAIF, Entebbe).
- 11 See Parliamentary Hansards, Issue No. 14, 28 June–23 August 1990, 381.
- 12 This information is contained in a memorandum from squatters to the Chairman of the Bunyoro Ranch Restructuring Committee, of 20 November 1990. The information was corroborated during an interview with the then LC3 Chairman, Kiryandongo sub-county, Kibanda county, Masindi District; Jonathan Bigirwa who was one of the key people advocating for the rights of the squatters.
- 13 In a report on ranching development in Uganda, December 1990, Ministry of Agriculture Animal Industries and Fisheries (MAAIF), Entebbe.
- 14 See Parliamentary Hansards, Issue No. 14, 28 June–23 August 1990, 390–1.
- 15 See '62 Ranches to be divided and Sold', New Vision, 26 January 1990.
- 16 This policy statement was made as a directive by President Yoweri Museveni to Minister of Animal Industry and Fisheries, Kampala (Ref.

PO/5, dated 6/8/1990, in File Lan/10, Vol. 4, Land Matters, Office of the Chief Administrative Officer, Luwero).

- 17 See 'Government to repossess, restructure ranches', *New Vision*, 24 August 1990.
- 18 The notice was published in the Uganda Gazette of 12 October 1990, Vol. LXXXTTT, No. 42.
- 19 The decision by government (through the National Resistance Council) to establish the RRB was published in the *Uganda Gazette* of 13 October 1990.
- 20 In February 1992, President Museveni told two public rallies in Masaka District that government would soon come up with a law prohibiting nomadism because it leads to the spread of cattle diseases, and leads to overstocking and overgrazing. See 'Nomadism will be outlawed Museveni', *New Vision*, 18 February 1992). During the 1992 May Day address in Mbarara, President Museveni warned that: '... government will not tolerate the practice of nomadism anymore ... those who will be found continuing with the habit after the demarcation of the government ranches, will be arrested and prosecuted ...' (See 'Museveni Warns Nomads', *New Vision*, 4 May 1992).
- 21 See 'Government to repossess, restructure ranches', *New Vision*, 24 August 1990.
- 22 See 'Ranches Board given Deadline', New Vision, 14 January 1997.
- 23 Instruction to ensure this directive was implemented within a week was given to Chairman of Ranch Restructuring Board, the district administrators for Mbarara, Rakai and Masaka Districts, and the concerned security organisations. The affected cattle keepers who would not comply were threatened with arrest (see 'President Museveni Directs on Ranches', *New Vision*, 21 November 1990).
- 24 This was provided for in Section 4, sub-section 2 of the terms of reference of the board, also provided for in general notice No. 182 of 1990 section 4, sub-section (i) and (h).
- 25 In the records of the *Parliamentary Hansards* (Issue No. 14, 28 June–23 August 1990) one member of the National Resistance Council, Ssepiriya Kajubi (Kassanda, Mubende) said: 'if government was to bow down to the people who use might, might would then be a right, instead of the contrary'.
- 26 See Republic of Uganda/Parliament of Uganda. *Report of the Select Committee on the Ministry of Agriculture, Animal Industry and Fisheries,* Parliament of Uganda, Parliament Buildings, Kampala, Uganda, March 1999, 4.
- 27 Ibid., 12–14.
- 28 See 'Government to repossess, restructure ranches', *New Vision*, 24 August 1990.
- 29 President Museveni, during the debate on the ranches on 22 August 1999, see *Parliamentary Hansards*, Issue No. 14, 28 June–23 August 1990, 405.
- 30 *Ibid.*

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Resource Competition and Conflict: Herder/Farmer or Pastoralism/Agriculture?

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The interaction between pastoralism and agriculture in African drylands is an extremely complex issue. Despite the considerable amount of literature which has been accumulating on the subject, there is still very little agreement as to the nature, the forms and the outcomes of that interaction. This lack of consensus has in turn created a climate of uncertainty that casts grave doubts on the potential role for anthropology and other social sciences in influencing national policy making and development planning for the sustainable use of resources.

The fact that the literature is replete with varying descriptions of the interaction between pastoralism and agriculture has been noted by many scholars (cf. Toulmin, 1983a, pp. 33–41; Little, 1987, p. 195). What is lacking is a wider debate by which to explain those variations. Indeed there appears to be a general tendency for ignoring debatable issues in the study of African pastoral societies relative to the literature on peasant societies: '... scholars who have studied herding groups are at least partly to blame for their inability to engage in larger debates on agrarian transformations' (Little, 1992, p. 1f.). This is perhaps one of the reasons why our understanding of the interaction between pastoralism and agriculture is still as uncertain as it was when Camilla Toulmin (1983b) first called for the need to develop a new vision that would take full account of the historical experience and the socio-cultural complexities of African rural societies.

This chapter begins by identifying the reasons why little progress has so far been achieved in capturing the complex issue of resource competition and conflict in the context of an interaction between pastoralist and farming problematic. The second section examines the relationship between farming and pastoralism and shows how it is far more complex than to be captured in a simple herder/farmer dichotomy. The remainder of the chapter, by reference to the case of Dar Hamar, western Sudan, identifies the dilemmas associated with using problematic categories such as 'herder' and 'farmer' and suggests that a sectoral approach is far more useful in capturing the complexity of resource competition and conflict. However, it should be stated from the outset that this brief exercise is meant to be conceptual rather than documentary.

THE HERDER/FARMER DICHOTOMY

A possible explanation for the lack of significant progress on the subject could perhaps be traced in the general tendency for research to focus on "... a herder/farmer dichotomy drawn along ethnic lines and phrased, for example in terms of Kikuyu farmer versus Maasi pastoralist (Kenya) ... or Hausa cultivator versus Fulbe herder (West Africa)' (Little, 1987, p. 195), and I would add, Nuba agriculturist versus Baggara nomad (Sudan). In this way, the arena for resource competition and resource conflict were entirely confined to those related to 'inter-group rather than intra-group' interactions and that '... Land tenure and land use problems in pastoral areas are seen as stemming from outside factors, such as farmer encroachments, rather than from processes within the pastoral community' (Little, 1987, p. 195). Even in those cases when internal competition and conflict are adverted to, as tended to be the case in the literature on the 'new pastoralism', the discourse on the interaction between herding and farming is always loaded with populist sentiments. As Ramisch (1996, p. 5) put it: '... the populists provide a convenient and emotional focus on the fate of pastoralism at the end of the twentieth century ... pastoralism is dead, long live the pastoralist'.

This is perhaps nowhere clearer than in some of the literature that attempts to look into the problems of resource degradation and the usual conclusion of pointing a finger of blame. In some cases the finger of blame was pointed in all directions, though with variable force. In the Sudan, for example, environmental problems in the semi-arid parts of the country were blamed on one occasion on peasant farmers and pastoralists but '... the major culprits are both the urban merchants ... and the national and international decision makers' (Ibrahim, 1987, p. 229). Only the researchers are left out! In another occasion, the usual culprit was singled out: the 'rich' farmer. Thus, '... accumulation and increased social differentiation ... are positively correlated with increased degradation,' since '... the long term concerns of affluent tenants are not primarily in agriculture. Although most of them are farmers, they aspire to educate their children for other careers' (Salim-Murdock, 1987, p. 337f.). Following this line of reasoning, one might suggest policies that ban rich farmers from sending their children to school. Moreover, '... most of the land these people farm is rented, not owned, and they see it in their interest to use the land for short-term gains without concern for longer sustainability' (p. 338). However, when one affluent tenant displayed consciousness of soil quality and the importance of resting the land, which he was actually practising by renting more and more land, the researcher was not impressed since that was

'not the only reason'. Rather, this rural tycoon persistently denied any credit, and was taking on more and more land because, in the scheme administration '... he has many friends who come and see him several nights a week, and for whom he provides food and drinks' (pp. 344–5). One really wonders if there is any researcher in the field who has not been occasionally entertained, if not fully accommodated – sometimes provided with transport – by a rich farmer or an affluent pastoralist. However, such otherwise informative accounts are, unfortunately, self-undermining and, in the process, their utility for policy making (or unmaking) is severely constrained.

PASTORALISM/AGRICULTURE: A COMPLEX RELATIONSHIP

The position taken here should by no means be construed as a total negation of the importance of the herder/farmer dimension when one analyses issues of resource competition and conflict. The point is that the complexity of interaction between pastoralism and farming cannot be adequately understood by basing one's enquiry on a herder/farmer dichotomy. In most parts of the African drylands the herder/farmer distinction is progressively breaking down: farmers are investing more of their surpluses in livestock and herders are relying more on farming, that is, they are becoming 'herder-farmers' or 'farmer-herders' in the sense those terms were used to describe the blurring of occupational categories previously assumed to be distinct (Toulmin, 1983b). One wonders if this is an entirely new and recent phenomenon. Ibn Khuldun's Muggaddima aside, there is ample historical and anthropological evidence to suggest that groups, and individuals within the same group, have shifted between pastoralism and cultivation where and when the ecological and politicaleconomic conditions demanded and allowed (cf. Mace, 1993; Anderson, 1988; Holy, 1988; Khazanov, 1984; Haaland, 1972). Thus, pastoralism and cultivation, on the ground, are not discrete and static objects for academic analysis. Rather, they are dynamically interrelated and it is this very dynamism that determines the forms and outcomes of the processes of transition between pastoralism and cultivation over time and in different socio-ecological settings.

Thus, the focus on the herder/farmer distinction would render the comprehension of the complexity and the dynamics of resource competition rather inadequate for a number of reasons. First, it ignores the importance of scale and the multiplicity of levels of analysis. Recognising the difficulties associated with combining levels of analysis, claims for access and control of resources are usually contested, negotiated and

settled at different levels (for example, household, village, region, nation) whereby individuals and groups may be directly or indirectly involved in one or more level. Second, it distracts attention from the important processes of social differentiation (Little, 1985, 1987, 1992). Even when such processes are taken into consideration, in a multi-resource economy (Salzman, 1980), it would be insufficient to treat the question of herder differentiation on the basis of livestock ownership alone. Access and control of land, the degree of involvement in trade, etc. ..., might be equally important. Finally, the assumption that the state's influence in

(Salzman, 1980), it would be insufficient to treat the question of herder differentiation on the basis of livestock ownership alone. Access and control of land, the degree of involvement in trade, etc. ..., might be equally important. Finally, the assumption that the state's influence in pastoral areas is relatively recent, although unsustainable on the basis of historical evidence (cf. Babiker, 1988; Anderson, 1988), it is but another legacy of the focus on the herder/farmer dichotomy. Although there were instances where the colonial and national governments introduced explicit policies not favouring herding groups (Hjort, 1981; Sobiana, 1988; Waller, 1984), these should be distinguished from the more indirect policies not favouring pastoralism. The failure to make this distinction is perhaps one of the reasons why past indirect policies in other sectors of the local economy, with important feedback into pastoralism, were overlooked by those who entertain the idea of the state's recent interventions into pastoral areas. In Dar Hamar, for example, the administrative and land tenure policies were intelligently articulated by the British in a way that encouraged the production of gum arabic for export and the settlement of the population with far-reaching implications for the patterns of access and control of resources, pastoral mobility and pastoralism in general (Babiker, 1998a).

Thus formulated, attention should not have been directed initially and only at the herder/farmer dichotomy. In the first place, rather than as an a priori assumption, the analytical utility of the herder/farmer distinction should be considered as problematic in the sense that it can be accepted, modified or rejected on the basis of the social and temporal specificity of the case under consideration. That is, the nature, the forms and the outcomes of resource competition and conflict, at any point in the history of any group, are invariably the product of the total system in which they live, rather than of any particular aspect of it. Social reality is far more complex and the interaction between pastoralism and farming involves complex relations of competition, cooperation and complementarity within each, as well as between them all. Only in this way could one adequately capture the forms, dynamics, and outcomes of resource competition and conflict in any particular context. This should by no means be construed as a startling revelation. Few but forgotten anthropological accounts have long ago documented the complexity of interaction between farming and pastoralism (cf. Barth, 1981; Ahmed, 1973).

THE CASE OF DAR HAMAR

It should be pointed from the outset that the case I am presenting here is neither unique nor special. It is 'just different'. However, one cannot rule out the possibility of similarities with other ethnographic or real cases. Nevertheless, Dar Hamar can be distinguished from other cases, at least in the Sudan, in the sense that it has been immune, thanks to the local ecology, from encroachment by large-scale mechanised rain-fed and irrigated farming, a phenomenon extensively documented in other pastoral areas (cf. Adam, *et. al.*, 1983; Ahmed, 1973; Mohamed Salih, 1987, 1990; O'Brien, 1981; Shepherd, 1983, 1984, to mention but a few). Moreover, Dar Hamar has not been a target for forceful expropriation of land whether for occupation by colonial settlers, resettlement schemes, or wildlife parks, as happened in some parts of east Africa (cf. Anderson and Grove, 1987; Arrighi, 1973; Leys, 1975).

This does not mean that Dar Hamar has not attracted 'outsiders' at all. To the contrary, the history of Dar Hamar shows how the political paramountcy of the Awlad El-Haj Mun'im lineage (the Taradat), the ruling elite of the Hamar, was further consolidated, ideologically as well as economically, through their premeditated policy of encouraging the recruitment and assimilation of outsiders possessing religious learning and skills in the tapping and marketing of gum arabic (for example, Shaygiya, Bedeiriya and Gawamaa). At the same time, the Hamar have vigorously resented cases of spontaneous settlements on their land by neighbouring groups such as the Berti. Moreover, Dar Hamar seasonally attracts other pastoral groups such as the Baggara (cattle herders) in the wet season, and the Abbala (camel herders) in the dry season. In this connection, one should mention the emigration of expatriate and Jellaba traders since the beginning of the twentieth century, and the recent influx of government and other officials in the context of an expanded bureaucracy and the proliferation of development projects since the early 1980s drought.

The Hamar and their 'guests' (welcome or not) are all involved, in one way or another, in pastoralism, cultivation and other economic pursuits. While the majority are 'farmer-herders' or 'herder-farmers', traders, government official and NGO (non-governmental organisations) national personnel, are all investing in herding and/or farming. It is because of this plethora of actors that Dar Hamar presents a case where the herder/farmer distinction is not only inadequate for capturing the complexity of resource competition and conflict, but the categories 'herder' and 'farmer' are themselves problematic. Thus, as pastoralism and farming, in this order, represent, the two central forms of adaptation, one cannot resist the temptation of saying that apart form the seasonal 'guest' pastoralists, in today's Dar Hamar there are neither 'pastoralists' nor 'farmers'. Before explaining why this is the case, I would like to give a brief account of the social organisation of agro-pastoral production in Dar Hamar.

For analytical purposes and on the basis of the orientation of the production process, two forms of agro-pastoral production can be identified: household production and commercial production. While the former is both subsistence- and market-oriented, the latter is exclusively market-oriented. One might suggest that the two forms of production be further distinguished by, for example, the degree of specialisation on either of the two main crops – namely millet, the staple food grain, and groundnuts, the principal export crop. However, the familiar 'subsistence/cash' crop distinction does not apply here. The reason for this is twofold. First, groundnuts are grown under both forms of production. Second, and more significant, millet, is not only sold and bought in the market place, but many units are actually devoted to its commercial cultivation. In Dar Hamar as elsewhere, 'subsistence crops are cash crops' (cf. Little and Horowitz, 1987). Alternatively, household and commercial production could be distinguished on the basis of the sources of mobilising labour into the production process. Thus, while household production refers to the situation where the family constitutes the principal source for mobilising labour into the production process, augmented in some cases with paid labour, commercial production refers to agro-pastoral units that are exclusively operated on the basis of hired labour and/or crop-sharing contracts. However, it should be emphasised that the two forms of production are not isolated from each other and that there are complex sets of interaction between the two in the form of credit relations, land and labour exchanges, and exchange of produce.

That said, I would like to go back and try to explain why the categories 'herder' and 'farmer' are both problematic in the case of Dar Hamar. First, pastoralism, at least for the majority of the inhabitants of Dar Hamar, is no longer a way of life but a strictly commercial activity. The degree of commercialisation of pastoralism could perhaps be appreciated by reference to the fact that for all classes of livestock owners (large, small, and even stockless) the word *raai* (shepherd) is synonymous with hired herders. Thus, apart from the few transhumant herders, small and large livestock owners are dependent on hired herders. In the case of small owners, they practise what might be described as group herding whereby herds are pooled together and entrusted, on an annual contract basis, to a hired herder.

Second, farming is the most unpredictable and highly seasonal activity (three to four months a year). Its incidence is predicated on the amount as well as the temporal and spatial variability of precipitation in any one wet season or between years. Thus, those who farm in Dar Hamar are 'part-time' farmers. Moreover, one never hears the word *mazraa* (farm) but often catches the word *zari'a* (cultivation) in the day-to-day discourse of the Hamar. This is perhaps because what an individual actually cultivates are widely dispersed plots rather than a compact farming unit, a strategy to minimise the risks imposed by rainfall, spatial and temporal unpredictability and the variations in moisture requirements associated with differences in soil types (Babiker, 1996, 1998b).

Finally, when somebody is asked about the size of their *zari'a*, the reply is usually: 'I weeded so and so many *makhammas*' (1 makhammas = 1.7 acres). For the Hamar farming is *hash* (weeding). This is simply because weeding is the most labour-demanding operation and its timeliness and quality, to a significant extent, draws the line between crop success and failure, provided that the rains are adequate and optimally distributed. It is also during the weeding time that the resources of most households are exhausted and creditors not yet willing to lend, since they only do that just before harvest when the crop is there.

Cultivation and pastoralism do not clash in terms of competition for labour, since labour requirements for herding during the wet season are minimal. However, competition for labour during weeding time is severe between, as well as within, household and commercial production units. Some members of households, which are in desperate need to survive until the next harvest, hire themselves out to weed others' fields. In these cases, the weeding is not carried out in their own fields and poor yields are more likely. Moreover, millet and groundnuts severely compete for labour, especially during weeding time. Access to labour is, therefore, an important consideration in making decisions on the allocation of land between different crops. It should be noted that the discussion so far by no means does justice to the complexity of labour relations in Dar Hamar. Aspects of labour relations, such as family labour, cooperative labour, wagelabour, herding and crop-sharing contracts, each represent a complex issue in their own right. Moreover, the present exercise is meant to be illustrative, rather than exhaustive, of the complexity of resource competition and conflict in Dar Hamar. Issues of land tenure in terms of access and control are far more complex. But that is another story (see Babiker, 1987, 1998a).

CONCLUSION

The foregoing discussion suggests that in a multi-resource and multiactor economy, where the level of functional specialisation is very low, issues of resource competition and conflict are better analysed and adequately comprehended in the context of distinctions categorised on an economic-sector basis such as pastoralism and agriculture, rather than on occupational labels such as herder and farmer or trader and administrator. This is perhaps the main reason why Fredrik Barth, more than a quarter of a century ago, called for 'a general perspective on nomad-sedentary relations', whereby the focus should be, at least initially, on types of activity rather than on groups of people. Otherwise, the illumination of the complex relationships between 'the "desert" and the "sown" might not be forthcoming' (Barth, 1973).

Thus formulated, the diversity and multiplicity of resources can be mapped out and important questions associated with access and control, such as how claims are contested, negotiated and settled, and who is involved, can be raised. Moreover, although difficult to sustain in practice, in this way one might be relieved, at least for the moment, from the moral obligation of taking the side of those among whom one has conducted field research. On many occasions this burden and the associated populist sentiments have, in the process, seriously undermined, the findings and the conclusions of high quality research.

Moreover, there is a general tendency in many African countries whereby pastoralism and agriculture are considered as discrete objects for policy-making purposes. This could be related to the fact that the tasks of agricultural, livestock and forestry development, in most cases, are compartmentalised and entrusted to different government institutions without any formal mechanism for cooperation and coordination. This, more often than not, has resulted in contradictory, and at times conflicting, policy goals and objectives. In some way, this state of affairs could be considered a further legacy of the herder/farmer distinction which excludes any possibility for appreciating the complexity of interaction between economic activities hitherto assumed to involve different actors. The fact that livelihoods of many rural communities are based on agro-silvi-pastoral systems of production, calls for a rethinking of current policy-making frameworks. The objective should be to attain the highest possible level of harmony in policy formulation and programme implementation of otherwise sectorally segregated development initiatives.

If the argument presented here makes any sense then, when

confronted with a complex situation, such as Dar Hamar, one should avoid getting embroiled in categories and distinctions of one's own creation. Having done that, one is, of course, free to choose which side to take.

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7

Resource Conflicts Among the Afar of North-East Ethiopia

Getatchew Kassa

The Cushitic-speaking Afar (with a population of 1,008,205) are one of the major pastoralist ethnic groups of Ethiopia. With the exception of the flood-fed plains on the river Awash, most of their lands have an annual rainfall of less than 700 millimetres. Until a few decades ago, the Afar of north-eastern Ethiopia were able to feed themselves and secure their basic needs and exchange parts of their products (local and regional trade) through livestock production. Their pastoral land tenure and their production based on mobility, as well as their social and political institutions have been efficient in preventing environmental degradation and increased competition and conflicts. The ability of the Afar to maintain their land tenure and economic security and the ability to maintain their mobile livestock economies as well as their cultural identity has nevertheless been affected and their institutions have gradually been eroded. A range of external factors that the Afar have been exposed to can explain the internal dynamics within the Afar society. The Afar existence as a pastoralist group is being threatened more today than at any other time in the past. Since the 1960s as well as recently their high-potential lands have been lost to agricultural encroachment, to private and state initiated development schemes, to conservation schemes and to planned and spontaneous settlement schemes (all well documented) as well as to a tribal grazing reserve to the Issa Somali.

The Afar pastoralists in north-eastern Ethiopia face these pressing problems. Amibara District, in the Middle Awash, provides good examples of a shrinking resource base and resource scarcity, intense inter- and intra-group competitions and conflicts among pastoralists, farmers and pastoralist groups over questions of access and tenure rights to land and land resources management. The objectives of this chapter are:

- to discuss the customary pastoral land tenure and access rights and the strategies of resource use
- to explore the dynamic circumstances generated by national policies

and local dynamic processes resulting in transformations of the pastoralists' rights of tenure and use in land and natural resources and institutional practices and regulations

• to assess how these developments have resulted in intensified resource competition and violent conflicts over issues of access and tenure rights in land and landed resources within the Afar.

Case examples are used to explain these developments.

The Amibara District is situated in the Afar region in north-eastern Ethiopia. Its headquarters are Malka Warar. The district covers the flood-fed pastures and wet-season lands located between the Awash Station and Gewani. The Addis Ababa–Assab Highway and the Alleideghii Plain are its western boundaries, and the Awash River its eastern boundary. The mean annual average temperature is 25°C. The coolest months are December and January, and the warmest month is June with an average of 36.8°C at Malka Warar. The long rains occur from June to September and the short rains between March and mid-May. These make up an annual average rainfall of some 576 millimetres. In general, the rainfall pattern is erratic and unreliable.

Pastoralist Afar who are part of the Weima and Debine sections of the Adohimarra Afar predominantly inhabit the district. At the time of the last survey they numbered some 89,000 people. There are estimated to be around 79,000 Afar and 9,000 non-Afar. According to the government records of 1996, the population of the district was estimated to be 40,175 people. The majority of the Afar live in rural areas while the non-Afar population resides in the towns and on irrigation farm settlements. They are employed as administrators in irrigation farm schemes and in town businesses.

THE AFAR'S RESOURCE USE, TENURE AND MANAGEMENT PRACTICES

The Afar are pastoralists who pursue their livelihood in subsistencebased, mixed-livestock management of camels, cattle, goats and sheep. They employ a wide range of livestock management techniques, which are well adapted to the limitations and vagaries of their arid country. Their livestock management system stresses mobility, efficient labour use, the practice of efficient land use of vast areas of flood-fed lands and wet-season pastures as well as socio-economic cooperation.

They have developed effective social organisation that enhances decision making and enforcement through traditional political authority (clan leadership). Social cooperation and solidarity between clans (*kedo*) and lineages (*dhalla/gulubu*) are reinforced through shared rituals, sharing resources and the practice of preferential patrilateral cross-cousin marriage (*absuma*). The social organisation and *absuma* are crucial to the functioning of land use and management strategies. Since the past few decades some Afar have been engaged in a range of non-pastoral pursuits, such as marginal cultivation, wage-labour, urban business and government jobs.

PASTORAL LAND AND NATURAL RESOURCE TENURE, USE AND MANAGEMENT

The Afar use a wide range of land and natural resource management strategies which are neither random nor irrational, as some outsiders have thought, but deliberate and well adapted to the limitations and vagaries of their environment. As shall be explained, their land tenure use and management system stresses mobility, efficiency, resource sharing and cooperation.

In the study area, the flood-fed land and wet-season pasturelands are subdivided into a number of clan lands (*kedo-badho*). Each clan land is named after the clan whose members have inhabited and exploited it for many generations. Each clan land is separated from neighbouring clan lands by natural boundary markers (*fanteina*). Clan land of comprises resources such as pasture and browsing areas, trees, water sources, minerals, wildlife as well as people and livestock, communal grave-yards, residential sites and ritual places.

Access rights to land and resources are based on customary/cultural practices of resource use, control and management and it is not 'open access' as envisaged by outsiders. Access rights to clan lands in the flood-fed land along the banks of the Awash River and the wet-season pasturelands were, and are still, crucial to the survival of pastoral Afar households in the study area. Unlike in the vast wet-season pastureland outside the flood-fed plain, for example, the Alleideghii Plain, territorial claims are stressed more by clans in the flood-fed lands situated along the Awash river. Members make these claims to land through effective occupation and exploitation over a long period which is recognised by neighbouring clans. A clan land's boundaries are well known and respected by neighbouring clans. But in clan lands outside the flood-fed plain, there have been frequent changes in claims and boundaries of clan lands.

CUSTOMARY CLAN- AND LINEAGE-BASED LAND-USE RIGHTS AND RESOURCE MANAGEMENT

Customarily, land and its resources are perceived as communal property belonging to the collective patrilateral descent units or groups, the clan (kedo/mela) and the lineage (gulub/dahla) members. Land cannot be owned or claimed exclusively either by an individual or as a family holding, nor can it be sold. The clan heads (kedo-abba/malak/balabat), the clan council members (daar-idolla) who represent their lineage, and collectively the clan and the heads of the sanction-executing unit (finaa*t-abba*) are the elders of the clan land. They are the traditional authorities entrusted with the power to control the management and allocation of the right of access to clan land resources and to arrange negotiated rights of access (isso) to land and natural resources to their clans. They control the allocation of exploitation rights to clan members and non-clan members alike, and shoulder community responsibilities as effective and efficient managers of clan land (communal) resources. Another important task of these elders is to resolve disputes that occur over access to land and resources.

The Afar have developed institutional arrangements that allow access rights to land resources. These rights refer to culturally constructed rights, duties and responsibilities defining clan members' and non-clan members' access to the resources of clan land as well as those of the land of other clans. Rights of use refer to the culturally recognised traditional knowledge and practices employed by pastoral Afar in the proper exploitation of the land and resources of clan land.

In the study area there are two types of customary land-use patterns, which, in principle, apply to all recognised members of clans, lineages and clients (or non-clan members). An exclusive ownership right or claim of a clan to a particular territory and the inalienable rights of use by clan members is called *waano*. Each head of a household (*burra-abba*) has inalienable rights of access and usufruct to the collective resources of his clan/lineage and to any part of Afar land in which his clan/lineage resides. The *waano* rights differ from the negotiated rights of access to resources of other clans, *isso*.

Isso, which literally means 'lease', is an extension to non-clan members or client groups of the right of access to clan land and its resources for limited periods of time. This right of access can be gained by payment in material or services or by establishing bilateral clan relations. In the past and at present, some clans draw up agreements allowing their respective members access to each other's land and resources. In order to exercise land tenure and resource-use regulations,

each Afar lineage (*gulub* or *dahla*) and clan (*kedo*) has a spokesman among clan or lineage elders at council level and at a higher level within the sections or confederations of multiple-clan elders. Leaders of two or more clans negotiate in order to allow their respective clan members and their stock to have access to each other's land and resources, including the establishment of residence for limited periods of time.

Besides the formal arrangement by elders of clans, established marriage relations, friendship relations (*kataissa/wodaytu*) and herding relations allow stock owners to have access to the land and resources of other clans (and groups). Such access is needed in dry and drought periods and in times of displacement due to raids or when under the threat of epidemics spreading. In these circumstances members of a client clan are expected to respect the customary regulations of resource use of a host clan, for example, to refrain from cutting down particular types of acacia trees, for instance, the *Acacia nilotica* species (*kasalto*). In other words, *isso* could be considered the granting or leasing for grazing purposes of part of the communal or clan land. Moreover, *isso* rights are alienable. The following case example explains the importance of such arrangements between clans.

AN EXAMPLE OF ISSO FROM THE HASSOBA CLAN LAND

During my fieldwork residence in Shekek-Hassoba land, in October 1993-94, there were no other pastoral households residing among the Hassoba clan members in Aligeta, except the minority client clan, the Maaffai. At this time, the drought was very serious all over Amibara. It forced many pastoral households to move with their stock out of their own drought-affected clan lands to seek relief in other clan lands, which were less badly hit by the drought. One such area was Aligeta in Hassoba land. In February 1994, some 20 households with their stock arrived at Aligeta. These households belonged to the Rakbak-Dermela and the Maandita clans. They were permitted by Hassoba clan leaders to settle in specific areas and to use the resources until the drought period had ended. The households settled there after a prior arrangement had been negotiated between the leaders of the Hassoba and the heads of these households. The negotiations were conducted smoothly for two reasons. First, the clans to whom these households belonged were related to the Hassoba people; they all belonged to the Weima section of the Adohimarra Afar. Second, some of these households had longestablished conjugal ties with the Hassoba people.

This case demonstrates *isso* according to two related, negotiated access rights. First, access to land and resources of other clans has to be

formally negotiated by the clan authorities concerned. Second, besides formal arrangements, established marriage and friendship relations are considered crucial to families that acquire negotiated rights of access to other clans' land.

STATE POLICIES, TRENDS OF CHANGE AND CONTINUITY IN PASTORAL LAND USE, TENURE AND MANAGEMENT

Over the past few decades, customary pastoral land tenure, land use, land control and management practices and arrangements of negotiated access rights to land and natural resources of other groups (isso) of the pastoral Afar of the Middle Awash have been undergoing profound changes. Since the time Afar people were brought under Ethiopian rule, the state has introduced laws and regulations which have transferred all lands from the customary owners, users and managers to the state. These laws have imposed the sanctity of state ownership on all lands, including the land of pastoralists. The development programmes and land policies pursued by previous governments in pastoral areas have introduced private ownership of farmland. At the local level the consequences of these policies for the pastoral Afar have meant the loss of ancestral rights to their land. Under the previous governments, most of the rural lands were alienated from pastoralists and other smallholder farmers and put under the control of the government and government functionaries. They controlled the allocation and management of the land and any other resources.

Accordingly, during the last four decades vast areas of flood-fed prime grazing lands, wet-season pastures, and watering sites (*faghi/malka*) of the Afar clans in Amibara have been alienated by the state and development agencies like the Awash Valley Authority (the AVA) to establish, for example:

- the Amibara-Malka-Saddi mechanised irrigated commercial farm to supply cotton to the textile industries
- the Awash National Park Tribal Grazing Areas or Reserves (*yegitosh-killil*) for Issa, Afar and Oromo
- administrative and market towns

as well as the Amibara and Halledebbi settlements for settler farmers. All these developments were carried out at the expense of the pastoralist Afar clans. As a result of the implementation of land policies, development programmes, and tribal grazing areas, the pastoral Afar of Amibara District have lost lands which are of great importance to them in providing good grazing and access points (*faghi/malka*) to the Awash

river water, during the long dry seasons, especially during the driest months of the year, from September to June.

All in all, there are great similarities in the outcome of land policies and development interventions regarding the alienation of pastoral land under the Imperial and the Derg governments (1974–91). The previous government's appropriation measures have diminished Afar pastoralists control over their land and resources. As a result they are faced with growing land and grazing scarcity and have been forced to move into marginal grazing lands and/or to move and settle in or around the growing administrative and market towns where resources are even scarcer. The impact of the loss of vast areas of prime flood-fed dry-season grazing lands has had disastrous long-term implications upon the Afar people. The impact of these developments has already proved disastrous. It has resulted in the destruction of the environment and of the natural resources, such as overgrazing, charcoal and fuel-wood production, and the undermining and abolition of the land rights of the pastoral Afar, the basis of their livelihood and cultural identity, along with the accompanying loss of life (of livestock and people).

The following are important consequences of the government's appropriation measures:

- the increased individuation of clan land
- clan territoriality
- the adoption of opportunistic farming
- the adoption of charcoal and fuel-wood production as sources of cash income through share-cropping
- the frequent intense resource competition and violent, armed conflicts over access rights to scarce resources within the Afar and between the Afar and their neighbours (the Issa), and between the Afar and the state-run irrigated farm schemes.

Below, I shall consider the competition and conflict over land resources between clans and within clans.

RESOURCE COMPETITION AND CONFLICT BETWEEN AFAR CLANS

Competition and conflict over land and grazing resources are not new to the pastoral Afar clans of Amibara District and the Middle Awash. This happened in the past whenever a clan moved on to land without prior arrangement or permission from the authorities of the clan that traditionally held claim to the land.

As indicated earlier, clans have a tradition of access rights to each other's land and resources, provided that the client users of the host clan's land resources recognise their tenure rights. Clan territoriality was practised in the spirit of reciprocity. Established clan relations were, however, undermined with the gradual shrinking of the pastoral resource bases of many clans in Amibara District (*Wereda*) following the subsequent Ethiopian government's claim to their land, the expansion of large-scale irrigation farms and other developments, and since 1991, the privatisation of land policy. As a result, each clan in the study area began to protect its remaining land and resources from its neighbours.

Consequently, conflicts between Afar clans over resources and disputed claims over certain territories have become very common. Sometimes such disputes have resulted in bloody warfare among clans in Amibara District. One example of such a conflict, between the Harkamella-Fediha and Sidiha-Burra clans, both of which belong to the Debine, occurred in 1989. Their dispute over land rights in the Amibara settlements, Kadiga-Dora (*Dirk-Kebelle*) and Sublele, led to armed warfare which resulted in the deaths of 28 individuals of both disputing clans and their respective allies. The lineages of the Sidiha-Burra clan were forced to leave the Sidiha-Burra land of Sublele. This land conflict was settled through negotiations held jointly by many clan heads and elders from within the study area.

Another example is the 1995–96 land conflict between Rakbak-Dermela and Fediha clans over recently returned irrigable farmland at Dahitelle in Amibara. This conflict was about issues of tenure rights and also resulted in the deaths of some six individuals from both clans. Elders, leaders of neighbouring clans, commercial farm investors, the district administration and Afar political organisation officials, settled the conflict. The solution found was that the two clans were to lease the disputed land to a commercial investor (working in the disputed area) and that this investor should pay the authorities of the two clans land rent. Yet the dispute between the two clans has persisted and has not been entirely settled.

COMPETITION AND CONFLICT BETWEEN CLAN MEMBERS

Furthermore, at the local level, these developments have led to a growing tendency to differentiate between community members in

terms of inequitable access to communal resources, and who has access to clan land resources. It has led to a tendency of increasing economic and social differentiation and inequalities in wealth and degrees of economic security within the clan. I will focus next on trends of change in the customary land rights and institutions of land and resource management at the clan level, by taking as an example the Shekek-Hassoba clan.

TRANSFORMATION OF LAND USE AND MANAGEMENT: THE CASE OF THE SHEKEK-HASSOBA CLAN

The practice of enclosing (fencing in) a clan's land (communal land) for farmland and grazing by individual clan members has been a relatively recent phenomenon. It started in the 1970s following the establishment of the settler farms and the allocation of farmland to a few Afar settlers in 1971 and 1972. According to the AVA reports, these minority Afar households were allocated from 0.2–5 hectares of farmland. They were given tenure rights over the land they got from the AVA. Furthermore, these households could transfer their plot to and inherit their plot from family members and close kin. Nevertheless, land sale has been rare and has generally been rejected, and resisted.

Following AVA land allocation to Afar settler farmers, a few conscious and powerful clan leaders (*balabats*) in the study area, who were themselves participants in the settler farm scheme, took this opportunity to enclose large tracts of fertile lands in their respective clan lands to establish cotton farms. Umar Aba Haba, *balabat* of the Harkamela-Fediha in Doffan, Hajji Mussa of the Sidiha-Burra, and Hassan Gurra, *balabat* of the Shekek-Hassoba clan in Ailgeta were three examples of pioneering individuals who enclosed part of their clans' land for cash-crop farming and later leased it to rich commercial farm investors. Next, I will illustrate this development using Hassoba land as an example.

THE PATTERN OF INDIVIDUATION OF THE COMMONS AMONG THE SHEKEK-HASSOBA

Shekek-Hassoba land is a rural area on the flood-fed land in Amibara District, with high pastoral production potentials. This land has been seriously affected by decades of irrigation farming and other developments. The introductions of settler and irrigation farm schemes have gradually undermined pastoral communal/clan tenure in Hassoba land. As elsewhere in Amibara District it encouraged practices of clan land

enclosure – individuation of the commons – by households. In Hassoba land, apart from the AVA land allocation made to a few Hassoba households in 1971, enclosure of clan/communal land by individual clan members followed the following patterns:

- A clan member (only a man) can ask his clan authority, clan elders (*daar-idolla*) and clan head (*balabats*) to enclose part of a clan's land for farming. These authorities would then allocated land for farming outside the main settlements (*ganta*), away from communal grave-yards and other public and ritual places.
- Members of a clan clear part of their clan land and establish fenced farmlands. In this case, these individuals enclose land on their own initiative without presenting a formal request to the authorities of their clan. As long as these individuals do not encroach on certain reserved communal places as indicated above, they face neither resistance nor disapproval from clan members and leaders. The main reason behind this tolerance is that they belong to the clan and enjoy the rights of usufruct of their clan land and its resources as any other member.

The size and type of land enclosed by individual household-heads for farming, seems often to have differed both with regard to the period of time allowed and the location of the land, and also in relation to the wealth, social standing and ability of the individual.

The holder of enclosed land has rights of usufruct over that piece of land. This includes establishing residence, growing crops and using trees and other shrubs in the enclosed plot for domestic consumption and as grazing for livestock. Furthermore, the holder can use the land for unlimited duration and further transfer this usufruct and possessor right to his immediate family members and close kin, but in practice, enclosing parts of the communal land by an individual member does not seem to guarantee outright ownership rights or to give security of tenure. The holder cannot sell it, and the land continues to be considered by other members as the property of the clan or the community. As will be discussed below, the case of Hassan Gurra illustrates this well.

As is prevalent in other sections of the Afar in Amibara, an outsider (a non-clan member) is not permitted to enclose land for farming or residence. There are cases where government authorities, district officials and peasant association leaders have allocated land for farming in the recent past to non-Afar settlers, farm employees and displaced households from other parts of Ethiopia. But these official allocations of parts of clan land by government officials have been and are still resisted and fought by clan members and their leaders. In most cases, these non-member landholders, especially non-Afars, have been evicted from the clan land they hold through violent measures undertaken by clan members with the approval of the clan authorities.

Until recently, the state had been forced to station a police force and the army to protect these subjects and their farming interests from recurrent attacks of the local pastoralists and the Afar Liberation Front (ALF). Besides deploying police and army units at Malka Warar and Malka Saddi, the government used to arm these non-Afars in the irrigation farm settlements and small towns to defend their property (cattle) and families from the Afar population. This is one good example of resource conflict that existed between the state and the Afar institutions of management and allocation of land and other resources.

THE IMPLICATIONS OF INCREASING TRENDS OF LAND ENCLOSURE AND ENGAGEMENT OF PASTORAL HOUSEHOLDS IN AGRICULTURE FARMING

In the Hassoba area as elsewhere in the study area, a growing tendency to enclose clan land for farming and grazing purposes seems to have the advantage of preventing the resources and the land from being dispossessed by outsiders and the state. But this practice has had disadvantages for customary land and resource use, and the management system. A few households seem to take advantage of this emerging land-use pattern. These are particularly wealthy stock-owning households who can convert their livestock, labour and time to invest in lucrative cash-crop farming and increase their household income. Besides the cash income, these households can make good use of farm residue, grass and trees within their enclosed (fenced) farmland as fodder for their main settlementbased lactating stock, especially during the long dry months and drought years, when fodder in the common grazing lands becomes very scarce. Moreover, these Afar have gradually been converted, becoming more or less commercial farmers and herders. They invest large sums of capital in cash-crop farming and develop their farms through commercial inputs. They also lease the land they have enclosed for higher prices to farm investors and at the same time are able to maintain themselves successfully in the pastoral sector.

Unlike the minority rich stock owners, clan leaders, rich town-based traders and government employees, enclosing land and the engagement of poor households in farming seems to be a marginal, opportunistic and temporary activity and for many reasons an often unrewarding economic alternative. The rainfall pattern in the area is extremely unreliable and access to the irrigation facilities and water schemes (owned privately and by the government) to water their farms, improve their seeds, fertilisers and pesticides are lacking. Above all, they lack the necessary capital required to purchase commercial inputs to make their land productive. Such poor households are therefore engaged in farming on a temporary basis and generally desert their enclosed farmland after experiencing crop failures, becoming waged employees of rich Afar farmers, or farms owned by commercial farmers or the state. Another alternative for them is to move out of their rurally based home to settle in or around small towns, like Malka Warar or Malka Saddi or Awash Arba. There they live on extremely low wages which they receive for the type of menial employment small towns can offer.

Opportunistic farming has increasingly become an economic alternative for many poor and rich households in the study area. Despite the will of many poor pastoral households to adopt farming, the capital cost involved has effectively excluded them from this economic endeavour.

The following case from Hassoba further shows trends of change that are taking place all over Amibara. It illustrates changes taking place in land use, tenure and management due to the expansion of irrigated farming, as well as the adoption of new land uses, such as land enclosure for farming, settlement and grazing reserves. It also demonstrates how these developments result in creating inequality and differentiation between clan members concerning the access and use rights to clan lands, as well as intense competition and conflicts between clan members.

LAND-USE CONFLICTS BETWEEN A CLAN HEAD AND CLAN MEMBERS

Hassan Gurra is the *balabat* of the Shekek-Hassoba. He is one of the few Afar household heads who started farming prior to the establishment of the Amibara-Malka-Saddi irrigated farm and the Amibara-Halledibi settlement farms. Prior to the 1970s, his farmland at Aligeta (Hassoba) was less than 20 hectares. The only crops he grew then were maize, millet and watermelons (*hab-hab*) mostly for household consumption. The farming tool he used was a digging hoe.

In 1971 Hassan Gurra joined the Amibara-Halledibi Settler Farm Pilot Programme where he learned about new and improved crops, new farming techniques, and the use of new farming tools. When the settler farm failed in 1972, he returned to his own farm in Hassoba. He increased the size of his farm by clearing and enclosing additional land. He started to use donkeys, oxen and camels as draught animals. Later he acquired a subsidy from Sultan Ali Mirah Hanfare and some Hassoba relatives living in Djibouti and also got bank loans (from private banks) to expand his plot, improve production strategies and grow profitable crops such as cotton and marketable vegetables (onions, peanuts, pepper). He bought two tractors, a gas pump and a transport lorry. He started to grow improved seeds, and began to use fertiliser and insecticides. As a result, his annual yield and profit increased. In 1973, he leased his farmland, some 340 hectares, to a group of commercial farmers. These leaseholders invested in tractors, water pumps, irrigation canals, a gas depot, farming tools, and residential houses for farm employees as well as in the construction of a connecting dry-weather road. Eventually, his annual income increased and the expansion of the farm created more farm jobs for his clan members and also attracted non-Afars. It also led to the growth of the Hassoba settlement, which changed from a predominantly pastoral settlement to a small farming settlement and market town.

In March 1975, the Derg introduced its controversial land reform and the local government confiscated Hassan Gurra's farmland and farm equipment. His land was turned over to a peasant association (*gebere-mahbar*) and he was imprisoned for four years in Harrar. After he was released he returned to his clan land, Hassoba. He became head of the peasant association of his clan, Shekek-Hassoba. But the Derg regime did not return his farmland nor did it recognise his traditional authority as *balabat*.

During the Derg administration, the Hassoba people and their clan leaders refused to recognise the continued dispossession of their land by the state. Along with other Afar clans belonging to the Weima and Debine sections they attempted to disrupt the operations of the irrigation farm schemes. Several times they launched armed attacks against government employees and all the non-Afar settlers in their area. They killed several of them and destroyed cotton and banana farms in Amibara District. The majority of Hassoba, along with other Afar, joined the ALF, the Front for the Restoration of Unity and Democracy (FRUD), allied themselves to the Tigray People's Liberation Front (TPLF) and fought the Derg regime for two decades, principally to reclaim their alienated land but also to defend the remaining land from further expropriation. In these armed clashes in Amibara District alone many hundreds of Afar were killed by government troops and their livestock killed or confiscated. Many Afar households were forced to pay fines (afalama) for the damage they inflicted on the cotton and banana farms. Besides armed resistance, the pastoral Afar in Amibara used enclosure of communal lands (by individuals, lineage and clan) as an alternative strategy to hinder further encroachment and expropriation of their best grazing land and river water access points (*faghi*) by the government-run irrigated farms and by their neighbours (Afar clans and non-Afars).

THE RESISTANCE OF THE SHEKEK-HASSOBA PEOPLE AGAINST THE PRACTICES OF LAND ENCLOSURE BY CLAN MEMBERS: THE CASE OF OPPOSITION AGAINST HASSAN GURRA, FARMER CLAN HEAD

Since its early days, the expansion of irrigated farming and settlement programmes in the dry-season grazing sites was resisted by most members of the Hassoba clan; by households engaged in subsidiary smallholder farming and by full-time herders. This opposition against land enclosure practices on Hassoba land was waged against clan members, members of other Afar clans, and non-Afar settlers. But the resistance put up against clan-member farmers was not very serious compared to the resistance against outsiders and against government agencies, such as the AVA and other interest groups, and especially against competing pastoralist groups (including other Afar clans) and the Issa Somali clans (the Reer Mussa and Said Mussa clans).

The case of Hassan Gurra, *balabat* of the Hassoba, provides an example of the resistance of clan members against their own farming people. The first, very loosely organised resistance against the expropriation of large areas of the dry-season pastureland of the Hassoba clan for farming and residence by clan members, such as Hassan Gurra, started during the reign of Emperor Haile Selassie I. The resistance against Hassan Gurra and his family started when he enclosed more land from the communal grazing sites for irrigated farming and leased his expanded farmland at Aligeta to a group of commercial farmers. Some influential clan elders of the Shekek-Hassoba, such as the late Mohammed Adoita, mobilised opposition against him. However, this resistance did not stop Hassan Gurra from his venture. To neutralise the conflict and opposition from his clan members, Hassan Gurra exploited his traditional authority base and his extensive network of government officials, the Sultan of Aussa, and those in Djibouti. Moreover, to deter further resistance he employed, as farm employees, some influential and powerful clan elders (daar-idolla) and heads of clan sanction-executing bodies (finaa) of the Shekek-Hassoba. In addition he shared farm residues and a small fraction of his revenue from the lease of farmland with those elders of his clan who were seriously opposed to his practices of land enclosure and lease of clan land.

The soundest strategy Hassan Gurra used in the land-use conflict between himself and his clan members was to convince the elders and members of the Shekek-Hassoba about the advantages of adopting agriculture as a subsidiary economic activity. He explained to them the importance of having their own farming people. He stated that the engagement of many of his clan members in sedentary agriculture would help to stop outsiders from encroaching on their land and from establishing permanent settler farmers on Shekek-Hassoba land, and from the ultimate loss of all their clan land to outsiders. He encouraged those members who envied him to enclose land for farming and to start growing food crops and cotton. He promised to irrigate their farmland, provide improved seeds and any other facilities they required. To other clan members, especially the aged, the weak and the poor, he offered simple farm jobs, food subsidies and access to farm residue for livestock owners. Hassan Gurra is considered a local hero by most of his clan members because he defended the interests of his clan by resisting the settlement of outsiders on clan land. The exception is the Hassoba farm settlement, which is at present a small town. Moreover, to diffuse resistance against him (his family and lineage members) and to benefit his clan members, Hassan Gurra demanded of the subsequent investors in Hassoba clan land that they cultivate and irrigate the farms owned by his clan members. He also demanded from the leaseholders jobs, food subsidies and other social services for his people, and acquired permission from the leaseholders for all herd owners of his clan to graze their livestock on the farm residue and to use the canal water.

As a result of all this efforts, he was able to benefit his people and himself; the majority of his clan members did not attempt to wage strong official resistance against Hassan Gurra until 1997.

POST-1991: CONFLICT OVER LAND BETWEEN DIFFERENT AFAR INTEREST GROUPS

As a result of the increasing unpopularity of the state ownership of land and other resources, the privatisation of state-owned farmlands has been pursued since 1990 by the Derg and by government since that time. In spite of repeated demands for the return of all the land held by the state farms, the state has not totally solved the land question. In 1994 the Middle Awash Agricultural Development Enterprise (MAADE) state farms returned some 6673 hectares and in 1996/97 some 600 hectares of irrigated farmland to clans in the study area.

The Afar in Amibara are not satisfied with the return of only a small portion of their lands and they still hope, through peaceful negotiations and/or violence, to get back all the lands held by the government farm schemes. So far the state has maintained control over most of the irrigable farmlands (former state farms) and continues to encourage

privatisation of the recently returned irrigable farmlands. Most of the recently returned land, as well as other lands of the pastoral Afar within the study area, has been made accessible through the lease system by the clan leaders and local government authorities to commercial farm investors. Between 1992 and 1999 about twelve small and big commercial farmers have been attracted to the district. Some of the investors and most of the land speculators are a small group of educated Afar who belong to the politically rising elite, and their non-Afar friends. This Afar elite, now engaged in commercial farming, are a few powerful clan leaders (clan heads and clan elders) and young people active in the new regional administrative structure. These individuals are members who sympathise with Afar political organisations. As a result of this recent development, the majority of the pastoral Afar population in Amibara District are closely observing the establishment of legal control over access, use and management of their clan lands by a minority of Afar and non-Afar interest groups. They also compete with the MAADE state farms over issues of access and use of canal water and crop residues.

INCREASING TENURE INSECURITY AND RESOURCE CONFLICTS BETWEEN AFAR CLANS

Internal competition and conflict between Afar clans and lineages in Amibara District over rights of access and tenure in the recently returned irrigable farmlands increased in intensity and frequency from 1994 to 1999. Principally the so-called returned land is held by the elite in the local administration and by a few powerful clan leaders, and was not returned to the majority of pastoralists who badly needed it. Instead the returned land was leased by this minority Afar to commercial farmers for higher rents. The revenues acquired from leasing the land or from rent are shared between the few political elite, clan heads and their respective supporters, the town-based entrepreneurs.

This practice of leasing communal (clan) lands to private farm investors by powerful clan heads, clan elders and Afar youth in the new local government administration is further reducing the pastoral householders' access to the flood-fed prime dry-season pasturelands, farm residue and water points. This process – of increased land lease (rent) for irrigated farming and of increased individuation of clan lands (communal grazing lands) by the minority Afar – has already led to the exclusion of the majority of herd-owning and smallholder farming Afar households from access to the fertile lands for farming or grazing. The concentration of control of the best clan lands in the study area is in the hands of a few powerful Afar individuals and investors. The following case explains this current development.

BACKGROUND TO THE OPPOSITION TO HASSAN GURRA BY THE HASSOBA CLAN MEMBERS AND OTHER INTEREST GROUPS

Hassan Gurra reclaimed his farmland after the fall of the Derg and amid the ambiguity of the land policy of the Transitional Government of Ethiopia. Since 1991, he has leased his farmland to two Afar investors consecutively. But Hassan Gurra's action was neither backed by his clan members nor by the emerging political elite from Hassoba. He was resisted by his clan members, one of the prominent elders, the late Mohammed Adoita, who was an old rival, and the youth who are now affiliated to the emerging political factions.

The principal reasons behind the opposition of his clan members were:

- he leased part of the clan's land to an outsider without consultation (of fellow members and clan elders) and against the regulations of the current regional and local government land policy; and
- once he had done so, he did not explain clearly to other clan elders or his people the terms of his lease agreement, the benefits from the lease (land rent) and the possible advantages to his people and the clan elders.

In this land conflict, most of his supporters were from his own lineage (*Dinahumado*) and lived with him in the same locality. Moreover, they had a share in the benefits of the land lease.

The opponents of Hassan Gurra could be categorised into two interest groups. The first group consisted of individuals who were peasant association officials during the Derg and who used to manage and allocate land. Their position had been officially abolished at the fall of the Derg in May 1991 but they wanted to have a lion's share of the benefits from the lease of the farmland. But Hassan Gurra and his partners, the leaseholders, were unwilling to satisfy the demands of these ex-peasant association officials. The second category of opponents consisted of the majority of his clan members, especially the herd owners who were entirely against enclosing any part of their clan lands (communal dry-season grazing lands) for farming and against leasing the returned farmlands to commercial farm investors. They wanted the returned irrigable farmland and other clan resources to be controlled and managed by the clan leadership, the clan elders. They also wanted to have unrestricted access to their clan land and resources.

CONFLICTS OF INTEREST BETWEEN HASSAN GURRA AND SOME CLAN MEMBERS, AND HASSAN GURRA AND THE YOUTH IN THE CURRENT ADMINISTRATION (MA)

This land conflict between Hassan Gurra and his clan members. particularly the majority of the youth, escalated and reached its peak in 1995–96. In 1995 his opponents, prominent lineage elders, the youth, many poor households, and herd owners were convinced by MA to gather a petition against Hassan Gurra. MA had some kinship links with the Shekek-Hassoba people. Until he was deposed in 1996, MA was one of the high officials of the ALF in Amibara and he was also the head of security of the district administration. MA asked other Hassoba clan members and elders to back him to write an application against Hassan Gurra on their behalf and to submit it with their petition to the district administration office. Furthermore, MA asked the opponents of Hassan Gurra to give him their support to pursue legal confiscation and subdivision of their clan land now held by Hassan Gurra. Hassan Gurra's opponents agreed to his proposition. MA wrote the application, stating how Hassan Gurra, using his balabat position and closely supported by some other clan elders, oppressed and exploited his opponents. The case against Hassan Gurra and his allies included the fact that he had enclosed vast areas of clan land – dry-season communal grazing land; the fact that he had leased this land to investors and used all the benefits from the land rent and other benefits for himself, his family members and close supporters, particularly his lineage members; and the fact that above all he had refused to share the land with all his clan members. MA presented this application to the administration offices of the Amibara District and Zone 3 of the Middle Awash Valley.

The officials and politicians in the Zone and Amibara District administrative offices were MA's close peers from the Harkamella-Fediha clan and Sidiha-Burra, and his connections were excellent. MA was therefore in a position to convince these officials in the administration to get hold of Hassan Gurra and to confiscate and distribute Hassan Gurra's irrigated farmland to the lineages of the Shekek-Hassoba. The Zone 3 and Amibara District administration officials sent an official summons and Hassan Gurra came to Malka-Warar town as instructed. Upon his arrival at Malka-Warar, the district police detained Hassan Gurra and while he was in police custody at Malka-Warar, MA and the secretary and head of Amibara District administration travelled to Aligeta without police escort. After their arrival at Aligeta, they went to Hassan Gurra's farm site

and started to measure the land. At that moment, Hassan Gurra's elder son and his cousin, puzzled by the rumours of their relative's imprisonment and the unexpected visit of these district officials, started to shoot at them. The officials and MA returned to Malka Warar. They took Hassan Gurra with them escorted by a truck full of heavily armed soldiers from Berta Camp, situated on the outskirts of Malka Warar town. Hassan Gurra was told to bring his two criminal sons. Hassan Gurra stated to the officials that he could not help them. At this point they called the Hassoba clan elders and household heads to a meeting. Hassan Gurra attended the meeting as a prisoner. The district officials talked about Hassan Gurra's exploitation of his fellow clan members using strong words and insults in order to humiliate him. Then they asked the elders and others in the audience to express their discontent against Hassan Gurra. Some elders accused him of refusing to share the land he held and the benefits from it and stated that they wanted justice. The district and the army officials then decided that they would distribute the land to the lineages of the Shekek-Hassoba clan. Hassan Gurra's farmland was measured and divided between the four lineages of Shekek-Hassoba. Each lineage was to receive about 88 hectares of farmland. Each member of the Hassoba lineage was also to share the benefits from the revenues of the then unharvested cotton crop on the land allotted to them. Hassan Gurra's lineage was allotted 44 hectares of farmland. After the distribution was complete the officials, the soldiers and Hassan Gurra returned to Malka Warar. Hassan Gurra was detained. He was asked to hand over his elder son and the cousin, and that until his son and cousin submit themselves to the district administration he would be kept in police custody. Meanwhile Hassan Gurra's younger son began to approach the district officials and to convince them to resolve the land-use dispute through unofficial mediation (through the clan's own customary conflict management, *mablo*) by clan elders and members. He paid the three officials (including MA) a bribe. The officials released Hassan Gurra and Hassan Gurra returned to Hassoba. His son then convinced him to make peace (that is, to forgive and establish smooth relationships, *aafu*) with his opponents, except MA.

The distribution of Hassan Gurra's farmland did not resolve the land conflict in the Shekek-Hassoba land. It rather encouraged further competition, conflict and mistrust between the opponents and supporters of Hassan Gurra, lineage elders and Hassan Gurra's lineage and the youth in the district administration. It further led the Shekek-Hassoba people to question why MA and his allies became intolerant towards Hassan Gurra and Mohammed Borre, the leaseholder (*ditta*). After some time the clan elders and former opponents of Hassan Gurra understood that MA had not fought for the benefit of the Shekek-Hassoba lineages,

but for his own advantages. Later it was discovered that MA wanted to take over the control of the divided lineage lands, lease it to other investors for higher interest, and evict Mohammed Borre from Hassoba. MA argued that Mohammed Borre had deceived and exploited the Shekek-Hassoba people for three years with the collaboration of the clan head, Hassan Gurra and some other clan elders. He pointed out that Mohammed Borre failed to pay the Hassoba people their 20 per cent annual share (equivalent to 100,000 Birr) that he had agreed to pay them. If the elders had given him full mandate over the subdivided clan land (excluding that of Hassan Gurra's lineage), he would have leased the land to an investor who could pay more, provide social services, and create more jobs. But the clan elders rejected his proposal to expel Mohammed Borre. In 1997 lineage elders of the Shekek-Hassoba clan held a meeting at Aligeta village to discuss in detail the land-use conflict in the presence of representatives of the Amibara District administration.

They arrived at a decision that rejected the distribution of the land between the lineages, and the incursion of youthful politicians, like MA, into the spheres of the traditional authority of the clan. This particular meeting decided unanimously to punish the youth and lineage heads of the Shekek-Hassoba clan who had instigated and escalated the resource conflict. The majority of the population of Shekek-Hassoba also endorsed the decision passed by the *daar-idolla* that insisted that clan land should not be fragmented further through further land distribution. They called on the people to refrain from leasing their respective shares of clan land to non-clan members. The main reason given for this was that leasing their clan land to strangers, especially to non-Afars, might result in the gradual loss of the land to the state and the dislocation of the people.

CONCLUSION

This chapter has attempted to show that some of the changes that took place in resource-use regimes and relations among the Afar pastoralists of north-eastern Ethiopia, and in Zone 3 in particular, is the outcome of changes in land and resource use, and has resulted in competition over land tenure, use and management. The current expansion of commercial farming by private farmers and state farms has also led to the exclusion of the pastoralists in Amibara. Neglect has been shown by both the regional and federal governments as well; they have failed to consider and officially recognise the traditional land rights of the Afar pastoralists and to stem encroachment by farmers, schemes and strong neighbours. This neglect is one of the biggest threats currently affecting the well-being of the majority of the pastoralists in the Amibara District and the Zone 3 areas of the Afar Region.

The future of the Afar areas is going to be distinguished overall by an increasing trend in population growth, and increasing competition and demand for grazing land and farm land, water, natural resources, goods and social services (education and health care) and employment. There is much that can be done by the government and local leaders of pastoralists (with the help of donors and NGOs) to reduce the degradation of natural resources, resource scarcity and competition, which are now ongoing processes, and to avert the escalation of resource-use competition and conflicts among Afar clans and the Afar and their neighbours.

I suggest that the following interventions should be considered: the role of the federal and the Afar regional government should be to establish a broader regulatory framework in which the Afar can take on increased responsibility (such as management and conservation) for their communally owned grazing lands and natural resources and to promote culturally and ecologically sound pastoral development. The point of departure for the government should be the implementation of policies (pastoral extension services) that encourage the development of the nomadic pastoralist sector through improvements in land and natural resource management. This means recognising and strengthening the traditional knowledge and institutions of the Afar, of both men and women, and forms of rangeland management practices by:

- encouraging and strengthening the traditional rules of grazing and water access management, demarcation of settlement areas and herd mobility
- strengthening the traditionally widespread practice of land and pasture and tree conservation, and land-use management.

Policy development (land reform) and community participation would be required. The government would have to come up with a clear land policy that strengthens the pastoralists' land-rights, land-tenure, landuse and land-management practices. Policies should be implemented that:

• recognise the local leadership structures of the Afar as accountable to their group.

Legal measures should be taken to:

• discourage inappropriate expansion of farming and settlements within the remaining dry-season grazing areas, water points (wells

and a small number of access points to the river, *malka* or *faghi*) and water development in the wet-season grazing lands; and more appropriate land, grazing and water management programmes should be investigated.

Moreover, the government ought to:

• give more recognition to traditional resource-conflict management institutions; the mitigation of resource conflicts and settlement of conflicts has to involve primarily the local elders and leaders of the clans and lineages of the Afar.

Finally, the fragility of arid and semi-arid eco-systems thus dictates a culturally and ecologically adapted approach to development in the pastoral areas. One key proposed area of policy focus therefore concerns the study and promotion of the pastoral sector, pastoral land use and modes of life, and the reconciliation of pastoral livestock production based on mobility and the needs of a modern administration.

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8

Livelihood and Resource Competition, Sudan

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The present situation in the drylands of the Horn of Africa is a complex one. The dilemma facing the population of these countries is a result of a combination of factors that have their roots in the economy, social organisation, policy and ecology. The population of these Horn countries are presently experiencing many calamities. The civil wars, droughts and famines of the last decade have culminated in a widespread food shortage with intense human suffering and many deaths, especially among children, women and the elderly, due to malnutrition and related diseases (Ahmed and Abdel Ati, 1996, p. 1).

The countries of the Horn are characterised by four broad-based systems of land utilisation. These systems are pastoralism, agro-pastoralism, rain-fed and irrigated agriculture. However, it has to be emphasised that these four systems are closely interlinked through symbiotic relationships. High potential areas which are normally put under agriculture, whether rain-fed or irrigated, have a better chance of supporting the systems that utilise them. Yet the increasing demand for food production in these countries in general has put marginal lands in the region under severe strain and has led to long-lasting land degradation. This land degradation together with the loss of livestock, continuous mobility and excessive marginalisation of rural communities have become dominant trends which are irreversible. Within such a framework, recovery in the sense of simply restoring sustainable self-reliant livelihood systems may no longer be an attainable option (Shazali and Ahmed, 1999).

Pastoralists and agro-pastoralists, who are the main concern in this chapter, represent a high proportion of the population in the region and are utilising the arid and semi-arid areas. It is apparent that a significant number of people in the Horn of Africa are engaged in pastoralism (Salih and Ahmed, 1993). This is largely due to the fact that much of the land in this part of the continent is dry land which offers little or no opportunity for means of subsistence other than livestock raising. Pastoralists inhabit the most inhospitable environment characterised by low annual rainfall and concomitant scarce vegetation. In the late 1970s the most important single countries of the world in terms of the numbers of pastoralists were Sudan,

the USA, Somalia, Chad, Ethiopia, Kenya, Mali, Mauritania, India and China (Sandford, 1983, p. 2). The order may be different at present, but one important thing to note is that four out of the ten countries above are all found in the greater Horn of Africa, which indicates the importance of pastoralism as a livelihood system and as a method of land utilisation in the region. Table 8.1 gives the number of pastoralists by country and their percentage to the total population in the Horn region.

| Country | Population* | Pastoralists* | % of total population |
|----------|-------------|---------------|-----------------------|
| Djibouti | 0.54 | 0.16 | 25.00 |
| Eritrea | 3.50 | 1.16 | 33.30 |
| Ethiopia | 49.20 | 3.90 | 7.90 |
| Kenya | 24.00 | 3.50 | 14.50 |
| Somalia | 7.50 | 4.50 | 60.00 |
| Sudan | 25.20 | 3.50 | 13.80 |
| Uganda | 16.58 | 2.40 | 14.47 |

* millions Source: Salih and Abdel Ghaffar, 1993, p. 7.

The pastoralists in the Horn are found on the ridge of the Ethiopian mountains including Eritrea, the whole of the Somalia region, the northern and eastern parts of Kenya and the Sahalian plains of the Sudan. High rainfall variability and periodic droughts are characteristic of these areas. In addition to the harsh climate the terrain is difficult in some areas. Such environmental conditions have been identified as constraints to development in this part of the continent. However, contrary to this, the hostility of the environment is sometimes considered an advantage because it discourages the encroachment, particularly by investors in large-scale agricultural projects (Barrow, 1996, p. 17). This in itself allows for the emergence of the possible combination of livestock with agriculture in relatively high-potential areas leading to the emergence of agro-pastoral systems are completely interlinked with the pastoral ones since the livelihoods in both systems is highly dependent on each other.

A PASTORAL PREDICAMENT

Certain factors have to be taken into account in order to understand the systems of livelihood among pastoral and agro-pastoral communities and the ways and means through which they are managing to cope with the difficult circumstances they are facing. This will allow for the understanding of the strategies they have developed over decades in their struggle for survival. These factors which have direct bearings on the structure and culture of the population in these communities of the drylands of the Horn of Africa include patterns of movement, mode of habitation and the degree of reliance on supplementary economic activities. Such a degree of reliance on supplementary economic activities brings the pastoral and agro-pastoral systems of livelihood in close contact with the wide economic system in the region as a whole to the extent of not even recognising national borders in certain areas (for example, the Beni Amer on the Sudan–Eritrean border, the Nuer on the Sudan–Ethiopian border, the Afar on the Djibouti–Ethiopian border, just to mention a few). This in turn leads to the fact that the method of resource utilisation in time and space in the Horn countries has to be looked at as a continuum rather than as unrelated systems or ones which are marked by strong boundaries between their economic spheres.

Crossing the economic spheres is a major feature in the symbiotic relation between the pastoralists system of livelihood and that of their neighbouring communities, whether they are agro-pastoralists, settled cultivators or urban dwellers. The same applies in the case of agro-pastoralists since, like the pastoralists, they do not produce all that they need for their survival and depend on exchange through the market mechanism to obtain the basic necessities and to sell surpluses.

It is important to note that instead of a general acceptance of such complexity and realisation of inter-linkage and continuity between pastoralists and agro-pastoralists and other systems of livelihood neighbouring them on the national level as a whole, the history of planning has ignored such a situation. The contacts between public authorities and pastoralists and agro-pastoralists in the drylands of the Horn have been that of misunderstanding as well as continuous policies of marginalisation based on simplistic assumptions. Most common, for example, among these generalisations which pave the way for the marginalisation of the pastoralists in the drylands, is that of accusing them of creating desertification, of managing their stock according to irrational economic principles, of being technically stagnant and backward, of wandering about destroying nature and adhering to conservative social structures and cultural notion, and hence being against development and modernisation (cf. Ahmed, 1976).

Behind much of the policies followed and their justification are the widely perceived images of environmental change. These include overgrazing and the desertification of dryland together with the mining of natural resources, among other factors (Leach and Mearns, 1996, p. 1). In this context it is almost forgotten that the pastoral production system used to be, and still remains, a major food producer in the countries of the Horn, not only for local consumption but also for export. The land utilisation by pastoralists cannot be held responsible for the environmental degradation and as a cause for this population marginalisation. The marginalisation process does not take into consideration the fact that most traditional pastoral management can now be seen to be environmentally benign, and indeed customary institutions for land management are potential models for the future (Scoones, 1995, p. ix).

AGRARIAN TRANSFORMATION AND ECOLOGICAL STRESS

This being the case, competition over natural resources, particularly land, in areas utilised by pastoralists and agro-pastoralists became an issue of both major concern and conflict. Since the 1970s the region has plunged into recurring cycles of drought and famine threatening the lives of both people and livestock. The issue of 'food security' has consequently become an overriding concern for both national governments and donors to the region. But invariably strategies for food security seem to emphasise the expansion of agricultural production to enable people to attain 'self-sufficiency'. Over the last three decades, and particularly since the mid-1980s, numerous interventions have been launched in favour of agricultural production in areas which were basically the home of pastoralists and agro-pastoralists representing the base for their livelihood systems (cf. Salih, 1994; also see Doornbos *et al.*, 1992, pp. 133–94).

The Sudan case is the best one with which to illustrate the issues raised in this paper. As indicated above the state plays a major role in the process of transforming the landscape. The traditional system of land tenure which recognises the *dar* (homeland) of each ethnic group was abolished and replaced by a system of tenure granting the government the right to appropriate land as it wishes. The pastoral areas were mostly given to operators of large schemes (Shazali and Ahmed, 1999).

The pastoralists were marginalised not only by being pushed to corners of the land with no potential but also through the total neglect of the development of their human and animal capital. They have in this sense been politically marginalised through the abolition of their native administrative system. They have no way of influencing any decisions which impact on their system of livelihood. The services that ought to be rendered for their animals have either declined or been privatised beyond their access. As far as they could, the pastoralists attempted to provide the needed services to their animals using their own resources. The state failed to provide the significant support arguing that it is costly to provide mobile services. The same arguments are used when addressing the issue of education for purposes of developing the human capital.

The government policies toward the pastoral sector have gradually led to forced settlement. Taking away the land led to reducing the range area, which led to increased competition and the reduction of the productive capacity of the herd. Households with small herds or those who lost some of their animals due to drought and desertification had to settle. This led to the start of another form of competition over land, this time for settlement purposes. The settled villagers found that the newcomers seeking settlement are taking land that the already settled villagers are using for their small cultivations and grazing the limited number of animals which they keep in the village.

Such a position has led to the 'engineered marginalisation' of these populations, especially the pastoralists. This took place through the appropriation of their land by the state, private owners, investors and through the expansion of settled villages due to land degradation, loss of livestock and forced settlement. In the meantime, policies guiding pastoral development on the national levels became outdated. Seeing pastoral production systems as being 'incapable of efficient land use', and independent of their control, governments in the region have willingly adopted colonial measures that favour agricultural production and the appropriation of pastoral lands for non-pastoral use. The focus has been on the use of legislation to reform land tenure rather than accommodate the different pastoral land-tenure systems found in each locality. National legal frameworks provide the essential conditions within which tenure systems operate, but they are inconsistent with customary land-tenure arrangements that enable pastoralists and agropastoralists to make good use of natural resources (Lane, 1998, p. 4; Shazali and Ahmed, 1999, p. 1). In the process, the land area utilised by such a population has been reduced significantly leading to intense competition and serious conflict among communities that used to complement each other's systems of livelihood. Animal mobility both in space and time started to be severely constrained.

The shrinking of the land resources used by pastoralists and agro-pastoralists has been accented further by the instability created by conflicts and civil wars which are becoming a major feature in the region (Fukui and Markakis, 1994, pp. 1–2). It has disrupted the human and animal mobility and hindered any prospect for sustainable agricultural production in the war zones. These wars thus reduced the area which pastoralists and agro-pastoralists could utilise for the survival and continuity of their human and animal capitals. It forced a wide margin of land out of production and hence limited the ability

of the systems of livelihood in such areas to expand or even continue as they were in previous years. Complementarity and symbiotic relations between groups in the war zone and the pastoralists who used to spend part of the year grazing in this area, in the case of the Sudan, for example, have given way to military raids, looting of herd The militarisation of these crops and holding hostages. and communities became evident in the continuous presence of tribal militias, supported by both government and rebel forces (Salih, 1989, pp. 65–82). The traditional system of utilising grazing areas through well-defined migration routes and conservation of grass and woodlands is no longer attainable. The possible cultivation of small plots of land by different communities for purposes of supplementing their diet can no longer be practised. Fishing and hunting, which used to be daily activities of youth during the dry season, are now hazardous. Some pastoral groups inside the war zones have had to flee their areas while their herds were either looted or destroyed by disease, and large numbers of people also died. Similar situations faced the agro-pastoralists where, in addition, the use of land mines has rendered most of their areas out of reach (Ahmed, 1993, p. 16).

Such circumstances of ill-planning and civil wars have led to the total collapse of systems of livelihood in many areas of the Horn and have eventually led to forced settlement of a large number of households. These households are engaged in different activities and are developing various coping strategies in their attempts to adjust to their new style of livelihood. Under the new realities the symbiotic relations between pastoralists, agro-pastoralists and other communities became unbalanced and therefore have had a direct impact on the nutritional status of these communities. Wage labour and other jobs in the informal sector became the major possible ways for those who were forced to settle. Even those who continued to maintain their systems of livelihood in the pastoral and agro-pastoral sector could no longer produce enough of what they needed for household consumption and what they do produce is often exchanged for what their neighbours have produced or for items available in the local market places. This situation has led to an unbalanced diet and eventually malnutrition.

A category of what has been referred to recently in the literature as 'destitute pastoralists' has now emerged around large villages and small towns in the countries of the Horn. Since they lack the skills to enter into any economic activity in the new setting, pastoralists make the best by living on what they can gather from their neighbours' leftovers and attempt to sell the labour of their household members in any way possible to provide a source of livelihood. The political marginalisation of the nomads within the state system has made it impossible for them to express their views in relation to planning the land use in areas where they herd their animals. They are not in a position where they can explain to planners and decision makers that their contribution to the national economy in a country like the Sudan is the leading one within in the agricultural sector. This is because in reality they respond to market mechanisms. However, they do that within the frame of their own production system which is governed by both cultural and economic factors.

SURVIVAL UNDER STRESS: A CASE FROM SUDAN

The pastoral and agro-pastoral production systems in the area between the Blue Nile and the White Nile in the Sudan, referred to as the southern Funj region, serve as a case in point to illustrate most of the issues raised above. These systems are undergoing rapid processes of change in a context of steadily deteriorating environmental conditions. The competition over grazing resources by different pastoral groups is intensifying due to the shrinking area available for such an activity. The semi-mechanised schemes, the drought and the civil war in the southern part of the region have impacted negatively on the pastoral production systems and on the national economy at large.

The Rufa'a al Hoi, studied intensively between 1968 and 1971, are the major pastoral group utilising the pasture resources in the southern Funj region (cf. Abdel Ghaffar, 1974, 1976). They compete over these pasture resources with three other ethnic groups, namely the Umbarraro, the Ingessena and to a lesser degree, the Kinana who meet with the northern *Badiya* (pastoralists of the Rufa'a al Hoi) on crossing to the eastern banks of the Blue Nile during the dry season. With the start of the semi-mechanised agricultural schemes in the late 1950s the land available to the pastoralists began to rapidly decrease. Other resources that the Rufa'a al Hoi used to utilise were gradually disappearing. Major among these are the gum gardens where the trees are cut down to make room for the agricultural schemes. They also lost access to the artificial water bonds (*hafirs*) which they and their annual animals depended on during their movement from the wet-season grazing areas to the dry-season ones.

Many changes have taken place since the Rufa'a al Hoi were first studied as briefly mentioned above. However, the most recent change in the area is the extension of the civil war zone to cover the southern part of the area used by pastoralists in the southern Funj. These changes have forced the Rufa'a al Hoi to readjust their system of livelihood to the new realities or totally abandon the pastoral system and settle down. The result has been the fast sedentarisation process witnessed recently. With this sedentarisation process the issue of land ownership, and disputes over land resources became a daily concern for the settled villagers and pastoralists alike.

The expansion of war into the area forced the pastoralists to create their own defence mechanisms. They started to train in the use of sophisticated arms and to develop a military organisation of their own. The issue of stability and complementary relations between the various ethnic groups in the region can no longer be taken for granted as they used to be. This chapter briefly addresses some of the major changes that have taken place over the last three decades or so.

THE RUFA'A AL HOI HOUSEHOLD ECONOMY

The major resources utilised by the Rufa'a al Hoi households up to the early 1970s were the animal herds; the abundant grazing lands; possible areas for cultivation of small plots during animal movement which part of the household members return to harvest; the gum gardens distributed by the tribal leaders and the possibility of sharing gum gardens or agricultural lands with settled villagers on rent basis. Under such circumstances the household labour was divided on these resources on the basis of sex and age.

Animal herding, cultivation and gum tapping is mainly undertaken by young and middle-aged men. Women do the domestic work and, together with the children, look after the small herd of goats or sheep kept round the tent cluster for the purpose of providing the household with its daily needs of milk. Elderly men mostly sit in the men's tent or under the shade of a big tree a short distant from the tent clusters where they entertain guests and occupy their time by undertaking some hand work such as rope making. The types of herds kept by both *Badiyas* of the Rufa'a al Hoi have different grazing habits and hence require special arrangements in herding. Camels, cattle and sheep have different habits and hence a household which owns the three types has to distribute the time of its young men in such a way that such needs are fulfilled. This may require the collaboration between different households in a cluster so that all herds will have the needed manpower to look after them.

The income gained from the gum tapping, in addition to the sale of a small number of animals every year, allows the household to buy the necessary goods from the village markets. The goods needed are mostly consumption goods such as sugar, tea, sorghum, clothes, etc. In certain circumstances the household may sell milk to the villagers in places where they spend the rainy season.

Recently, changes have taken place in the household daily activities. The plots of lands for cultivation have disappeared since all of the high-potential land has been taken over by the semi-mechanised schemes and settled villagers. Even if such a plot is found it is no longer possible for the household members to cultivate a plot and come back sometime after to harvest it as in the past. Such an unguarded plot will be taken by others or damaged by animals.

The gum gardens have been cleared to give precedence to the agricultural schemes. This has led to the loss of an important cash source for a significant number of households. To compensate for this loss of income, and to buy sorghum that they could have produced in the past on their plots of cultivated land, more animals have to be sold to provide for the necessary consumption goods. They have had to go beyond the surplus animals mentioned above and now even sell some of the productive herd. Such an act leads to the depletion of herds, to poverty and forced sedentarisation.

RECENT TRENDS IN THE LARGE-SCALE SEDENTARISATION OF THE RUFA'A AL HOI

For the Rufa'a al Hoi, whose history of resource utilisation in their *dar* had been characterised by continuous movement according to availability of water and grazing areas, settlement in large numbers has only recently been observed. Although since the late 1960s and early 1970s some of the Rufa'a al Hoi pastoralists started to settle due to the gradual loss of herds, the conspicuous process of sedentarisation witnessed today is a new phenomenon.

Many factors have expedited the process. Significant among these are:

- the expansion of the rain-fed semi-mechanised agricultural schemes that took over most of their traditionally utilised *dar*
- the impact of the drought of the mid-1980s which left many members of the group without any significant herd to facilitate a migratory life
- more recently the extension of the civil war into their areas.

In addition, of course, is the competition the pastoralists were facing all the time from other groups who had been using the same area since the 1950s, namely, the Fellata Umbarraro and the Ingessena. The destinations of the new settlers are the small towns of Abu Hugar, Wad al Nayal, Dar Agil and Signa which are mainly market and administrative centres in the Rufa'a al Hoi *Nazirate* area. The number of settlers has been very large and whole neighbourhoods have appeared in such towns populated by the Rufa'a al Hoi settled pastoralists. For instance, groups of more than 500–600 members have appeared in these towns. Three such groups, for example, appeared in Abu Hugar while two of a similar size appeared in Wad al Nayal. The settlers are mostly from the northern *Badiya* where the process started earlier than in the southern *Badiya* and was greatly assisted by the drought and the expansion of the semi-mechanised rain-fed agricultural schemes.

Apart from the settlements in the urban centres of the area, there are also scattered settlers' villages. Some of these are in the vicinity of these urban centres. It is, however, important to note that the pastoralists' settlements in urban areas or in villages are not without their problems. An example of what usually takes place can be seen from the case of the village of Wad Karar, near Dar Agil. The households settled in this village number 200. The settlement of the pastoralists in this village was preceded by a long dispute between the old and the new settlers over land ownership. In the old days the concept of *dar* was consistently applied and the whole areas was considered as Dar Rufa'a al Hoi or Dar Abu Ruf. The Rufa'a al Hoi pastoralists can set up their camp anywhere in that *dar* or they can settle if need be. The non-Rufa'a al Hoi settled population had to seek the permission of the *Nazir* (the leader of tribe) to establish or expand the boundaries of their settlement.

The situation that the Rufa'a al Hoi pastoralists started to face after the abolition of the Native Administration in the early 1970s, and even after its reinstatement in the late 1980s, was that the non-Rufa'a al Hoi settlers refused to recognise the Rufa'a al Hoi claim to their *dar*. With this understanding the non-Rufa'a al Hoi settlers of Wad Karar village refused to allow the Rufa'a al Hoi pastoralists to settle down with them claiming that the land belongs to those who are already settled on it. The settlers' argument was based on the assumption that the concept of *dar* no longer holds, especially when there is an already established village.

This dispute between the new settlers of the Rufa'a al Hoi and the old non-Rufa'a al Hoi settlers had to be settled in court. It took a long time to settle the dispute and in the end the new settlers rights were recognised. Many other similar conflicts instigated by the need of the Rufa'a al Hoi members to settle down were solved in the same manner. The increasing need of the Rufa'a al Hoi to settle is best represented by the fact that 70–80 per cent of the members of the northern *Badiya* have settled down.

The settled pastoralists engage in both agriculture and animalrearing activities. Some of those who settle in urban centres engage in animal markets acting as mediators and guarantors, an activity which was in the past mainly undertaken by the Rufa'a al Hoi settled elite. While the households settle permanently in the village, young men from such households travel long distances with some of the animals retained from their previous system of livelihood. Sometimes they can be away from the village for over two months. Yet it has to be emphasised that this type of movement differs from the previous one (before the settlement) in two ways: first, the size of the herds now are small; and second, the distance covered is relatively short and the direction and route can vary from one journey to the next.

As stated earlier, the Rufa'a al Hoi view all the area of the southern Funi (except for the banks of the Blue Nile) as their homeland on which they have the right to settle and practise any activity they see fit. According to their own customary land regulation anyone who abandons his plot of land for three successive years automatically loses the right to any claim over the plot. Equally, the person who occupies a plot (that is, cultivates it) for three successive years can claim ownership. In the process, conflict over lands ensue. The Rufa'a al Hoi do not wait to be given the consent of the non-Rufa'a al Hoi old settlers to occupy the land. They simply erect their huts, either in the vicinity of established villages or in any empty space. In fact, the Rufa'a al Hoi leaders encourage their followers to first settle down and then if a dispute arises it can be processed in court. However, attempts are always made by the Rufa'a al Hoi leaders and the village leaders (Shaykhs) to settle these disputes outside the court. So far no specific arrangements have been reached between the Rufa'a al Hoi and the village non-Rufa'a al Hoi settlers regarding the land claims and each case is considered on its own merits.

The Rufa'a al Hoi *Nazir* and his supporting administrative staff (*Wakeels, Omodias* and *Shaykhs*, the Nazir's deputy, head of section, and head of camp or village leader respectively) are administratively in charge of the settled Rufa'a al Hoi members. These days in fact it happens that a particular *Shaykh* and his followers may settle in the same place. The latecomers to the villages attempt to reside where the previous members of their camp have settled and hence they come to be under the administration of the same *Shaykh*. The case of Wad Karar village mentioned above is a case in point.

While the major parts of the northern *Badiya* have settled round small urban centres or already established villages, the southern *Badiya* settlers have established their new villages further south around places such as Boot, Mazmum, Guli and Wad Abok. Few of the southern

Badiya members who lost their animals in the early days of the drought and the expansion of the agricultural schemes have settled in the vicinity of Wad al Nayal.

Since the competition over land has intensified over the past years the role of the elderly Rufa'a al Hoi members has been elevated tremendously. They are now constantly needed to provide advice, guidance and help in solving disputes over land. They play the very important role of consultant for *Shaykhs*, *Omads* and *Nazir* since many of these are young and not very familiar with the tradition of land ownership and the relations with the non-Rufa'a al Hoi settlers of the *dar*. This is of course in addition to their role in settling internal disputes, whether in the pastoralist camps or among those who are settled.

It should be mentioned that the policy of Rufa'a al Hoi leaders is to encourage their followers to settle. These leaders have come to realise that by settling the pastoralist will come to enjoy some of the services that the villagers are receiving from the government. In handling the landownership problem, the leaders ask their followers to construct their huts anywhere and then they deal with the disputes with authorities later. Some of the leaders argue that settlement is not a question that should be argued about. Rather, it depends on the situation in the area and the desire of the pastoralists themselves. A pastoralist might settle down and after a while move again. However, to do so one has to have enough animals to be back in the system. Some succeed in doing this because originally when they settled they left some of their animals with relatives and friends and hence they did not have to build a new herd.

THE PASTORALIST MOVEMENT AND THE RAIN-FED AGRICULTURAL SCHEMES IN THE SOUTHERN FUNJ AREA

The major pastoralist groups utilising the southern Funj area has remained the same over the past three decades. However, due to the development of the rain-fed semi-mechanised schemes and the appropriation of the high-potential areas by the scheme owners, the pastoralists started to loose most of their best grazing areas. The schemes' expansion led to the shrinking of the space which used to be grazed during the movement from the northern rainy-season areas to the southern dry-season grazing areas and back. To cope with this situation the pastoralists had to concentrate their herds on the dry-season and the rainy-season grazing ground while they were forced to move quickly through the schemes areas which occupied the major part of the landscape between the northern and southern regions. Due to the increasing conflict between the pastoralists and the scheme owners the state administration in the region has had to intervene a number of times to regulate the contacts between the two parties. When the schemes were originally planned in the late 1950s and early 1960s it was made clear to the scheme owners that they should allow for the passage of the pastoralists in their north–south annual migrations. The routes for the pastoralists were identified and no scheme was licensed in the recognised areas. However, soon unauthorised schemes started to appear taking most of these passages. This led to conflicts which made it necessary (in 1970) for the administration of the region to draw up some regulation for organising the migrations which would also allow for the expansion of the schemes.

The problem became more critical by the late 1980s when the government appropriated most of the land in the region and leased it to companies and private owners for the purpose of increasing agricultural production. This was done with total negligence of the contribution of the livestock sector to the economy of the country and the fact that pastoralists in these areas are among the most significant contributors to the sector and therefore the national economy as a whole. As an example the contribution of the livestock sector to the national economy in 1990/91 was 11.9 per cent while the large-scale rain-fed mechanised schemes contributed 1.5 per cent (Ministry of Finance, 1992).

Combined with the civil strife in the southernmost limit of the Funj area this appropriation of land has led the Rufa'a al Hoi southern Badiya, who continued to move with their animals, to make major adjustments to their annual movement. They had to stay for longer periods in the rainy-season grazing areas, a practice that started to lead to the exhaustion of the natural resource and hence the degradation of the land. When moving to their dry-season grazing areas they had to cover the distance taken by the expanding schemes in a very short time, which has a negative effect on both human and animal populations. In addition it became a fact of life to enter into conflict with the scheme owners since the animals always, during their long move of three to five days, have to graze on some of the schemes' lands and be watered from the hafir which are now in the vicinity of the schemes. They also have to stay longer in the dry-season grazing areas until the heavy rains start. This makes the movement of animals northwards very difficult, in addition to the attack by insects that appear with the rains.

The movement south can no longer extend to the areas it used to cover a decade ago. This is mainly due to the activities of the fighting groups. This situation has made the Rufa'a al Hoi and their other competitors on the grazing areas come close to each other and compete for limited space. As mentioned earlier, this was one of the major reasons for the settlement of 10–15 per cent of the Rufa'a al Hoi southern *Badiya*.

As for the other pastoralists using the same area as the Rufa'a al Hoi – namely the Fellata Umbarraro and the Ingessena – they have also been greatly affected. The expansion of the schemes south of the Ingessena Hills has had its negative impact on both groups since it has removed most of the grazing areas they used to utilise in the early parts of the rainy season and the late days of the dry season. Civil strife has restricted their movement south in the same way that it affected the Rufa'a al Hoi.

It is to be noted that the Umbarraro have changed the direction of their movement so that they now spend the rainy season on the western side of the Ingessena Hills and move westwards toward the White Nile during the dry season. This of course gets them into conflict with the scheme owners on the eastern banks of the White Nile as well as competing for grazing lands with the White Nile Beggara Arabs.

As for the Ingessena youth moving with their herds south of the Hills to the Khor Yabous area and then to the western banks of the Blue Nile near the Ethiopian borders, such a movement continued until the late 1980s. However, with the fighting intensity escalating in the Yabous area the tendency more recently was only to move toward the Blue Nile Banks.

The northern *Badiya* of the Rufa'a al Hoi also faced limitations on its movements due to the expansion of the schemes and the establishment of irrigated agricultural schemes such as Kinana and the Rahad. The drought of the early 1980s had led to the settlement of 70–80 per cent of this *Badiya* in the villages already noted above. Those who still continued to move, especially with their camels, had to extend their dry-season movement to eastern Sudan (Gadarf, Kassala and the Ethiopian borders).

After the abolition of the Native Administration at the beginning of the 1970s what was left of the high-potential lands in the areas was earmarked for rain-fed cultivation and was distributed to settled villagers as well as private non-resident scheme owners without consultation with pastoralists or their leaders. In the process of preparing the land for cultivation trees were cut down including *hashab* gum trees (*Acacia Senegal*). The gum arabic production in this area was mainly a domain controlled by the Rufa'a al Hoi leaders who had the responsibility of distributing the gum garden to their supporters who in turn arranged for tapping the trees through the share system with migrant labour from Kordofan. After the abolition of the Native

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Administration the few residual gardens were given to non-Rufa'a al Hoi villagers. The authority of the Rufa'a al Hoi leadership on the gum gardens was totally lost to the extent that even the *Nazir*, coming to office after the reinstatement of the Native Administration, claimed to have no access to what was left of the gum gardens. When the Rufa'a al Hoi pastoralists started to settle they claimed their rights over the gum gardens, a situation that led to conflict with the villagers who had claimed the gardens. The leadership is making all efforts to regain the gardens for their followers, though with little success so far.

Another problem arising from the fact that the Rufa'a al Hoi had to stay in the rainy-season areas for a longer period is leading to serious competition with their neighbours the Kinana who use the same area at the same time. There is obviously here a latent problem of land dispute instigated by the expansion of the scheme and other factors. This conflict is still dormant but, as the leadership of both groups view the development in the area, it might soon become an open one.

LOCAL GOVERNANCE: THE NATIVE ADMINISTRATION SYSTEM REINSTATED

Having been abolished in the early 1970s, the Native Administration system has been back in place since the late 1980s. The leadership structure of the Rufa'a al Hoi remained the same as it was before the abolition. It consists of the *Nazir*, on the top of the hierarchy, followed by his two *Wakeels* (deputies); one for the northern *Badiya* and one for the southern *Badiya*. The present *Wakeels* are brothers of the *Nazir*. The three being the sons of *Nazir* Ahmed Yusuf Abu Ruf who was the *Nazir* before the abolition of the Native Administration in the early 1970s. The one change at this level of leadership is that of the *Wakeel* post of the southern *Badiya* which was under the authority of the Beni Hussein family, the rivals of Abu Ruf family, and is now in the hands of Abu Ruf family.

There are nine *Omodias* under the authority of the *Nazir*; including Abu Hugar, Wad el Nayal (where the present *Nazir* lives; the previous *Nazir* lived in Abu Hagar), Dar Agil, Mazmum, Galghani, Wad Awieda, Wad Balula, Bani Hussein and Osman Rahama. However, the major *Omodias* are the four who are with the pastoralists; two in each *Badiya*. The rest are for the settled population; and among these one is a non-Rufa'a al Hoi *Omodia*, namely in Galghani where the group are Fellata under the Rufa'a al Hoi administration.

Under the above *Omodias* there are 80 *Shaykhs*, including the northern and southern *Badiyas*. The number of *Shaykhs* attached to the

Abu Hugar council is 19, while those attached to Wad el Nayal number 27 and the rest are in the two *Badiyas*. The approximate number of *Shaykhs* in each *Omodia* is eight, and the size of the Rua'a al Hoi population is estimated at 300,000. Among the pastoralists the average size of the camp is 100 households.

At the time when the Native Administration was abolished the settled villagers established their own village councils. New leadership has emerged from among them and has developed its own interests in the area, especially with reference to the land ownership issue. It started to argue that lands around the villages are the villagers' property without consideration of the issue of Rufa'a al Hoi *dar*. Their influence in running rural council affairs has increased while that of the Rufa'a a Hoi leaders has declined.

The bridging role between the settled people and the pastoralist which was played by the Rufa'a al Hoi leadership is no longer in place. This is due to a number of reasons. Most significant among these is the fact that the new Rufa'a al Hoi leadership is not familiar with the traditional relations between these two communities (settled and pastoralist) and the history of the different settlements. The mediation role of this leadership has been weakened due to the fact that many people have settled over the years and started to manage information. The pastoralists now go to their settled relatives to obtain information rather than approaching their leadership. The ethnic issue between village leadership and Rufa'a al Hoi leaders has started to come to the fore, fuelled by the national politics.

The federal system promulgated recently in the country with the intention of bringing the government, both 'functionally and physically', closer to people has had negative effects on Rufa'a al Hoi. While previously they were attached to one or two states, currently they are scattered in four: Sennar, Blue Nile, White Nile and Gezira. This complicated the administration of pastoral groups and exerted financial losses on pastoralists. This is because the pastoralists are in many cases taxed more than once. This also applies in the case of *Zakat* and many other duties.

Among the leadership of the Rufa'a al Hoi there are some *Shaykhs* who are critical of their current *Nazir*. It is argued that he has no comprehensive knowledge of the area and the existing complexities of the present situation because he was absent during the previous years (studying and becoming a migrant employee in the Gulf States). Even when he succeeded his father as a *Nazir* he used to travel a lot to the Gulf States where his wife and children resided.

THE COST OF THE CIVIL WAR ON THE RUFA'A AL HOI

From the mid-1980s the Rufa'a al Hoi were drastically affected by the civil war. And military operations in the Blue Nile areas made it impossible for the Rufa'a al Hoi to utilise their southern grazing areas. According to information provided by the *Wakeel* of the *Nazir* for the southern *Badiya* 23 herds (*murahs*) of cattle and sheep were robbed by the rebels between January and May 1998. Each such herd consisted of 400–600 animals. Moreover, 17 Rufa'a al Hoi herders were killed.

It is important to note that some of the ethnic groups of the area, namely the Jum Jum, Gumuz and Burun, who have been in peaceful relations with the Rufa'a al Hoi for a long time, some of whom even used to work as herders for the Rufa'a al Hoi, have taken arms. Many of them, however, did not join the rebel movement or the military units of the northern Sudanese opposition. Their activities were directed towards robbing the herds of the pastoralists moving in the area, among whom were the Rufa'a al Hoi. Ironically these groups have been trained and armed by the government so that they can act as a buffer zone against the rebels.

As a result of the devastation, the southern *Badiya* pastoralists can no longer go beyond Jebel al Tin which meant being denied the use of the best dry-season pasture they used to have. Camp clusters consisting of extended families became very cautious and specific in their movement. While previously two or three herders (mainly owners) would look after the herd, now, after recurrent robbery incidents, the number of those who follow the herd ranges between 30 and 40 members.

To combat these problems, the Rufa'a al Hoi started to train themselves in the use of sophisticated fire arms and in proper war tactics. Some of those who are trained follow the herds while others stay at nearby camps to be ready for any emergency. Two of these emergency camps are found in Wad Abok and Malkan. This is a clear defensive device to confront threats caused by shifting the war to the areas which formerly used to be the main domain of grazing for the Rufa'a al Hoi. Such action could obviously become a nucleus for a Rufa'a al Hoi armed militia similar to those found in southern Kordofan and Dar Fur.

With this defensive strategy, the southern *Badiya* pastoralists insist on going as far south as they can despite the danger they are destined to face. This is due to the fact that those southern parts are rich in pasture and water. By experience the Rufa'a al Hoi found out that when they graze their animals in this area the sheep give birth twice a year. They argue: 'let the rebels take one of the birth and leave the other'. The dynamics of local-level politics are behind the reluctance of the government of the Blue Nile state to train and arm the Rufa'a al Hoi pastoralists in the southern *Badiya*. The Rufa'a al Hoi argue that this is the case because the government of the state is mainly dominated by non-Arab members. As such they are not ready to empower those pastoralists Arab groups who may one day turn against them.

The Umbarraro have been even more devastated by the civil war than the Rufa'a al Hoi. This is because they used to travel further south than the southern *Badiya*. They also used to stay late in the south rather than go north during the rain, beyond the agricultural schemes of Mazmum. They have had to change the direction of their migration from north–south in the southern Funj to east–west from the Ingessena Hills to the White Nile and back.

One interesting aspect of the war situation is that it made the relation between the Umbarraro and the Rufa'a al Hoi into one of mutual support. In the past this relationship was competitive and hostile. This is not to say that there are no conflicts of interest between the Rufa'a al Hoi and the Umbarraro, but such conflicts, if they exist, proved to be minor compared to the challenges of war facing both of them.

Another impact is that the war not only affected the Rufa'a al Hoi and other pastoralists in the area but also affected their animals. Due to attacks and robbery some of the cattle herds wandered around the area without their herders, and gradually turned wild, as is common when domestic animals are no longer attended by humans.

CONCLUSION

The factors influencing the situation of the livelihood systems in the Horn of Africa are many and complex and have their roots in the economy, social organisation, policy and ecology. People experience serious difficulties as a result of drought leading to food shortage and famine. Having this combined with mismanagement of resources, bad planning and above all civil strife, the suffering of the human and animal population becomes intense.

The pastoralists and agro-pastoralists in this region suffer most under these circumstances. Their numbers are great compared to the population in the region and they inhabit areas which are generally inhospitable, being characterised by low annual rainfall and concomitant scarce vegetation. However, in some of the high-potential areas agro-pastoral systems seem to prosper and make a significant contribution to the national economies of the countries of the region. Yet this contribution is rarely recognised by planners and decision makers who seem to favour agricultural production systems. The agricultural policies suggested by planners mostly ignore the needs of pastoralists and agro-pastoralists and lead to their marginalisation through the appropriation of the lands which they have traditionally used.

Many misleading justifications are used to explain the policies that lead to the pastoralists' and agro-pastoralists' marginalisation within the framework of the national plans in the Horn region. Simplistic assumptions such as accusing the population, especially the pastoralists, of creating desertification, of managing their stock according to irrational economic principles, of being technically stagnant and backward, etc., are mainly used to guide the marginalisation policies. It is on the basis of these assumptions that the agricultural policies that allow for the expansion of agricultural production systems in lands traditionally utilised by pastoralists and agro-pastoralists are promoted.

This engineered marginalisation has extended beyond the issues of access to resources. The pastoralists and the agro-pastoralists have also been marginalised politically. In rare cases some of their elite may be able to access some powerful positions at a local level and influence the decision-making process in relation to land-tenure issues. However, the majority of the people have to cope with difficult situations without being able to exert influence on them.

Recently, the ill-planning, the harsh environment and civil strife have led to the total collapse of some of the pastoral and agro-pastoral livelihood systems in the Horn, eventually leading to forced settlement of large numbers of households. Yet even this trend is not without its complexity. The case of the Rufa'a al Hoi of the Funj region of the Sudan illustrates the dynamics involved in such a move.

The recent trend of sedentarisation of the Rufa'a al Hoi has been caused by three major factors:

- the appropriation of their traditional grazing areas to allow for the expansion of the rain-fed semi-mechanised schemes that commercialised the agricultural production in the area
- the drought of the early 1980s that led to a significant loss of animals, especially among the northern *Badiya*
- the civil war activities in the southern Funj area which forced changes in pastoralist migrations.

One thing that seems to go unnoticed by planners and decision makers in the region is that, by appropriating land from the pastoral group and putting it under rain-fed or irrigated agriculture, they are doing a disservice to the national economy. Over the years the contribution of the livestock sector had always exceeded that of the agricultural one. Yet no supporting facilities similar to those given to the agricultural sector are directed towards the livestock sector.

The concentration of the pastoralists in limited areas is gradually leading to land degradation. This, together with the cutting down of trees to allow for the expansion of the rain-fed agricultural schemes and the drought of the 1980s, has had a negative impact on the pastoralists and has led to sedentarisation. The clearing of trees, particularly the gum gardens, has led to the loss of a major income for the settled and pastoral groups. This also represents a loss to the national economy.

Sedentarisation brought to life the conflict over land, especially between the non-Rufa'a al Hoi villagers in the Dar Rufa'a al Hoi and the recently settled pastoralists who hold traditional claims to the land. The re-establishment of the Native Administration system did not help very much in solving this problem. On the contrary it may well have made the conflict worse. The Rufa'a al Hoi leaders are encouraging their member who want to settle to build their huts first and then try to argue their cases with whomsoever opposes them, through the court. This is complicated by the feeling of the pastoralists and their leaders that they are living in a federal state whose leadership is mainly non-Rufa'a al Hoi, and in many cases, non-Arab.

The civil war has promoted the emergence of a military trend among the Rufa'a al Hoi. They have had to change their system of grazing; to be cautious in their movement; and to resort to armed tactics to defend themselves and their herds. The emergence of a militia similar to those in Kordofan and Dar Fur is very possible. Other pastoralists in the area are suffering equally from the civil war. Some, like the Umbarraro, had to change the direction of their migrations in response to the expansion of war in the area.

On the whole the situation in the area is deteriorating rapidly. Under the pressures outlined what is left of the pastoral system may not survive. Unless a new visionary state leadership proposes integration of the agricultural schemes with the livestock sector (as represented by the pastoralists), little hope for developing the area and improving the quality of life of its people exists.

The civil war is no longer confined to southern Sudan only and the looming reality of two Sudans (South and North) has already had a disastrous impact on the frontier peoples like the pastoralists of the southern Funj province. This will of course have negative effects on the economy and the life of the groups in the whole region.

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Pastoral Commercialisation: On Caloric Terms of Trade and Related Issues

Ton Dietz, Abdirizak Arale Nunow, Adano Wario Roba and Fred Zaal

CONCEPTS

Commoditisation, commercialisation, off-take rates and sustainable land use

With fluctuating emphasis throughout the twentieth century, attention for scholarship and policy concerning pastoralism in Africa was often guided by feelings of horror about perceived 'overgrazing', the self-destruction of the pastoral habitat, and unsustainable land use in pastoral areas. Concepts like 'desertification' and the 'tragedy of the commons' were fed by statistics concerning ever-growing numbers of livestock and people in a shrinking and degraded pastoral area. Often vigorous attempts to convince or force pastoralists to sell animals and to make better use of the market were seen as the 'way out' (see Fratkin, 1997; Dietz and Mohamed Salih, 1997 for an overview). This chapter does not actually deal with the 'sustainable land use' side of the argument as such, but it deals with a related contextual variable: the reality of pastoral commercialisation. It tries to develop theoretical concepts to look at how pastoral societies are embedded in a wider market – the pros and cons and the necessities and dangers.

The process of commercialising livestock and livestock products in a pastoral society is part of a wider process – turning livestock and its products into commodities – which took place in most pastoral societies in the world during the second half of the twentieth century.

Commoditisation is a process in which the utility value of assets, goods and services increasingly changes. Initially assets, goods and services are used for the subsistence of the producers and their units of consumption. Then the utility value begins to have an exchange value as well and products can be sold and acquired on the market. At first this exchange may take place without money as barter trade, but soon money is used as an intermediary. In the debate about pastoralism the following elements of this process should be highlighted:

- The commercialisation of livestock production (through the sale of milk, meat, wool, hides and skins, manure, draught animals) takes place when the balance between the producer's own use and the sale of the product changes and local livestock trade becomes part of the (inter)national trend of supply and demand, with emphasis on price formation.
- The acquisition of food through the market becomes important and is often accompanied by a change from a mainly livestock-based diet to mainly grain-based.
- The acquisition of non-food consumption items through the market increases, starting with material goods (ornaments and clothing, items for the house, medicinal drugs and stimulants) and services (education, health care).
- The input of the production process may increasingly be purchased buying of water or land-use rights, veterinary medicine, salt, additional feed, material used for building fences, animals for breeding, or semen; and sometimes even the purchase of firearms and ammunition to defend or acquire property and rights of access.
- There is growing privatisation of land ownership, water sources, salt licks, vegetation, and the restriction of access or use rights of formerly communal, state or 'open access' resources; and the commoditisation of labour relations takes place when a growing part of the pastoral production and livestock marketing work is being done by labourers for a wage.¹

The debate about pastoral commoditisation in eastern Africa has long been dominated by issues of livestock commercialisation and 'off-take rates'. Livestock commercialisation and 'off-take rates' are often motivated by the growing demand for meat in the ever more dominant nonpastoral sector of the economy of the three east African countries (for example, Aldington and Wilson 1968) and are not necessarily possible answers to growing tensions in the pastoral economy. The governments strove to 'tap the livestock wealth' of the pastoralists in three stages. The first stage was in the second half of the 1930s, which provoked the famous Akamba Political Protest against forced destocking in 1938 (cf. Forbes Munro, 1975) as well as the failed attempts to develop stock auctions. The second stage was in the second half of the 1950s, when the ecological argument to force a higher off-take rate was often used (for example: on Karamoja, Baker, 1967; Evans-Jones, 1960; Quam, 1978; on Kenya: Raikes, 1981) and in the third stage the World Bank financed livestock development programmes of the late 1960s and early 1970s were launched (for example, in Kenya the Kenya Livestock Development Programme). Often the concept of 'off-take rate' was used in a very restricted way. It was defined as the percentage of the herd that annually enters the commercial market and is registered as such. This limited concept of 'commercial off-take' often obscures the understanding of the 'total off-take rate', which is the percentage of cattle or other animals that leave the herd, because of

- a. slaughter
- b. accidents and disease
- c. ritual killing and sacrifices
- d. gifts, such as a part of a marriage arrangement, or as part of a social security arrangement
- e. sales for purposes of slaughter
- f. sales for other purposes (fattening elsewhere; draught power elsewhere; breeding elsewhere).

This is not the same as 'biological off-take', which does not include d) and f), and not the same as 'commercial off-take' which only deals with e) and f). If we assume that, in a pastoral setting, female cattle reach the age of 12 to 15 years on average, and male cattle die at a younger age, because they are either slaughtered earlier or sold for slaughter, a 'normal off-take rate' in a pastoral cattle herd would be between 8 and 12 per cent per annum. For a flock of sheep or goats it may be up to 25 per cent, for camels it may be between 5 and 10 per cent (the best analytical text on this issue is still Dahl and Hjort, 1976).

Scholars looking at government-led drives to increase commercial off-take rates from the perspective of pastoralists, often complained about 'unfair terms of trade'. Especially in the early 1980s much scientific work was being done on the economically unfavourable relationships of pastoralists with the wider economic world. Raikes (1981, p. 97) blamed east African governments because the pastoralists' 'reluctance (to sell livestock) is at least in part due to low prices'. Evangelou (1984a, p. 140) wanted 'more favourable national pricing policies' for livestock and added (1984b, p. 50) that the transition to market-oriented production had been hindered because the Kenyan government succumbed to 'short-term political advantages gained by "cheap meat" and other urban-biased policies'. Campbell and Axinn (1980, pp. 7–8) wrote: 'official prices of beef, in particular, have remained controlled and low during the past 15 years in Kenya'. Aronson (1980, p. 181) speaks about a 'sharp decline in the terms of trade, so that more and more livestock products are necessary for a given amount of grain or industrial goods'. Hjort (1981) cited Swift (1979) and Kjaerby (1976) to suggest a decrease in exchange ratios for cattle and camels against maize. And also Little (1983) was convinced that 'in recent years ... the rate of inflation for consumption items (particularly maize and finger millet) has increased faster than livestock prices, eroding the purchasing power of the herdowners'. Elsewhere we have already questioned the wisdom and empirical basis of this negative attitude towards pastoral commoditisation (Dietz 1987, 1993; Zaal, 1998).

Caloric terms of trade

a. Independent subsistence production

Pastoralists who produce milk, meat or blood for their own consumption with the aim to be self-supporting in the provision of food need enough animals to do so. The absolute amount of food needed to provide energy as well as proteins, minerals, and vitamins is generally dependent on household composition (children/adults; men/women, number of breastfeeding women), on the average weight and body efficiency to handle food, on the climate and often on the type of work-related energy requirements. People can do with temporarily lower energy inputs, but at a certain point bodies become 'wasted' and death or long-term damage to the body results. The food people produce from their herds and flocks has a certain caloric (and protein, etc.) value, which can fluctuate per unit of weight depending on the fat content of milk and meat.

ASSUMPTIONS:

- An average person in east African pastoral circumstances needs 800,000 calories per annum.
- A household unit consists of seven people who need 5.6 million calories altogether.
- A litre of milk contains 700 calories.
- An average (zebu) cow gives 400 litres of milk per annum for human consumption (there is competition between milk for calves and milk production for human consumption. There will generally be between two and three litres per day in the short rainy season and between one and two litres per day in the long dry season).
- Cows form 60 per cent of the cattle herd.

- A kilogram of beef contains 2300 calories (goat meat less, mutton more).
- A zebu has a consumable meat weight of 100 kg on average, a goat has 15 kg.
- The natural life of zebu cows is 13 years; most male animals are culled at three to five years, which results in an average life-span for all new-born male and female calves of eight to nine years. That would mean an average 'normal' off-take rate for cattle of 11–12.5 per cent per year.
- A pastoral household unit can manage a herd of 30 to 40 cattle without labour problems; to team up with other herders and their herds for seasonal mobility is often useful for security and labour efficiency reasons. Beyond 40 animals per herding unit additional labour is often required.

CONCLUSIONS:

- If the average pastoralist only drank cattle milk he or she would need 1140 litres of milk in a year, that is 8000 litres per assumed household unit, requiring 20 cows or a total cattle herd of 33 animals (assuming that milk can be stored and/or production evened out).
- If the average pastoralist only ate beef he or she would need 350 kg of meat in a year and the assumed household unit 2450 kg, requiring 25 cattle to be slaughtered for food. In a 'normal' situation, with an off-take rate of 11–12.5 per cent, this would require a cattle herd of at least 200 animals.
- Combining the milk and meat production, full dependence on animals for all food requirements means that a pastoral household needs a cattle herd of at least 28 animals (producing 6720 litres of milk and 350 kg of meat). This is within the labour potential of an average household production unit. It would mean an average of four head of cattle per capita or three TLU/cap.

(The '(tropical) livestock unit per capita' (TLU) is the unit most widely used in Kenya (Peden, 1984; Bekure *et al.*, 1991; Kilewe and Thomas, 1992, p. 77). 1 TLU = 1.42 heads of cattle, 10 hair sheep or goats, 1 camel. The concept of TLU is crucial to be able to understand the predicament of any pastoral society.)

Complications (which result from the fact that 'averages' are of course only analytical tools, and may well be far from the individual household and herd situation) are:

- A large seasonality in milk production would either require dependence on other food sources during part of the year or an adequate storage of milk. In pastoral societies, the 'hunger period' is usually during the dry season when milk production is at its lowest and the amount of labour energy required at its highest.
- The assumed 'normal' off-take rate for cattle is based on the supposition that all animals end up as meat for the household. However, part of the meat is not eaten, either because of loss due to predators, disease or sacrifices, or because of taboos concerning the consumption of certain animals.
- The assumed 'normal' off-take rate for cattle is based on a natural life-span for cows and on the culling of (most) male animals as soon as they are adults. Sometimes, because of cultural requirements, male animals are allowed to become older, for instance, because of shared ownership with far-away stock friends and cultural taboos against early slaughter or sale. When oxen are required or are in demand as draught power the average life-span of male animals goes up as well.
- With frequent droughts, animals die of starvation and/or lack of water, and these animals are either not eaten or they go to waste. They may have lost a lot of weight and all their fat, so their food value is lower, if they are eaten at all. In a first drought year lower milk production will be compensated by higher meat availability. In a second consecutive drought year food problems become severe.
- Cultural norms prescribing dietary behaviour might complicate the food (milk and/or meat) entitlements of particular members of the household.
- Even if certain households have herds big enough to provide them with milk and meat during dry seasons and droughts, other households might be faced with structural or temporary food problems, and customary sharing of meat and milk among a larger group than the individual household may still jeopardise the household food situation even of rich households.

b. Production with minor commoditisation

In many pastoral regions in east Africa, population densities have increased because of natural growth, immigration of pastoralists from elsewhere (Maasai from Uasin Gishu and Laikipia to Kajiado and Narok; Boran to Marsabit from Ethiopia; Upe Pokot to Kenya; Somalis from Somalia to Kenyan Somali areas), and non-pastoralists pushed out of the high-potential areas (see Dietz, 1986). It is generally assumed that long-term pastoral population growth since 1960 has been (much) higher than livestock growth, partly because of the devastating consequences of the droughts (in most Kenyan pastoral areas in 1960–61, 1965, 1968–69, 1974–76, 1979–81, 1984–85, 1987, 1989, 1991–93, 1996–97), preventing the rebuilding of herds and flocks. On the other hand it is probable that the total absolute number of animals in the pastoral areas of Kenya is higher now than it was in the 'boom period' of the 1950s. On the whole, the overall trend of livestock per capita has decreased. For many pastoralists it must have meant a loss of wealth to a level below the requirements for subsistence production.

There are a number of ways to avoid a food crisis when pressure grows. Of course pressure is mostly felt during periods of drought (see Dietz, 1991).

- Pastoralists have always traded during these periods, for example, selling or bartering for milk, hides, skins, or hunting trophies and getting non-livestock food in return (see Schneider, 1981; Kerven, 1992).
- They also try to get additional food by hunting and gathering (or by stealing food from neighbouring cultivators), even if this activity is often regarded as culturally taboo.
- Using patches of land where cultivation is possible (for example, 'wetlands in drylands'), some pastoralists also start to grow their own food. They start with what is sometimes called 'hit and run' cultivation of millet or sorghum, which sometimes develops into more labour-intensive forms of rain-fed or water-harvesting types of agriculture. The problem is that during years in which drought causes most stress in the livestock economy, the chances of a harvest are also meagre. However, in years with adequate rainfall, the cultivation of cereals by pastoral households enables the livestock to recover more quickly. On the other hand there is a growing problem of access to the few niches where cultivation is possible, because these have gradually been occupied by non-pastoral immigrants or former pastoralists.
- Often relationships with groups in higher potential areas are formed by marriages, especially when the exchange is within the same ethnic community. Bride-wealth arrangements then often include livestock as well, which is sometimes retained as part of the son-in-law's herd in the pastoral lowlands, but owned by the highland-based father-in-law.

• These relationships often form the basis of temporary migration of women and children to these higher-potential areas (which in Kenya are often the 'highlands'; elsewhere they may also be riverine areas). Migration is one of the important ways of reducing the energy requirement of households in dry areas during droughts.

c. Market-intermediated reproduction using the positive terms of trade between livestock and grains

Growing tension between pastoral production capacity and household consumption needs can also force a more active involvement in the market economy. Selling a steer or milk on the market and buying cereals with the profit could be a much more lucrative affair, as long as the 'caloric terms of trade' (Tc) are good for the livestock owners. This Tc relates pastoral production, expressed in energy values, with pastoral consumption of cereals, also expressed in energy values, through the price of the respective products and their energy value on the market.

ASSUMPTION:

• One kg of maize or sorghum provides between 3000 and 3600 calories (say 3500), depending on milling and storage losses.

CONCLUSION:

• For the exchange to be positive in caloric terms the pastoralist should be able to get more than 65 kg of cereals for selling a steer, and more than 200 grams of cereals for a litre of milk.

(A steer = 100 kg of meat * 2300 cal = 230,000 cal. This is equivalent to 65 kg of maize or sorghum. A litre of milk = 700 cal. This is equivalent to 200 g of cereals in energy terms.)

COMPLICATIONS:

Pastoralists who are becoming increasingly more dependent on the market, should be able to rely on three things:

- Traders should be willing to buy the animal or the milk when the pastoralist needs cash to buy food, and at a market place that can be reached without too many problems (trekking distance, security for animals and herders against raiders and greedy civil servants, health risks).
- Traders should be willing to sell food when the pastoralist wants to

buy food and at places which are accessible to pastoralists at low costs and with low risks.

• Pastoralists should have animals to sell, without jeopardising the sustainability of the herd; and the Tc should be reliably lucrative (>1).

It is not always clear whether urgent or unforeseen food needs in the household can be covered by the sale of animals or milk for cash to buy cereals. Taking decisions is often gender specific. It is mainly the women who are confronted with a lack of food to feed the household, and they often may not take the decisions concerning the sale of animals. The male head of the household takes the decision and even he may have to consult other members in the family hierarchy, or 'stock friends' who have a partial claim of ownership. And even if an animal can be sold, the man generally gets the money and there can be so many competing uses for this cash (from buying veterinary medicine to buying beer) that it might easily 'evaporate'. In some households male heads simply regard it as their wives' responsibility to provide for food and do not even contribute. Food security at the micro-household level then depends on the wife's ownership of animals (often some small stock) and the opportunities she has to trade at the livestock and milk market. Usually women do have the opportunity to sell milk and do so independently, but then there will need to be a market for milk nearby. With increasing urbanisation, also in the drylands, these opportunities have increased considerably during the last 20 years. Nearby refugee camps or large-scale projects offer the same opportunities. (In Kenya, the Bura Irrigation Project was an example during its heyday, or the Turkwell Gorge project in West Pokot.)

The availability of food aid provided by government agencies or NGOs complicates the situation further. Occasional food handouts or food for work arrangements undercut the position of food and livestock traders and could result in the absence of any reliable trading infrastructure after food aid comes to an end. The collapse of trading infrastructures could well mean that 'lucrative caloric terms of trade' become an illusion and people become ever more dependent on food handouts.

Not all commercialisation of livestock is a result of a gradual or dramatic process of diminishing livestock per capita, or of short-term disaster sales. Part of it can also be a deliberate strategy by rich pastoralists and, in particular, absentee herd owners-cum-politicians, to become ranchers. They may focus on purely commercial production as an accumulation strategy. The emphasis then shifts to meat production, off-take maximisation, and market-derived inputs (medicine, top-quality breeds, special feed), and fixed assets (water facilities, dips and sprays, fences). When livestock becomes a commodity as well, this could mean that pastoralists' land-tenure situation will also change. Behnke (1984, p. 265) states that a pastoral nomadic system of land use then changes to an 'open-range ranching system', as a spontaneous process.

d. High level of commoditisation, supporting market-intermediated intensification and diversification of the pastoral economy

With increasingly diminishing livestock-per-capita ratios, growing additional non-food consumption needs, or a change to a 'ranchers' mentality', pastoralists might be forced to intensify or diversify their economy. When adequate land and water or access to adequate land and water becomes a problem, investments in private water facilities and commercially available feed will be required (starting with payment for access to cultivators' stubble fields after harvests). In some cases individual herders succeed in acquiring pasture as their own property so that land becomes a commodity. Some herders then start to invest in fencing to keep other pastoralists out, or at least to control the access to their property (sometimes demanding money for the use of pasture and water). This development shows that the 'entitlements to natural resources' are changing (Dietz, 1996).

According to Behnke (1984, 1985) this phase is often characterised by a shift from what he called the 'open-range ranching system' to a 'fenced ranching system'. This system has its roots in the USA where ranchers wanted to control their land, not their cattle (a beautiful epic account of this process can be found in Michener, 1974). Land had become a commodity and had to be protected from occupation by others. Cattle had already been a commodity for a long time. After fencing in their land, ranchers were trapped in their own ranches and had to adapt their practices and reduce grazing pressure. Turning land into a commodity initiated this shift. This practice was subsequently seen as a necessary step towards commercial production, and it was introduced in Africa in the 1950s. Most Sahelian and semi-arid eastern African countries have seen these projects fail. It would mean changing a labour-intensive subsistence production system to a labour-extensive commercial production system. There would be a shift from low per capita incomes to higher incomes for fewer people, and an expulsion of people from the production system due to lower labour demands. Migration would increase and pressure on those areas that had not yet made this shift would increase as well. Rutten (1992) states that land tenure change, and not improvement of productivity, is the only reason for this shift, because productivity of fenced ranching as practised in the USA is lower (in terms of protein production per hectare, see also Grandin, 1987). Improved natural resource management is often mentioned as a reason for change as well, but degradation can result from both systems.

Productivity per animal can also be improved by improving veterinary care, by improving breeds, by giving better feed and by improving access to water. Cash would be acquired through informal or even formal forms of credit, which could (although it does not necessarily) mean that interest payments become an additional driving force to increasing levels of commoditisation.

Increasing commoditisation of land, production and consumption often means increasing commoditisation of labour. Pastoralists try to earn additional cash by working elsewhere or by gaining access to local wage-paying jobs related to the government, NGOs or private traders. But if pastoral commoditisation results in increased stratification within pastoral society, pastoralists who accumulate animals beyond levels which they can manage with family labour, start to employ fellow pastoralists as labourers, a process that is often hidden behind various types of patron-client arrangements of labour and non-cash payment arrangements of labour. On the other hand, pastoralists whose herds and flocks have been so diminished that they are forced to get most of their income from other sources, try to get jobs as paid herders. Rebuilding their own herd or flock then becomes a possibility, especially if they are paid in livestock, and if the pastoral employer allows them to share the management of their own small number of animals with the employers' herd and flock. The pastoral sector has been invaded by a number of absentee herd owners who invest in animals, but who put the management of their herds in the hands of paid managers and labourers.

Caloric terms of trade: a summary of evidence from literature

The concept of 'caloric terms of trade' is crucial to understanding what is going on in pastoral societies. Basically the question asked is: How much more food value (in calories) do you get back in grain (maize or sorghum) if you sell livestock or milk?

In Zaal (1998) an analysis was presented of the terms of trade debate concerning pastoral production. Zaal recalculated the empirical data presented by a number of authors to enable him to present those data as 'caloric terms of trade' data. In Table 9.1 the evidence has been summarised.

The evidence shows that even during the worst periods (with the exceptionally bad situation in the Ogaden in 1974 as the worst recorded situation, as presented in the famous study by Sen, 1981) the Tc is still at or above parity, at least for those animals that could be sold. In some cases the Tc even reached levels beyond ten. If all income from the sale of livestock or milk were spent on grains, it would mean that households could feed themselves properly providing the TLU/capita situation was not below 0.3 (or in 'standard household terms' less than three cattle per household production unit). For a food-secure pastoral area it would mean in those cases that the TLU/hectare could be much lower than if herders had to feed themselves from their own herds only. Authors who tried to find reasons for the high, and probably improving Tc in many African pastoral areas during the twentieth century point at the steadily improving markets for animals, due to urbanisation and an increasing demand from urban prosperous consumers (for example, De Haan, Quarles van Ufford and Zaal 1997; Quarles van Ufford, 1999). We may add (following Swift, 1986) that there probably was a considerable difference in the change of labour productivity of livestock production versus grain production during the second half of the twentieth century. Not only did the labour productivity of grain production increase due to more productive crops, better varieties, better inputs and better management and care (and despite the dramatically decreased average rainfall in some areas during the 1970s and 1980s; see Put, 1999), but the average labour needs in pastoral production probably also increased. With restricted access, increased cultivation around water points and along rivers, and increased insecurity, the labour demands of herding must have intensified. In addition, probably the infrastructure for grain trade improved more than for livestock trade, resulting in diminishing transaction costs in the consumer price for grains, and a lower gain for livestock (less motorised transport, higher risks, less economies of scale, less competition from government-led attempts to keep the grain price low, leaving the price of livestock and milk to the 'free market').

WEST POKOT, KAJIADO, GARISSA, MARSABIT: KENYAN EXAMPLES

Dietz's (1987) study among the Pokot was finalised with a first assessment of the Tc situation concluding that the Tc was not only generally high, but also improving during the twentieth century. This argument was further developed in Dietz (1993) and in Zaal and Dietz (1999), adding evidence from among the Maasai. Zaal further presented his findings about the Maasai of Kajiado District, which was defended

| Author | Area | Type of exchange | High to normal Tc | Low Tc |
|-------------------------------------|--|--|---|--|
| Sen, 1981 | Ethiopia, Ogaden | cattle for maize | 'normal': 3 | 1974: 1 |
| Sutter, 1982 | Niger, Tanout (FulBe) | oxen, male sheep and goats for millet | 1977: 19; 1978: 7 | 1973–74 drought: 4–5 |
| Little, 1983 | Kenya, Il Chamus Baringo | cattle for maize | 1950s: 5; 1970s and 1980s: 3–4 | 1981: 3 |
| Swift, 1986 | Mali and Niger | cattle for millet | 'mostly' 4–10; 1958: 16 | 1963: 2 (other drought years: 2.3–2.6) |
| same | same | milk for millet | 'mostly' 10-20 | 1963: 2.5 |
| Mbogoh and Akello-Ogutu, 1991 | Kenya, Machakos | cattle for maize | 1962–88: 7–11 | 1957: 5 |
| same | same | milk for maize | 1962–88: high 16 | low: 6 |
| Karim, 1991 | Sudan, Red Sea Hills | cattle for sorghum | 1989: 14–18; Apr–Dec 1990: 6–7; Apr 1991: 6 | Dec 1990: 1.3 |
| Gillard-Byers, 1993 | Sudan: Baggara, southern Kordofan | cattle for sorghum | 17 (1986 after recovery) | 1.5–2 during the 1984/85 drought |
| Khan, 1994 | Niger | cattle for millet | 1978–80, 1982–84: 6–12; 1986–89: 10–20 | 1981 and 1985: 2–4 |
| Ensminger, 1996 | Kenya, Orma | cattle for maize | mostly 3-4 | 1926: 1.6 |
| Zaal, 1998 | Burkina Faso, Gorom Gorom | | 1994–95: 9–17 | early 1990s: 4–9 |
| same | same | male sheep for millet | 1994–95: 11–27 | early 1990s: 5–10 |

Table 9.1 Caloric terms of trade (Tc): evidence from the literature

Source: Mainly based on Zaal (1998).

and published in 1998. Nunow developed his approach to the situation among the Kenyan Somali in Garissa District (Nunow, 2000) and Adano Wario Roba collected data about Marsabit District for a PhD study, which will be defended sometime in the future (see Table 9.1 for a summary of the findings and comparison of the results).

Livestock numbers per capita

The history of livestock numbers in the four districts shows a dramatically different picture. In Kajiado the most recent period for which we used data also shows the highest numbers. In Garissa and Marsabit the most recent period shows the lowest numbers ever recorded, while West Pokot reached its climax in the early 1950s and again in the early 1970s, and recovered a bit from the desperate situation after the 1979–84 disasters which were a combination of drought, disease, cattle theft and punitive 'actions' by the Kenyan army (see Table 9.2). If we look at the translation of these data into 'tropical livestock numbers per square kilometre' the lowest situation recorded for Marsabit is around 4 TLU/ km² (early 1970s and mid-1990s) and in the other districts around 10 TLU/km²: 1983 in West Pokot, 1962 in Kajiado and 1998 in Garissa. In itself this is strange, because the range-ecological situation in West Pokot and Kajiado is better on average than the one in Garissa (which is mostly an arid zone, while Kajiado and West Pokot are mostly semi-arid and sub-humid to semi-arid respectively). In bad years there seems to be a comparable lower limit to what the combination of ecology and management practices can endure in those three districts. In the 'best years' (with the highest number of animals) the situation is different: Kajiado leads with 54 TLU/km² in 1992, followed by West Pokot with 28 TLU/km² in 1972 and Garissa with the remarkably high number of 23 TLU/km² in 1979. In Marsabit the highest TLU/km² was never more than 8. In all districts, but in Kajiado in particular, a considerable number of wild game should be taken into account as they compete for the same resources.

Population data are notoriously unreliable, even if we use recent censuses. Figures should be seen as rough estimates only. Indications of ethnic identity are even less reliable as there are quite a number of cases of mixed or shifting identity (for example, Kikuyu-Maasai in Kajiado or Samburu-Rendille or Gabbra-Boran in Marsabit) and smaller groups (for example, the Sengwer in West Pokot or Waata in Marsabit) are often overlooked. However, we may conclude in general that during the twentieth century the population increased tremendously, both because of natural population growth (due to better health and greater security) and because of immigration of either ethnic 'outsiders' (as in West Pokot until many 'outsiders' were chased out during 'ethnic cleansing' in the mid-1990s and in Kajiado where non-Maasai are starting to become the dominant group) or refugees (as in Garissa where most of the refugees are from Somalia).

| District | Highest recorded number of livestock | Lowest recorded number of livestock | Recent number of livestock |
|------------|---|---|---|
| West Pokot | cattle: 300,000 (both in 1952 and in 1972); goats and sheep: 1999: 595,000 | cattle: less than 100,000 (1983); sheep and goats: 200,000 (1983) | 276,000 cattle; 595,000 sheep and goats, 2000 camels (255,000 TLU) (1999) |
| Kajiado | 1992: cattle: 890,000; 890,000 sheep; 900,000 goats | cattle: 170,000 (1962) | 810,000 TLU (1992) |
| Marsabit | cattle: 430,000 in 1979; goats: 500,000 in 1982; sheep 500,000 in 1978; camels 220,000 in 1989 (TLU: 520,000 in 1989) | cattle: 140,000 mid 1990s; goats: 200,000 1972; sheep: 150,000 late 1960s; camels: 100,000 mid-1990s (TLU less than 300,000 in mid-1990s | 300,000 TLU mid-1990s |
| Garissa | around 1990: 700,000 cattle, 700,000 sheep and goats and 70,000 camels | cattle: 250,000 (1998) | 1998: 320,000 TLU |

| Table 9.2 |
|--|
| Livestock numbers in West Pokot, Kajiado, Marsabit and Garissa |

If we compare the various estimates of numbers of people and animals during the twentieth century we can tentatively calculate the development of the TLU/capita figures for the four districts. We have to take into account that a level of 3 or, to be on the safe side, 4 TLU/capita is required for food self-sufficiency where all food comes directly from animals.

We may assume that for all pastoral groups in Kenya food sufficiency based on livestock alone had been seriously threatened by disasters between 1880 and 1900 (rinderpest, drought, warfare) and that all their strength was regained under Pax Britannica, in the 1920s.

For West Pokot we see that the Pokot were above the food self-sufficiency threshold until the 1950s and could therefore more or less rely on their animals in isolation from the rest of the world. As with most other pastoral groups, the Pokot had improved their livestock orientation between 1900 and 1930 and, assisted by the British colonial agencies, could expand towards the Turkana area in the 1910s and towards the Karimojong area in the 1920s, although they had to give up their claim to the Trans Nzoia highlands during the same period. After 1930 the TLU/capita situation gradually deteriorated and in the course of the 1950s the Pokot began to rely more on the market and on cultivation. But the pastoral Pokot had strong bonds with the so-called agricultural Pokot who had developed ingenious irrigation practices on the northern edge of the Cherangani mountains; they could rely on their internal food security system for quite some time. From the mid-1970s onwards the situation became more dangerous, with TLU/capita levels below 2, further deteriorating to levels below 1 after the early 1980s. There was some recovery later, but never better than TLU/capita = 1. The Pokot had become 'pastoralists in dire straits' depending very much on the outside world and on increased cultivation for their food security. They began to rely heavily on the livestock-for-grain market, depending on Tc levels.

| District | Early population record | Recent population record |
|------------|-----------------------------------|--|
| West Pokot | 1926: 'between 24,000 and 45,000' | 1989 census: 250,000 of which approximately 180,000 Pokot; in 1993 many non-Pokot fled (estimate 1999: 300,000) |
| Kajiado | 1912: 10,000 | estimate 1999: 215,000 Maasai and 230,000 non-Maasai |
| Marsabit | 1969: 50,000 | mid-1990s estimate 140,000 (Boran, Gabbra and Rendille together 75%) |
| Garissa | 1969: 65,000 | 1999 estimate: 200,000 'local' and 160,000 in refugee camps; mostly Somali |

 Table 9.3

 Population estimates in West Pokot, Kajiado, Marsabit and Garissa

After recovering from the rinderpest and other disasters at the turn of the century, in Kajiado the TLU/capita situation had become extremely good until the 1950s, with levels beyond 10 and even reaching 17 TLU/capita. The Maasai could easily maintain an overall level of complete food self-sufficiency based on their own milk and meat production, and this was probably true for all household production units as well. The Maasai area in Kajiado and in the neighbouring Narok district could easily accommodate the Maasai who had been 'displaced' from the former huge Maasai area in the north to make way for White settlers in the Uasin Gishu, Nakuru and Laikipia areas during the first 30 years of the twentieth century. In the early 1960s there was a dramatic break with prosperity. The TLU/capita level suddenly dropped to a 'danger level' of 3. But unlike the Pokot, the Maasai were able to recover to a level of about 5 TLU/capita in the early 1980s. The drought of 1984 resulted in another decline (to an average level of 2.5 TLU/capita), which meant food security stress for many Maasai households. Livestock-for-grain trade became a necessary strategy, and for the first time many Maasai households started to experiment with cultivation and some even with irrigation and water harvesting methods. However, in the early 1990s the Maasai recovered again and it seems that they reached on average a rather comfortable level of 5 TLU/capita. Probably there was some deterioration afterwards, due to the great population increase and worsening weather conditions. Compared to all other pastoral communities studied in this research, the average Maasai of Kajiado is very well off. However, Maasai society is a rather unequal society nowadays, with large differences in livestock wealth between households. Zaal (1998) gives detailed evidence for the Olkarkar area: 42 per cent of all Maasai households in Olkarkar had less than 4 TLU/capita; 13 per cent even dropped below 2 TLU/capita. At the other end of the wealth spectrum more than 20 per cent of all households had TLU/capita levels of 10 or more.

In Marsabit the TLU/capita situation had always been higher than the threshold of 4 until 1990. Following the disastrous drought of 1987, especially the Boran, but also the Gabbra and Rendille groups all dropped towards a 'danger level' of 2 TLU/capita or even lower. Cultivation (in wetlands within the drylands, and especially on Marsabit Mountain) became a way out as did commercialisation and food aid.

In Garissa the TLU/capita situation was still rather good in 1980 (a level of about 5 TLU/capita), but it deteriorated dramatically to a level below 2 in 1995 and close to 1 in the late 1990s. Riverine cultivation along the Tana River became a way out. Relying on the huge food aid operation for Somali refugees after 1991(the Dadaab camps in particu-

lar) became another strategy. Livestock-for-grain trade was expected to become more important and would increasingly be used for food security purposes.

Livestock commercial off-take rates

In Kenya as a whole the 'national' cattle herd increased from about 7 to 8 million head during the 1960s to 13 to 14 million during the 1990s (Zaal, 1998; FAO online database). The number of sheep went up from 5 million in 1960 to 6 million in the late 1990s. The number of goats gradually dropped from about 10 million animals in 1960 to 8 million in the mid-1970s, and closer to 7 million during the 1990s. In total the number of tropical livestock units went up from 7 to 11 million. However, in relative terms it decreased from close to 1 TLU/capita to only between 0.3 and 0.4. The demand for meat has increased considerably per capita. Despite the economic crisis since the mid-1980s the average economic situation for Kenyans is still considerably better than in the early 1960s. Four results can be expected: a higher national demand for Kenyan meat and milk and therefore higher off-take rates; lower exports; higher imports; and a tendency for prices to increase due to the decreasing availability of animals per capita. The value of Kenyan livestock exports has actually diminished from US\$1.5 million in the 1960s to a meagre US\$300,000 per annum (FAO online database, 1999). In addition, the necessity for many livestock producers to sell livestock to be able to buy grains (and other consumption goods) is another reason why a considerably increased commercial off-take rate can be expected.

A high level of food independence does not necessarily mean a low level of commercial off-take. In West Pokot the colonial administration had successfully tried to force the Pokot to sell some of their cattle during a period when their TLU/capita situation was still adequate for market independence. During World War 2 and between 1954 and 1960 compulsory quota for cattle sales existed. Officially, registered trade in cattle went up from 1000-2000 heads to 8000-10,000 heads per year in West Pokot, or from an estimated registered annual off-take of only about 1 per cent to between 6 and 9 per cent. Officially registered sale of small stock was between 7000 and 14,000 in drought years and 4000 and 6000 in other years. In the Uganda-administered Pokot area (Karapokot and Upe) officially registered cattle sales fluctuated between 1300 to 2500 in years with good rainfall and between 3000 and 4000 in drought years, which was still below an estimated off-take rate of 4 per cent per annum in that area. Figures for the sale of small stock are unknown. With the breakdown of colonial rule (and effective taxation) and the drought of 1961,

official registration of trade collapsed, both in the Kenyan and in the Ugandan areas of Pokot (see Dietz, 1987). Trade in cattle and goats went largely unrecorded in post-colonial years, with the exception of drought vears when the need for distress sales forced herders to come to the official markets (for example, 1973: 9000 cattle, 6000 small stock). If we look at the total commoditisation picture for the pastoral Pokot during the mid-1970s, it becomes evident that some commercial sale of livestock existed for most pastoral households. However, ceremonial slaughter of cattle was probably more important than sale of cattle, and slaughter of goats and sheep for home consumption was more important than sale of small stock. Milk was not sold at all, with the exception of some barter exchange on weekly market days. The need to buy other consumer goods was minimal as 'western' or 'decent' clothes were not yet forced upon the pastoral Pokot by government action or missionary zeal. Education was still down to a minimum and the few pastoral children who went to school did so under missionary arrangements of a total subsidy. Livestock inputs were only beginning to be acquired through the veterinary services.

A combination of disasters that hit the Pokot community between 1979 and 1984 was needed to drastically change the situation. When forced by severely reduced livestock wealth, the Pokot tried to make good use of the positive caloric terms of trade between livestock, livestock products and grains. First Somali traders were important intermediaries but later Pokot livestock and grain traders appeared on the scene as well. However, money was also needed more and more for other goods and services. During the 1980s the government forced most of the pastoral Pokot to wear 'decent' clothes. Many pastoral Pokot children had joined primary and even secondary education (partly because of the school food and missionary food assistance through schools). However, neither grazing land nor pastoral labour were commodities as yet and subdivision of group ranches was not an issue, partly because group ranches had never properly functioned and individual claims to land only began to be relevant in some of the newly cultivated areas, for example, along the Suam river. The age-old goats-for-sorghum trade between pastoral and agricultural Pokot was soon to become negligible, because the pastoralists started to prefer maize grain. The supply of maize grain from the Pokot highlands (often not produced by Pokot farmers but by immigrants) increased considerably during the 1970s. Maize-for-goats trade was less dominated by traditional obligations than sorghum-for-goats trade, where even during drought years traders exchanged according to custom, for example 'a goat for a bag'. Maize traders who did not belong to the long-standing Pokot-Somali networks entered the scene and many new shops

appeared in the pastoral areas either run by non-Pokot (Kikuyus, for example) or by Pokot from the highlands. Trade in goats changed as well, as young Pokot traders took over from Somalis who mainly concentrated on the important gold trade after 1979. Prices started fluctuating to become more congruent with supply and demand situations. During the 1980s, lowland markets expanded rapidly (in 1999 there were 17). Most of them were weekly markets (like the larger markets of Chepareria and Chepkopegh), or twice weekly (those near the district headquarters, like Cheptuya and Serewo). In addition there were irregular smaller markets. Many markets also provided chicken and eggs, hides and skins, grains, fruits, and some clothing and utensils. In most of the markets shops were started, and increasingly pastoralists could buy maize meal there which was more expensive than maize grain but presented fewer transportation and milling problems.

According to official records of the District Livestock Production Office (DLPO) in West Pokot District, annual data (1985-98) of cattle and small-stock sales fluctuated enormously. In the peak years 1990-92 cattle sales reached figures beyond 20,000 head per year or more than 10 per cent commercial, officially registered off-take. During the same top period the officially recorded sale of 'shoats' (sheep and/or goats) reached 60,000 or 14 per cent off-take, which was higher than ever. However, in bad years (like 1986) only 2000 head of cattle were sold on official markets (only 1.3 per cent off-take) and 4000 shoats (1.4 per cent off-take). And during and after the 'ethnic cleansing' in 1993, registered, official sales dropped to levels between 0.5 and 2.5 per cent annual off-take for cattle and between 0.8 and 4.9 per cent annual off-take for small stock. Partly this can be explained by the reduced lack of confidence of Pokot sellers in government-controlled markets, partly by the collapse of the trade network for non-Pokot market people, and partly by the government's inability to register what was happening.

In the Maasai area, conditions for livestock marketing are much more favourable than in many other dry regions of Kenya. Kajiado District in particular has a good connection with Nairobi through the tarmac road to Tanzania that runs through it, while the northern part of the District borders the railway line, the main road to Mombasa and the densely populated Machakos District.

Animals are either sold or given to brokers who collect the animals at the breeder's producers' homes until they have a herd that is large enough for marketing, or the animal is taken to a nearby market by the breeder or producer himself. Small markets serve as collection points, from which bigger markets are supplied. In Kajiado District, Emali market has always been one of the most important markets (Bekure et al., 1991). Even recently this is the case although other markets now have a considerable share. A study of Emali cattle market in Kajiado District in 1990/91 revealed that supply varied considerably from 1500 heads per week in late 1990 to a peak of 5000 in mid-1991. Numbers sold were between 30 and 90 per cent of numbers offered and prices were high (Zaal, 1993). There are a number of explanations for these high average prices. First, private slaughterhouses serve as new end-points of the marketing chain, with Nairobi butchers contracting traders to buy and slaughter animals for them in the Ngong area, but now increasingly, in Kajiado as well, slaughterhouses are further away. After slaughtering, the carcasses are transported to Nairobi by car, in so-called 'meat matatus', high-speed unchilled pickup trucks, with special boxes in the back, which take about an hour to reach Nairobi. Second, animals are usually taken from Tanzania to Kajiado, but this changed in 1993, when the value of the Kenyan shilling was so low that for the first time since the early 1960s, animals were taken from Kenya to Tanzania instead. This helped to keep prices up, although probably only marginally. Third, the politically instigated conflicts between various ethnic groups in Rift Valley Province disrupted the flow of animals to Nairobi. Finally, the conflict in Somalia resulted in traders hesitating to go and buy animals in neighbouring districts (for an account of what happened with livestock trade in Somalia itself, see Little, 1996). In Kajiado the average registered commercial sale of cattle was 56,000 animals per annum, during the 1991-95 period or 7 per cent commercial off-take rate, which is high compared to West Pokot, but lower than might be expected given the excellent marketing conditions. With 350,000 small stock sold per annum during the same period the commercial off-take rate of shoats had reached a level of 21 per cent. In Marsabit the historical evidence cannot yet be given, but the research in 1997–98 at Marsabit market shows an annual level of sales at about 10,000 head of cattle per annum, 30,000 goats and 20,000 sheep. In terms of recorded off-take rates this means 7 per cent for cattle, 8 per cent for goats and 7 per cent for sheep. Most commercial off-take of small stock takes place outside the Marsabit market, in smaller lowland centres, like Maikona and Korr. Most of the livestock that is sold at Marsabit market leaves the district by truck towards Nairobi.

The 1990s showed an increasing liberalisation of the marketing situation in Kenya, and of livestock marketing in particular. However, both the colonial government as well as the Kenyan government after independence in 1963, attempted to control the livestock markets. The Kenyan Meat Commission (KMC) and the Livestock Marketing Division were the major buyers of livestock from all over the country. Many traders' districts supplied livestock, mainly cattle, to the KMC depots in Mombasa and Nairobi. However, even during the times of strict government control, there were rather large numbers of animals that were sold to private abattoirs in the big consumer markets of Nairobi and Mombasa.

Looking at the livestock sales data from Garissa, it is evident that the sale of livestock to places outside Garissa District has been relatively high for most of the post-independence period because of Garissa's strategic location at the entry point to north-eastern Kenya with modern road linkage to the rest of the country. Because the information is relatively new, some more extensive information will be given here (see also Nunow, 2000). The number of sales of cattle outside Garissa District has been fluctuating over the years. The lowest figure of cattle sold outside Garissa District during the period was recorded in 1983 after the long drought of 1979-82, with only about 7000 head sold or about 1 per cent commercial off-take. The drought not only influenced the quantity and quality of the animals sold, but also resulted in increased migration by nomads to wherever they could find pasture for their animals, often far from regular market outlets. Since that drought however, the figure for cattle sales outside Garissa has continued to increase and ranged between 16,000 head in 1987 (or probably 3 per cent commercial off-take) and a staggering 102,000 head in 1998 (DLPO, Garissa). However, this figure includes many animals coming from Somalia and from the rest of north-eastern Kenya during the severe drought and disaster situation of 1996-98. Compared to the 1979-82 drought there were higher sales of cattle during the drought period of 1991-92 up to 40,000 animals, or close to 10 per cent commercial off-take rate (although already including animals coming from Somalia). The sales figures continued to rise between 1994 and 1998 except for a moderate decline in 1997. In general, more pastoralist households traded at the market during droughts since subsistence on livestock products had become insufficient for many households. Animals had to be sold in exchange for money to buy food (maize meal in particular) and other necessities. The increased number of cattle sales may only partly be explained simply by an increase in sales by the local pastoralists. In addition, most of the other livestock markets in the larger Somali area are or have become less active than the one in Garissa, which has led many pastoralists from the other districts and from Somalia Republic to sell their animals at Garissa market. A commercial off-take rate based on a comparison between locally available animals

and actual commercial sales can no longer be calculated in this situation. However, the conclusion could be drawn that the local commercial off-take rate became very high indeed during the 1990s.

Since there is little pasture for livestock during periods of drought and dry seasons, traders who would ordinarily graze their livestock locally in order to sell in the future cannot do so. These traders are then compelled to sell to larger traders who then sell such livestock outside the district. The sale of livestock outside Garissa District, especially cattle and small stock, often depends on traders who may be local Somali or others from the rest of the country. These traders usually increase their sales during festivities such as Christmas for the Christians and Idd² for the Muslims. Usually, more livestock from Garissa District is sold in upland Kenya during the Christmas period since the Christian population is higher in the other provinces of the country than it is in the north-eastern provinces of Kenya. On the other hand, the Muslim population is highest in north-eastern Kenya and on the Kenyan coast and more animals are consumed during the Muslim festivals in these areas.

The considerable annual fluctuations cannot be explained only by local climatic conditions such as drought. Most of these annual fluctuations may, in fact, be accounted for by the role of traders and the local security situation at any given time. Whenever there are incidents of robbery or banditry along the roads connecting Garissa to Nairobi or Mombasa, there is a decline in the number of cattle leaving Garissa for a certain period of time until the security conditions improve. Although there is a lack of conclusive data on the trend of insecurity over the years, more incidents of insecurity are reported during the dry seasons and at the beginning of the rainy seasons. Since there is an increase in movement of the pastoralists during the dry season and just after the onset of the rains, bandits who steal the animals are able to disguise themselves as pastoralists and can therefore easily get away. In our opinion, the security situation plays an important role in the number of cattle sales outside Garissa District since livestock sometimes treks for many days and can easily be stolen on the way, although the level of off-take is considerable.

The average nominal prices for cattle³ have fluctuated over the years, although less so than the number of sales outside the district. A continued rise in average nominal prices was recorded from 1992 until 1996, after which there was some decline. The average prices then rose again in 1998. The year 1993 was the second year of severe drought claiming many livestock. As a result of the drought of that year and the year before, a reduction in the number of sales and therefore higher

prices were expected. However, both the prices as well as the number sold were high in 1993. The increase in the number of cattle sold outside the district and the average prices may be explained by a combination of several factors: the civil war in the Republic of Somalia, the quality of animals on the market, inflation in the national economy and insecurity in the area. Following the collapse of the government in Somalia in 1991, there has been continued rivalry between various warlords and the civil war has gone on unabated ever since. The consequence of the war concerning livestock marketing was such that many animals were redirected to the Kenyan market in Garissa town. The flow of animals from Somalia to the Garissa market is dominated by, but not limited to, cattle. Since it is usually the high quality animals that are able to withstand the rigours of the long trek from Somalia (mainly the Kismayu area) to Garissa market, the animals are of high quality and hence command high prices. The effect of insecurity in the area is such that traders are discouraged by frequent incidents of insecurity while a relative improvement in the security situation has the effect of enabling more traders to trade in livestock. The prices tend to increase whenever there are several new traders coming to the area while the reverse may lead to a decrease in prices. In addition, inflation in the national economy tends to lead to higher prices.

We will very tentatively present an assessment of 'real price' development for the period 1983–98. After the 1979–82 drought the 'real' prices were first rather high, but falling during the 1984 drought, climbing up to very high levels in the recovery years 1986–87 and gradually becoming more 'normal' again in the late 1980s, increasing to unprecedented levels after the 1991–93 drought and falling afterwards to rather low price levels during the 1996–97 drought, with a slight recovery afterwards. Current 'real' cattle prices are still below the price level of 1983.

The trend in small-stock sales in Garissa District is similar to the one observed for cattle. In general, the number of sales was higher in the period after 1993 than the period before, with the exception of 1989 when relatively high sales numbers were recorded for small stock in the area.

The number of small stock exported from Garissa District showed a moderate fluctuation over the period 1983–87. There was a gradual increase after that, reaching a peak in 1989. After 1989, there was a decline in the number of small stock leaving Garissa District, attaining a record low in 1993. After 1993, the number of small-stock sales increased substantially to almost 80,000 heads in 1996. There was a sharp fall in the number of small-stock sales in 1997, but this increased again in 1998. The factors affecting the small-stock exports from Garissa District are the

| Year | Nominal average price per head of cattle, Garissa market, KShs | Inflation (% per year) | Price index (1998 = 100) | 'Real' average price per head of cattle, KShs, rounded |
|------|---|---------------------------|-----------------------------|--|
| 1983 | 950 | 14 | 786 | 7900 |
| 1984 | 900 | 9 | 689 | 6200 |
| 1985 | 1400 | 11 | 633 | 8900 |
| 1986 | 1800 | 6 | 570 | 10300 |
| 1987 | 2200 | 8 | 538 | 11800 |
| 1988 | 1900 | 12 | 498 | 9500 |
| 1989 | 2000 | 13 | 444 | 8900 |
| 1990 | 2500 | 15 | 393 | 9800 |
| 1991 | 3000 | 20 | 342 | 10300 |
| 1992 | 2300 | 26 | 285 | 6500 |
| 1993 | 5800 | 45 | 226 | 13100 |
| 1994 | 6000 | 29 | 156 | 9400 |
| 1995 | 6000 | 2 | 121 | 7300 |
| 1996 | 5200 | 8 | 119 | 6200 |
| 1997 | 5300 | 10 | 110 | 5800 |
| 1998 | 6700 | - | 100 | 6700 |

Table 9.4 'Real' cattle prices in the Garissa market, 1983–98

Source: the average cattle prices are from annual reports of the District Livestock Production Office, Garissa; the inflation data are taken from various issues of the Economic Surveys, published by the Government of Kenya; annual average increases are computed by weighted averages for the lower, middle and higher income groups. Interpretations and calculations by Abdirizak Arale Nunow and Ton Dietz.

same as those affecting the cattle exports, although the demand for festivities such as Christmas and Idd has more impact on small-stock sales than on cattle, because more small stock are slaughtered during these festivities. The other factors affecting the demand for small stock, as with cattle, include climatic conditions, traders, security, economic conditions (for example, inflation) and the existence of restrictions on livestock movements in the area. Quarantines and restrictions on livestock mobility have declined since the early 1990s and the other issues have played a more important role since then.

Caloric terms of trade

In West Pokot the most important trade link during periods of droughts until the 1970s was the link between sorghum from the Pokot indigenous irrigation areas and goats from the lowlands. There used to be a fixed exchange rate of 'one bag for a goat', which means a Tc of 13. However, the relevance of this type of exchange has almost disappeared as maize is now preferred by most Pokot. For the exchange of maize grain against goats the Tc has fluctuated a lot: from a level of 9 during the early 1970s, to a dramatically low level of 2 in 1981 (after the 1979-81 drought and disaster years), to a level beyond 15 in the late 1980s, down to 6 in the turbulent year 1993 – with very high maize prices – up to 23 in 1996 and back to 9 in mid-1999, which is still high for Kenyan standards. As more and more Pokot no longer buy maize grain from the nearby highlands, but have started buying industrially produced maize meal at higher prices, the Tc for maize meal against goats is a bit lower. Also, the Tc for cattle against maize grain has almost always been slightly lower than the Tc for goats against maize grains.

In Kajiado, fluctuations of the Tc level are more moderate: from low levels of 3 to 4 in the mid-1970s (after the 1974 drought) and 6 in the late 1980s there are peaks of 9 around 1980 and 7 to 8 in the early 1970s and 1990s. Here the exchange is between cattle and maize meal.

In Marsabit the Tc situation during the disaster years 1984-87 was close to parity: between 1 and 2 (according to unpublished data from the UNESCO-IPAL project in the area). Data from the recent field study indicate that Tc levels during the 1996-97 drought were between 4.4 and 4.8 for the exchange of cattle against maize grain from the mountain, and between 3.8 and 4.0 for the exchange of cattle against maize meal in lowland market sites like Maikona. In 1997-98 the Tc level improved to levels around 6 for maize grain and around 5 for maize meal. For camels the situation is similar to cattle in Tc terms. For goats the Tc fluctuations seem to be more variable than for cattle and camels: during the drought the Tc was lower but in 1998 it was higher than for cattle. There is less demand for sheep than for goats and hence the Tc has always been lower as well. At the worst period of the recent drought in Marsabit pastoralists were confronted with the situation that no buyers were willing to buy and some pastoralists had to sell the thin animals for the price of their hide only, which was even less than the transport costs to bring these animals to the Marsabit market; so pastoralists lost much of their profit. However, those who had some money could always buy grain or meal at the market, or also in smaller centres which have proliferated elsewhere in Kenya.

In Garissa we will look at what happened at three market places

during the drought of 1996–97, based on detailed research by Nunow. Garissa is the major commercial centre, Dadaab is near a huge refugee camp and Ijara is in an isolated area towards the south, not far from the border with Somalia.

As in Kajiado, maize meal is usually preferred to maize grain and Nunow found every household in his survey to have purchased maize meal quite regularly, as opposed to maize grain. Whenever maize grain is purchased, it is crushed into maize meal before it is consumed. Maize meal is cooked and made into a hard paste and is usually eaten with milk or a vegetable stew and a bit of meat. The caloric terms of trade were found to vary from one area to another and over the seasons. However, seasonal fluctuations were moderate because of the continuous drought. In all cases, Garissa town had the best terms of trade in calories compared to the other two locations of Dadaab and Ijara. The ratio (Tc) of beef to maize meal was between 5 and 7 for Garissa; 2.6 and 5.5 for Dadaab; 1.8 and 3.3 for Ijara. Prices of cattle were similar in Garissa and Dadaab and lowest in Ijara. However, the price of maize meal was highest in Ijara, lowest in Garissa and halfway in between in Dadaab, hence the variation in the relative ratios.

Although maize grain is not frequently utilised by Somali pastoralists, it offers better caloric terms of trade compared to maize meal because it is often cheaper. However, there is usually an additional cost of grinding the maize grain into maize meal before it is consumed. In the following table, we present the caloric terms of trade between cattle and maize grain, and small stock and maize grains.

| Month | Beef/maize grain | | | Small-stock meat/maize grain | | |
|--------|------------------|--------|-------|------------------------------|--------|-------|
| | Garissa | Dadaab | Ijara | Garissa | Dadaab | Ijara |
| Mar'96 | 8.3 | 5.9 | 2.2 | 19.4 | 6.4 | 4.0 |
| Jun | 9.1 | 6.2 | 2.7 | 13.1 | 7.8 | 3.1 |
| Sep | 6.9 | 3.5 | 2.6 | 10.1 | 4.7 | 3.5 |
| Dec | 8.3 | 5.0 | 2.5 | 14.1 | 6.1 | 2.8 |
| Mar'97 | 8.2 | 3.3 | 3.8 | 8.1 | 4.9 | 2.6 |
| Jun | 7.8 | 3.2 | 2.5 | 7.4 | 3.9 | 2.3 |
| Sep | 6.4 | 3.3 | 2.6 | 8.6 | 4.2 | 2.0 |
| Dec | 7.4 | 5.0 | 2.3 | 8.5 | 6.3 | 2.0 |
| Ave. | 7.8 | 4.4 | 2.7 | 11.2 | 5.3 | 2.8 |

Table 9.5Caloric terms of trade by location and type of livestock (1996–97)

Source: Survey by Abdirizak Arale Nunow, 1996–97; the price of meat is computed from the sale of live animals in the market.

Garissa town was again found to be a better market for pastoralists than the more distant market places of Dadaab and Ijara. The ratio of beef to maize grain in the three areas was found to be between 6.4 and 9.1 for Garissa, 3.2 and 6.2 for Dadaab and 2.2 and 3.8 for Ijara. The averages for the three areas were 7.8, 4.4 and 2.7 for Garissa, Dadaab and Ijara respectively. While their cattle fetched low prices in the local market, the Ijara pastoralists had to pay more for maize grain due to the difficulties associated with the transportation of food to the area and the risks involved due to insecurity. On the other hand, the availability of both refugee food and relief food in the market had improved the terms of trade (Tc) for the Dadaab pastoralists. During this period, there was little relief food in Ijara compared to the other parts of the district.

When we consider the caloric terms of trade for small stock to maize grain, the ratio was highest in Garissa, again lowest in Ijara and in the middle in Dadaab. The geographical differences were huge, especially between the main urban town of Garissa and the outer markets of Dadaab and Ijara. The average ratios were 11.2, 5.3 and 2.8 for Garissa, Dadaab and Ijara respectively. Apparently, the Somali pastoralists preferred small stock to cattle for slaughter, and as a consequence, a higher price was demanded per kilogram of animal. Since the most commonly consumed foodstuff in the area was maize meal, and the most common source of meat was small stock (beef is rarely sold in the smaller trading centres), the terms of trade between small stock and maize meal must be looked at as well.

Garissa town had a considerably higher Tc between small stock and maize meal than Dadaab and Ijara, especially in 1996. This was the result of a combination of cheap maize meal compared to the other areas, and relatively high prices for small stock. The Tc values ranged from 6.2 and 14.9 for Garissa town, 3.2 and 7.0 for Dadaab, and 1.5 and 3.4 for Ijara. The difference in ratios became less for all three locations over the study period, and even approached equality in the case of Ijara. This process may be attributed to the low livestock prices over the period, making the price per kilo of meat quite low. The figures for Dadaab and Ijara were close, although Dadaab had more favourable Tc ratios than Ijara. The average Tc figures for the three survey areas were 8.9, 4.5 and 2.3 for Garissa town, Dadaab and Ijara respectively.

The above material shows that selling livestock and purchasing maize meal (other factors remaining the same) would make the Somali pastoralists in the study area better off in caloric terms. It should be added that certain basic conditions need to be in place, if the positive Tc is to benefit the Somali pastoralists. The most important among these factors include:

- the availability of saleable animals in the herd
- the availability of buyers for the animals
- the availability and accessibility of maize meal.

A pastoralist may have any number of animals and yet have no saleable animals, given the need to keep a certain minimum number, species and sex of animals for reproduction. Although the majority of households in Garissa District are still pastoralist and therefore have some livestock, many of them may have only the minimum necessary for reproduction and may only sell some of their stock at the cost of their future economic reproduction. However, the availability of buyers for the animals and the availability and accessibility of maize meal also plays an important role in the realisation of positive Tc for the Somali pastoralists. The increased insecurity in the area, the poor infrastructure for livestock marketing and the need for bringing in maize meal from outside, tends to disturb the Somali pastoralists' trading at the market.

TOWARDS THEORY BUILDING

To understand what is happening economically in pastoral societies it is useful to compare cases over a long time, using the core concepts of TLU/capita, TLU/ha, Tc and total and commercial off-take rates. Decision making concerning the sale of animals is taken within a wider spectrum of strategies related to household expenditure. Some major questions present themselves:

- 1. Is it necessary to sell livestock or milk for food security reasons?
- 2. Is it necessary to sell for non-food reasons?
- 3. Are animals available for sale without risking herd or social sustainability?
- 4. Are livestock traders available?
- 5. Are grain traders available (and willing to sell)?
- 6. Is income from livestock sales used to buy food?

Our calculations take as a point of departure the fact that if TLU/capita is higher than 3 there will be no food security problem, that is, if all available milk and meat is consumed by the pastoral

household. The theory at the beginning of this chapter was: if all TLU are cattle, it means that there are 4 head of cattle per capita. A non-commercial off-take of 12 per cent would mean annual meat consumption of 12 per cent of 4 animals of 100 kg consumable weight each, or 48 kg (or on average 130 grams per day). With 2300 cal/kg this means about 110,000 calories. Four cattle, with 60 per cent cows-in-milk and 400 litres per annum per cow gives 960 litres of milk per capita (or 2.6 litres per day). This gives an additional 672,000 calories. Together these 782,000 calories give more than 2100 per average person per day. Together with the consumption of blood as well as some fruit, herbs and game gathered from the field this is an adequate diet. The only problem is the seasonality of milk gifts, which should be solved by storage techniques, or by the ownership of mixed animal types that have different milk periods.

Our calculations also show that if TLU/capita is below 3 (trading on the market) it could still mean that food sufficiency can be maintained. If TLU/capita is only 1.5, and all milk is sold and the commercial off-take rate is 12 per cent, Tc has to be 2 and all livestock income has to be spent on grains to maintain the pastoralists' food self-sufficiency. However, many pastoralists will still want to consume most of their own milk while, at the same time, a commercial market for milk often does not exist. So in practice milk sales will often be negligible. In that case Tc for livestock has to be 8 (all proceeds would then have to be used to buy grains) to enable a pastoralist to be self sufficient in food. If the commercial off-take rate is only 8 per cent the Tc for livestock has to be beyond 10 to be able to maintain food self-sufficiency. We have seen that in Marsabit, Garissa and West Pokot the average pastoralist has reached the TLU/capita level of less than 2 so the market has to be used at least partly for food security reasons. We have also seen that in recent decades the Tc levels have been good during non-drought periods, and often beyond 10 and certainly beyond 7. In those 'normal' periods, livestock traders have always bought animals, even when there were security problems. At the same time, a proliferation of small trading centres with a few 'general retail shops' and ambulant traders who came to regular market days often had enough maize meal or maize grains and other food for sale. Only in 1993/94, during and after 'ethnic cleansing' (when also many non-Pokot traders were chased out) the supply of maize collapsed, and maize prices became very high. With the exception of Kajiado, a pastoral crisis in terms of low TLU/capita levels could easily be 'solved' by making use of relatively high Tc levels for livestock in non-drought years. High Tc

levels for milk were only relevant near the major trading centres and only for a minority of pastoralists with access to these centres.

For a minority of pastoralists some additional grain production also served as a solution. In Kajiado the TLU/capita level for the average pastoralist had recovered to food sufficiency level without the need to trade at the market. However, the rather large inequality meant that for a minority of households livestock had to be marketed to buy grains (even though the Tc level was high enough most of the time) and some Maasai even started to grow grains structurally, despite the high yield risks involved.

As the evidence of the four case study areas clearly shows, the situation becomes problematic during and immediately after a drought or during and after situations of collapsing security.

- When rains fail, milk production for the pastoralists' own consumption dwindles; if stored milk is finished, pastoralists face a food problem, despite 'healthy' looking TLU/capita levels.
- When dry conditions continue, animal–grain exchange relations become more important and off-take rises, up to or beyond herd sustainability levels.
- When drought becomes more severe livestock dies, often not so much because of a lack of feed and water, but because of disease and general weakness; dead animals will not always be eaten due to health risks and food taboos; weak animals which are offered on the market only fetch low prices if there are traders willing to buy them at all.
- Local grain production fails as well, and even the occasional production of fruits, herbs and other local food might be negatively affected by the drought as well.
- Grain traders will increase their food prices or they will hoard food, resulting in a much lower Tc and sometimes in complete market failure (traders are simply not available or willing to sell).
- Increasing competition for ever scarcer food, feed and water resources results in increased tension, both within the community and with (ethnic) outsiders and immigrant pastoralists, which results in higher risks due to insecurity or even warfare.
- Money that is available to buy food is often used to buy increased security (guns, ammunition, protection) resulting in a food crisis.
- The assistance by food aid agencies during the drought creates a

temporary relief for the emerging food crisis, but might undermine the trading structure; grain traders might be outcompeted and decide to leave the area or stop trading; in a recovery period when food aid has gone, food availability through the market could become a problem, even though many pastoralists might rely on that market.

- The much lower feed and water resources create a TLU/hectare problem, with deteriorating ecological conditions as a result (for example, 'circles of destruction') around the remaining water points and later around concentrations of destitute dependants of food aid. It might take years before the ecological damage is undone.
- During a drought not only animals die, but calving rates and calf survival rates will also be low; the recovery of a herd after a drought takes a few years; in those recovery years off-take rates will be relatively low (and herd rebuilding can sometimes be rapid; see Dahl and Hjort, 1976) or else the long-term sustainability of the herd will be jeopardised. Herd composition can be 'abnormal' during a few post-drought years. If too many droughts killing livestock take place within a short period, recovery is not possible and TLU/capita will structurally be undermined.

In an ideal model for 'normal herd growth', based on a base herd of 30 animals (a level which assures independent food security for a family of seven), of which 60 per cent are cows, we assume that the annual calving rate is 85 per cent (that is, 15 of the 18 cows have calves). Steers are eaten or sold after three years; cows are eaten or sold after 13 years. If nothing disturbs this model situation in year nine the herd has 150 living animals, while during that nine-year period a total off-take of 88 animals has been reached.

If a severe drought attacks the herd in year seven, with 75 per cent casualties with no milk production for human consumption during one year, and only 50 per cent calving rate, the herd falls back to a level below the independent food sufficiency level and in year nine the herd has barely recovered. If disaster strikes in years three and six under the same conditions, the herd strength first goes back to only half the independent food security level and after some recovery it falls back to less than one-third of the independent food security level. The food sufficiency level can be maintained through a combination of home consumption of milk (with no sale of milk) and selling the off-take at a Tc ratio of 6 when there is only one drought in year seven. When drought strikes twice, in years three and six, Tc has to be more than 10 for food security to be maintained, which is highly unlikely. If Tc levels

are adequate the availability of animals for sale can still be a problem, due to the composition of the herd (not enough adult males yet; and no old cows), while at the same time the sale of milk could jeopardise herd recovery.

CONCLUSION

From pre-colonial dominance concerning control of land, water, herds and knowledge, and even of other people, pastoral groups in Kenya have nowadays become dependent on others in order to be able to hold on to these resources. There has been growing insecurity, caused mainly by climatic variability and disease for which they can no longer prepare themselves as well as they could before. There is violence and a lack of personal security in some areas (for example, raiding in the case of the Pokot and large-scale violence in the case of Somali). More recently, other uncertainties have become more pronounced as well. There is a loss of control of land (even of ownership) through privatisation and sale. The former Group Ranches in Kajiado have been privatised. The riverine areas of Pokot and Somali land have been cultivated as well as the mountainous areas of Marsabit land. Those who have limited access to resources are now more dependent on increased marketing of produce or on other sources of income. Livestock and grain traders have become economic forces; politicians represent government policies. Traders and politicians have become important for pastoralists, influencing them not only in the area close to the political centre (the Kajiado Maasai) but also far away from the centre (the Pokot and the Somali).

We have used the TLU/capita figures to get an idea about the food security situation based on domestic livestock produce. We have calculated that a minimum of 3 TLU/capita would be needed for a secure and independent level of food acquisition with domestic livestock products alone. Among the pastoral Pokot this required level of self-sufficiency existed until the 1950s. During the droughts of the 1970s it had already collapsed to a level below 2, and after the disastrous years of 1979-83 it stood at an all-time low of 0.5, to recover slightly in later years. The Pokot obviously needed their non-pastoral support system (ethnic relatives in the highlands; their own grain production; gold and other non-agricultural activities; aid) to survive the gradual undermining of their pastoral existence. And they clearly needed the livestock market to make use of caloric terms of trade that were generally rather good: between 8 and 16, and in some years even beyond that. In very bad years (like 1983) the trade system virtually collapsed, with a Tc lower than 2, and very few animals to sell. In the

recovery years afterwards many pastoralists who wanted to rebuild their herds and flock needed a considerable time before they could again participate in a livestock market that had already returned to favourable Tc levels.

Among the Maasai the TLU/capita levels have never been lower than 3 (in 1962) and currently they are such that on average pure pastoralism could give a solid foundation for food security (above 5). Here we have a situation in which not food exchange (using good Tc levels) necessitates market participation, but a wealth accumulation strategy. High Tc levels (Tc = 7–11; although generally lower than among the Pokot despite the nearby Nairobi market) give this accumulation strategy a solid basis. The Tc situation for the Maasai seems to fluctuate less compared to that of the Pokot and is therefore more secure. In the worst year (1975) the Tc did not drop below 4. For the Maasai the problem is the rather large inequality in livestock ownership, which means that for considerable numbers of households the TLU/capita situation does not enable a purely pastoral food basis. Market participation and the use of lucrative Tc levels are necessary for them for food security purposes.

The Somali situation in Garissa District and the situation in Marsabit are different. Like the Maasai, the Somali, Rendille, Gabbra and Boran had a TLU/capita situation that enabled a purely pastoral life for a long time, and like them they actively participated in the livestock market for the purchase of other goods and as part of an accumulation strategy, but at rather low (officially recorded) commercial off-take rates. Around 1990 the system collapsed and this happened much faster than the Pokot had experienced in their pastoral crisis. TLU/capita levels went down to 1.5 and large numbers of Somali, Boran, Gabbra and Rendille became destitute and dependent on international charity. The fieldwork during the severe drought of 1996-97 in Garissa enabled a precise reconstruction of the development of Tc levels during a crisis. It is interesting to see that the Tc situation in the major centre, Garissa town, and in the centre near the refugee camp, Dadaab, was not bad at all, although the Tc became lower when the drought became more pronounced. The Tc levels in these centres were clearly good, compared to the Pokot and even Maasai figures during droughts in the past. A large demand for animals from the rest of Kenya, and the maintenance of a security situation that was within the margins of acceptability for traders and truck drivers on the Dadaab-Garissa-Nairobi road, enabled relatively high livestock prices, while the existence of the huge refugee camp in Dadaab with an ample food supply under the responsibility of UNHCR kept the maize price low. In far-away Ijara the situation was far worse:

security was bad, livestock transport was very risky, livestock prices were low and became ever lower, and the price of maize meal went up. The result was a Tc close to 2. This indicates a major crisis, but is still above parity!

Coming back to the first of the issues raised at the beginning of this chapter, commoditisation does seem to be an interesting strategy to ease the tension between pastoral production capacity and household food needs. Lucrative caloric terms of trade seem to be the rule even in times of crisis.

Requirements for commoditisation to be interesting for the market are numerous. Liberalisation of the livestock, meat and grain markets has helped to provide food and improve livestock marketing in the districts. The commercial system that has developed has had favourable effects in Kajiado District, but less so in West Pokot, Marsabit and Garissa Districts. The food aid for refugees in the Dadaab part of Garissa has also had favourable effects on the caloric terms of trade for pastoralists. A group of influential businessman and (ex-)politicians has recognised the opportunities and has started businesses which has helped to develop a slaughterhouse and butchery sector in all three districts, although at the social cost of increasing inequality. In general, as the economy in Kenya is heavily influenced by political decision making, involvement in marketing has its risks as well. Conditions may suddenly change, as was the case with the redevelopment of the KMC as a private enterprise at the cost of slaughterhouses of smaller scale. Conflicts between ethnic groups have disrupted markets in Kenya before. There are also developments that work out well for pastoralists. The exchange rate of the Kenyan shilling suddenly became interesting to producers in the southern part of the country, and it provided the Kajiado Maasai with an alternative market when the market in Kenya stagnated in 1993. The breakdown of the Somali state and its currency provided Garissa-based traders with quite a few new opportunities.

We found that growing commoditisation takes place in all four districts and that there are two distinct roads to commoditisation: the road to survival and the road to ranching. The road to survival can be explained by a gradual decrease in the TLU/capita figures, especially among the pastoralists at the lower end of the wealth spectrum. In Pokot society these form the larger part of the remaining pastoralists after the disasters of the 1979–82 period. In Somali and Marsabit society this also seemed to be the case, particularly after the 1996–97 drought. In the Kajiado Maasai situation they form a minority. The road to ranching is not forced by decreasing livestock-based food production per capita, but by an increasing need to improve livestock productivity through

purchased inputs, by pastoralists following an accumulation strategy at the upper end of the wealth spectrum. This road is followed by a rather large group among current Maasai herders and by only a small group among the Pokot, the Somali, the Gabbra, Rendille and Boran. People who apply the accumulation strategy try to diminish risks related to the market by becoming involved in politics and fostering connections with politicians (that is, if the politicians do not already number greatly among these wealth-accumulating pastoralists).

In all four societies a clear process of wealth differentiation is visible. Among the poor, we see a strategy of diversification of sources of income, in which livestock-related activities are only part of a broad 'survival package'. Among the rich both specialisation and diversification are found. Where marketing perspectives for livestock are good and stable, specialisation is a safe option.

To understand what is happening in current pastoral development in Kenya, it is interesting to use the concept of caloric terms of trade between livestock and grains (or maize meal), but it is clearly not enough to explain all the changes, certainly not for the more wealthy pastoralists. The whole package of purchases and sales should be included in the analysis as part of an overall analysis of all the trends in commoditisation, including inputs, land and labour.

Our analysis shows that pastoralists have three more types of decisions to make, after deciding that the Tc is interesting enough to market livestock (as it usually is), and after assuming that livestock and grain markets actually function (which in a Kenyan context has almost always been the case). These three types of decisions are:

- 1. whether to deplete the herd and flock
- 2. whether to sell an animal
- 3. what to do with the profit.

The first decision depends on the availability of 'excess animals', beyond the perceived minimal reproduction necessities of the herd and flock. Are there young males available (preferably mature) and are there old cows? After a period of crisis, rebuilding a herd and flock takes at least four respectively two years and during that period exchange possibilities for herders with low numbers of animals are very meagre. They can not simply depend on Tc levels, even if very good, for their day-to-day food security. Selling non-excess animals means slowing down the process of rebuilding a viable herd and flock. If excess animals are available it is sometimes preferred to give them away within a social network, to strengthen social ties and to improve indigenous

social security arrangements. Slaughtering an animal for a social or ritual occasion could be a preferred course of action, as this would also often cement social ties. In all groups that were studied this still happens, although in relative terms probably much less so than a generation ago. The third decision, about what to do with the profit, depends on the decision-making structure within the household and on the food situation. Even if the acquisition of grain (or other food bought on the market) should get the highest priority from the point of view of household food needs and health situations, money is not always actually spent on necessary food. As women are generally the major providers of household food, in food crisis situations it is of the utmost importance for them either to be able to rely on their husbands' willingness to spend part of his livestock sales profit on food for the family, or for the women to be able to sell milk and animals (often small stock) themselves.

Finally, we have illustrated how important it is for the viability of the pastoral sector that droughts, if they take place, are spread over time. Too many droughts close to one another undermine the recovery capacity of the pastoral sector. For a market-dependent pastoral sector this is even clearer. Not only the TLU/capita are adversely influenced by droughts, but the Tc as well. In addition, the TLU/hectare situation during a drought may cause such tensions, both ecologically and socially that rebuilding a herd and flock in post-drought periods becomes impossible. In West Pokot, Garissa and Marsabit such dangerous situations have arisen, in Pokot during the 1980s and in Garissa and Marsabit during the 1990s. For the Maasai of Kajiado the situation seems to be completely different. They seem to be in a league of their own: they have recovered from prior disasters, they have never had higher TLUs, and their TLU/capita situation would still enable them to be market independent. However, many of them do have high commercial off-take rates, using high Tc ratios. They live close to the important markets of Nairobi and Mombasa. Many Maasai sell, not because their survival is at stake, but because they are on a 'route to the ranch'. Their traditional pastoralism, as far as it still exists, is also challenged – not by disaster, but by opportunity.

NOTES

- 1 There is a complex debate going on about the type of wage, because in so many cases the 'wage labourers' get their rewards in non-monetary forms (for example, food or livestock wealth) and also many of them do have family ties or age-mate ties or clan ties with the 'employer' in various forms of patron-client relationships.
- 2 There are two Idd festivals celebrated annually. One is related to the Muslim

Holy month of Ramadan and is celebrated on the day following the last day of the month of fasting. This is called *Idd-ul-Fitr*. The second is related to the Muslim annual pilgrimage to Mecca and is celebrated on the day of pilgrimage. The Idd for the pilgrimage is known as *Idd-ul-Adha*, and it is during this Idd that the slaughter of an animal is most desired.

3 Average nominal prices are computed by the DLPO in Garissa by taking only the highest and the lowest figures for the period, and dividing them by two. This process may not show the variations between the two extremes or whether the prices have been skewed towards the upper or lower limit.

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10 Immediate Problems: A View From a Distance

P. T. W. Baxter

Having to cope with drought, warfare and epidemics has always been the lot of pastoralists. Even at its gentlest, pastoralism demands a hard, if proud and dignified, life; but over the last 30 years the combination of old hardships with new difficulties have come to seem overwhelming. In his recent comprehensive review of the present state of governance in pastoral societies and of pastoral studies entitled 'Pastoralism: Governance and Development Issues', Fratkin (1997) highlights the major issues. Here I pick out three:

- The first sentence of Fratkin's 'abstract' is; 'Pastoral societies face more threats to their way of life now than at any previous time.'
- In the first sentence of the paper itself he writes; 'The practice of pastoralism shows a remarkable resilience.'
- He concludes that pastoralism 'remains an important food production system and should be encouraged – not discouraged – by development planners and national governments'.

Most of us would agree, even though some Fulani and Somali may be doing well, that these three general statements apply to most African pastoralists. I will look at some of the threats and difficulties that particular pastoralists have confronted in the past, in the hope that an examination of events, from which we are distanced by time and in which we are not directly involved, may assist our understanding of the present. Some of the present threats are old ones writ large.

The first point, the increasing threats to pastoral survival, is the dominant one. Our first question, I suggest, is to distinguish:

1. the localised cataclysmic disasters which may destroy a people or a segment of a people

from

2. the widespread destruction of pastoralism as a productive system; that is, a combination of events which overcomes the 'remarkable resilience' of 'the practice of pastoralism' (cf. Smith, 1992 and Gowlett, 1998 on the durability of pastoralism).

The most obvious threat to pastoral survival is the increase in violence in the sparsely populated pastoral areas: warfare and raiding have been constant features in the lives of most pastoral peoples, but automatic weapons and grenades have revolutionised the intensity and deadliness of conflicts and quite altered their nature. Armed violence not only threatens the pastoralists' 'way of life' by making vast tracts of pasture too dangerous to use in the present, but also threatens their future livelihoods, because pastureland that is not grazed reverts to unusable bush. It can be argued that many, maybe even most, of the African pastoralists who are now almost entirely confined to arid and semi-arid pastures may soon be crushed out of existence and become forced refugees driven to shanty towns and relief centres. In fact, this has already happened to many. National governments have proven quite unable either to protect their pastoral populations from cattle raiding and violence or to offer them any alternative means of subsistence.

This violence has not only been aggravated by the recent easy availability of arms but (and more permanently) by the alienation of the crucial dry-season pastures with accessible water by cultivators, ranchers or game parks. Sedentary settlers must have water all year round, which they get by stealing – often in the name of 'progress' – the crucial fallback water and grazing on which pastoralists depend. Even if the herders can trade livestock for grain and survive the worst of the dry season themselves, their stock cannot survive and must perish. If the grazing and water available are less than the overall demand, herdsmen must fight for their share. Alienation of key pastures and water, and the violence which followed, have greatly restricted the mobility of herders and their stock. They have been disastrous for pastoral production and survival (Sobania, 1988).

A constant response by governments to violence has been to impose restrictions on mobility in an endeavour to keep the competitors apart. They draw lines across the empty spaces on the maps and designate specified grazing areas which are restricted to specified groups. These map lines have mostly been ignored but when enforced have often had catastrophic consequences. Such government interventions have been based on the undeclared, and quite inaccurate assumption that pastoralists live in territorially bounded political groups. Colonial and post-colonial governments, and nowadays NGOs, have found it almost impossible to grasp that most pastoralists do not have hierarchical political structures and do not live in political or productive units which are bounded territorial units. Both stock and political power and influence are widely diffused and widely distributed. This means that neither emergency plans nor longer-term development plans can be implemented simply by demarcating 'areas' and by getting the agreement of a few councillors and chiefs. For a pastoralist, continuing existence depends on the ability, when in dire need, to move freely and to disperse widely across the rangelands the different types of stock for which he is responsible. The distribution of risk by dividing one's stock by species, age and condition and distributing some to be cared for by distant living kinsmen, the affined, bond partners and stock associates is one of the few common pastoral practices. A wise man spreads his risks and manages his herd as if he was managing a unit trust (Baxter, 1966). What Helland (1997) has described for the Boran has wider applications:

The Borana political system is not based on territorial units but on social units; territorial attachment is not used as an organising principle in Borana society except in relation to various obligations to the government administration, including development projects. The madda (the area made accessible by a permanent water source) is not a political unit ... [p. 75] 'There is no evidence that the madda is resource management unit at all. [p. 72] ... a Borana may live wherever he wants to and wherever it suits him. (p. 65)

Given the awful combination of pressures which pastoralists are enduring it could well be that our deliberations can only be whistles in the wind, and that violence and ignorance will prevail, but we must hope and clutch at straws. There are some hopeful signs.

First, although pastoralists still need advocates, governments and development experts do not so readily dismiss pastoralism as a backward and primitive productive system, as they were used to doing. The 'mainstream view', as Stephen Sandford (1983) termed it, was that the ranges were being degraded and 'desertification' speeded up by a combination of improved veterinary medicines and overgrazing by conservative pastoralists, who blindly sought only to increase their herds. The mainstream view, which Sandford challenged, has become increasingly untenable. Desertification has proven to be something of a bugaboo and alternative ways of using arid lands, such as ranching, have mostly failed. It has been demonstrated that pastoralists are neither obsessive accumulators of stock nor unconcerned overgrazers. Officials and development agencies are, if reluctantly, beginning to accept that traditionally based pastoralism has proven to be the most effective way of utilising land areas which cannot support sustainable agriculture.

Acceptance of traditional-style pastoralism has been eased by the recognition that most external interventions have flopped. I would also suggest that perhaps another reason for the increasing recognition of indigenous pastoral knowledge is the generally increased perception of the efficacy and economy of much agricultural, ecological and medical *indigenous knowledge*. Some arrogant old *Eurocentric* prejudices have been weakened.

The effectiveness, then, of indigenous traditional pastoralism is becoming more recognised. It is effective because it is adaptable and cheap and because the workforce consists of committed craft workers. I write 'committed' because the herders not only depend on the stock they herd for their subsistence, but also have emotional and religious attachments to it; stock which is used for exchange and sacrifice is a source of pride, social position and ritual fulfilment. It is the very opposite of factory farming. The owner/father of a herd who requests his wife to offer a visitor a cup of milk is not filching his employer's property, but offering a small part of himself as a gift. An employed stockman expects overtime if he has to sit up all night helping the delivery of a calf, or danger money if he has to risk confronting armed stock thieves, whereas 'the fathers of cattle' are joyous about the first and determinedly resigned about the second. I write 'craft workers' because learning to care for stock requires a long apprenticeship on the job, in order to accumulate the experience and knowledge about stock, weather, water, trees, browsing and grazing, acquiring the emotional and physical strengths to endure hardship and, above all, knowledge of the enravelled social relationships in which herding is enmeshed. Men who have grown up as herders and then go away to town or into the services as adults can, and do, return to pastoral life. Boys who have been away at boarding school soon learn that they cannot return to arid-zone pastoral life because they are far too ignorant and physically too soft to cope. Successful townsmen and professionals invest in their herds but must have them cared for by their pastoral kinsmen. Nowadays many children of pastoralists are growing up in sedentary settlements and, although they may maintain pastoral values, they are not acquiring pastoral skills. It would be difficult, I think, to construct a vocational training course in survival as a pastoralist. It would probably be impossible to reconstruct an orally transmitted and constantly revised body of knowledge once it has been lost.

A second glimpse of hope is the increasing attention given to pastoral issues. What used to be a trickle of publications has turned into a flood. Clare Oxby's admirable annotated bibliography, *Pastoral Nomads and Development*, which was published in 1975, contains about a hundred items, most of which are by anthropologists. By 1997 Fratkin (1997, p. 236) notes that in the preparation of his review article he examined, 'over 600 articles, books and reports about pastoralism and

development, nearly all written in the last ten years', of which almost half dealt with ecology and economics. Organisations with great research resources, such as the International Livestock Centre for Africa (ILCA) and UNESCO's Man and the Biosphere - Integrated Project in Arid Lands, and smaller ones such as the International Institute for Environment and Development (IIED), the Institute for Development Anthropology and OSSREA have, between them, produced streams of publications. The 'mainstream view', along with the fears of the 'tragedy of the commons', was almost eroded right away by the waves of publications written by researchers from many disciplines. Areas have been opened up which had never been thought of. Generally the new data have strengthened the argument that pastoralists are their own best experts. Unfortunately this welcome attention from the measuring sciences has diverted attention away from the social, cultural, historical and political contexts within which pastoralists and developers must operate, and which give shape and meaning to the people's lives (Hogg 1997).

Another useful consequence of engagement by natural scientists and economists has been the demystification of the words 'pastoralist' and 'pastoralism', and the notions that they indicate a unique and archaic sort of person and a unique and archaic mode of production. It is now generally accepted that (Baxter, 1994, p. 3):

Both are only handy and very general descriptive terms, neither can be converted into a useful analytical category ... Pastoralism ... is not a readily isolable mode of production and pastoralists do not form a homogenous social or cultural category.

Some pastoralists, such as the Boran and the Gabra, have traditionally depended only on stock production and exchange and trade. But many pastoralists have always cultivated the earth while maintaining their dedication to their stock: among the Arssi of Chilalo, for example, barley features centrally in rituals and, like milk, is not just a commercial product (Baxter, 1982). The Arssi have certainly become increasingly dependent on barley and *ensete* (indeed many have been reduced to destitution); but they remain as pastoral in ethos and values as those Boran who have only taken to scratch cultivation in the last couple of decades. For long periods and in many places concentration on stock and milk production has been the most rational economic use of labour and resources. For the Boran and Gabra in their golden days, and for other well-off pastoralists who neither hoed nor ploughed, planting crops would have simply been an unproductive way of

spending their time and energy. Peter Little has shown how the El Chamus peoples have changed from pastoralism to cultivation and back again as their circumstances changed. But increasingly, wherever it is at all possible, pastoralists now cultivate from necessity.

THE KENYAN BORANA CASE¹

In the mid-nineteenth century the Boran were the dominant influence in the area which straddles what is now known as the Ethiopian-Kenyan border. Some moved down from Liban into the arid plains below the escarpment from which they eventually displaced the Orma, to whom I will return briefly below. The Boran took control of the deep wells of Moyale, of El Wak and, of particular importance, those of Wajir. They created their own loose hegemony across the region. There were no national boundaries then and they maintained full contact with their ritual leaders the Kaallu and with their kin and their affined in Dirre and Liban. As the century wore on, the Boran, in their turn, lost grazing and water to groups of Somali. What the Boran had done to the Orma, the Somali did to the Boran. They came as clients, increased in number and ousted their patrons. But Boran did not entirely relinquish their rights to the Wajir wells until the 1930s, when the colonial government forced them to move south to the area of the Waso Nyiro River. There, although they became increasingly separated from the main body of Boran to the north, they thrived as herders and became substantial contributors of sheep and goats to the national meat markets of Kenya. In the 1950s Borana heifers were even being exported to Australia and South America as breeding stock.

Their economic future looked bright until the outbreak of what is known locally in Kenya as the *shifta* war or the secession war, through which the Somali districts of Kenya sought to become part of Somalia. This bitter conflict was a brutal undeclared war waged between Somali guerrillas and the Kenya police and military from 1963 to 1969, and intermittently for some years after that. Indeed violence still smoulders. This was an awful period for the Boran of the Waso who were forcibly made sedentary, relocated and concentrated into camps. They were pauperised because they were forced to become sedentary. Thousands of animals starved or were slaughtered by the army. The people call this time *Gaaf Daaba* – the time of stop – and compare its devastating effects to those of the cataclysmic rinderpest and smallpox epidemics of the 1880s (Hogg, 1981; Aguilar, 1998). Many hundreds of families, especially Sakuye, have been driven out of pastoralism for ever, but some hold on in spite of continuing violence and Somali pressures. (Indeed, Somali pressures on the eastern borderlands from Liban down to Isiolo have been almost continuous for more than a century.) Those men who make some money in town, although they buy plots and settle comfortably, invest their savings in stock which they spread across the ranges in the care of pastoral kinsmen. Waso Boran pastoralists, despite awful suffering, are showing considerable resilience, as are the Somali pastoralist who are bearing down upon them.

What appears to be happening, in both southern Ethiopia and northern Kenya, is that while some Boran (and others) manage to survive, many are being driven out of pastoralism. But those being driven out are in many instances being replaced by Somali pastoralists with tacit government approval.

Similarly, the Orma, who had once loosely controlled 'the whole country from the Ethiopian highlands down to the ocean and from Marsabit to beyond the Juba' (Schlee, 1989), were being pressed further and further south by the Maasai, the Boran and the Somali. Although they retained their own pastoral mode of living, their grazing grounds were taken over by other groups of pastoralists. Yet pastoralism itself was undiminished.

The Somali–Orma war of 1867–69 resulted in many individual Orma being sold into slavery to Lamu and Zanzibar by the Ogaden. Many more became Somali clients over the years, and have effectively been absorbed into the Somali lineage system, preferring to stay with their stock rather than to strike out without them. The institution of stock/clientship – *tiise* – allows families to remain pastoralists but under a different ethnic identity.² Those Orma who moved south of the Tana River into their present territory have maintained an Orma identity and their own language but, over the years, have converted to Islam and relinquished many aspects of their former social organisation, such as *gaada*³ and their exogamous moieties (Ensminger, 1992).

I was briefly in Garissa in 1952. The Orma were then well established and prosperous pastoralists and the elders boasted, with proper pride, that not one man had to leave home and work as a migrant labourer. Private land holding was just starting to establish itself as a very few travelled men with entrepreneurial minds saw opportunities. Since then the Orma social order has undergone a transformation. The commons have been taken over. Men are still called *aba looni* – 'father of the cattle' – but the accent is now on the ownership of *aba* rather than the aspect of fatherly care and responsibility. Commercial production of livestock is dominant, rich families employ poor people and the gap between rich and poor has widened. In effect, the state and the economic elite have taken over from the elders without opposition; which

'amounts to an admission by the elders that their institutions are no longer capable of maintaining social order' (Ensminger, 1992, p. 148). The Orma have become enmeshed in the national and regional economies but many men and women must still be maintaining traditional pastoral knowledge, which could be a useful fallback if the markets collapse.

I have mentioned the great series of epidemics and famines which Boran named 'when the rib bones were black with flies' – *tiite cinac guuracha*,⁴ this was the local manifestation of the great series of famines and epidemics of the 1880s which devastated and depopulated most of the pastoral areas of Africa (cf. Pankhurst and Johnson, 1988; Waller, 1988). In the early 1950s, Boran described it to me with horror as a period during which social order and morality were suspended, chaos reigned and the obligations of family, kinship, affinity, age sets, generation sets (*luuba*) and ordinary decency were all ignored. Yet, when rain and grass and health reappeared, social order restored itself within a few years along with ordered pastoralism. Perhaps fortunately there were neither national governments nor international agencies to supervise rehabilitation, and stock owners were free to herd their few remaining stock where they chose!

Finally I look at an event from my own fieldwork among the Boran of Marsabit in 1951-52. Parallel to the Boran takeover of the Wajir wells a number of Boran from Dirre moved south to take over the upper reaches of Marsabit Mountain - Saaku. The newcomers were mostly younger sons who already had knowledge of the area that they had acquired during hunting and raiding trips. There was a permanent lake in the forest, some dry-season wells at Sagunte and excellent year-round grazing within easy reach. It was a ready-formed *madda* of the type they were used to in Dirre. There were only two drawbacks. The first was Marsabit's distance from the ritual centres of Dirre. The second was the tsetse around the forest which attacked their horses and forced them to give them up; the cattle were kept at sufficient distance so they were hardly affected and only brought to water at the lake at the height of the dry season. Most of the Sakuye, who were then living on Marsabit Mountain, moved away with their camels to the lowlands of the Wajir and Waso areas.⁵ Boran held Marsabit against Rendille and Maasai incursions and, using their horses, raided into Samburu and Maasai. When Menelik's pillaging troops took over in Dirre many Boran moved to join those already in Marsabit.

When the British assumed control of the area, the Rendille and Samburu insinuated, reasonably enough but not strictly accurately, that the Boran were new intruders. In the district records the Boran became branded as *hofte* or 'noisy strangers', and attempts were made to restrict their numbers and even to have them returned to Ethiopia. Those fleeing from Abyssinian tax collectors and occasional slavers were discouraged and often returned. As national frontiers were marked, and the bureaucracy tried to create administrative tidiness, the Marsabit Boran came to be considered an untidy anomaly, a people who should be back in Ethiopia. The Boran silently endured and stayed on because the circumstances were good and the regime was, generally speaking, not as unpredictable as that in Ethiopia. They devised ways of forestalling or sabotaging the moves the administration made against them. For example, most adult males ensured that they paid tax every year, and received officially stamped receipts, in both Ethiopia and in Kenya, thereby establishing their status as long-term nationals. They also knew that no official could tell a Boran from a Sakuye or a Gabra or an Ajuran or a Garre, so any one member of any one group would claim to belong to whichever group was officially allowed to graze in the area they were using.

In 1951, when I first arrived there, the Boran who resided most of the year on Marsabit Mountain lived in villages made up of elder siblings each with the milking cattle of their family herds. They were comparatively prosperous and moved their milking cattle up the mountain in the dry season and down to the low slopes during the rains. They kept their dry stock and their small stock in the lowlands in the care of junior siblings (Baxter, 1966).

By 1951 the provincial administration had become obsessed with what it had decided was the overgrazing of Marsabit Mountain, and they created erosion gullies along the cattle tracks to the wells. These gullies were nothing compared to the gullies made by the culverts that had drained the road from Isiolo. It was decided that no more stock owners or cattle were to be allowed on the mountain. The human population could easily be controlled by using the tax register, but cattle numbers were more difficult to control. It was decided that all cattle on the upper reaches of the mountain should be marked with a distinctive brand, and only those carrying that brand should be allowed to graze there. Any others would be forfeited. At intervals there would be stock inspections, and calves born of branded mothers would in turn be branded and allowed to stay. The people, it was assumed, would settle to a sedentary life and thereby become more productive and easier to keep an official eye on.

The Boran were outraged and argued to the District Commissioner (DC), personally a reasonable man, that it was against their law and custom to brand cattle. The DC argued that this could not be so because burning sick stock with hot irons was a common therapy, as it was for

humans who complained of head or muscle pains. There was a stand-off. I arrived in the field as the controversy was reaching its height and found it all extremely puzzling. On the one hand, if I enquired about the issue some elders feared that I might be a colonial agent, and clammed up; on the other, it opened a topic which led straight into the heart of pastoral husbandry.

Boran saw that the plan would not only impoverish them and make them sedentary them but that it would also isolate them. It would cut them off from their dry herds in the lowland ranges and prevent the movement of stock between milking and dry herds which lies at the heart of Borana stock management. It would not only prevent them from circulating their animals but also prevent them from distributing them among their kin, clansmen, their affined, friends, age-mates and stock associates who might be scattered across the whole of the wide Borana grazing lands. If they became restricted to their stock on the mountain they not only lost access to dry-season grazing, but also lost all the insurance against losses from epidemics or raiders that stock distribution brings. They would also become a small isolated social entity entirely cut off from their kin and the Boran in Dirre, Liban and the Waso.

Some homesteads packed up and left the mountain for Ethiopia, but the majority stayed on and continued to oppose the branding on the grounds that it was a breach of custom; yet they were all prepared to leave if the scheme were implemented. The elders did not propose that argument to the DC, that the restriction of stock to the mountain would destroy their way of life because, they said, although the DC appeared a reasonable man, his superiors were probably working for that very outcome. I think they overestimated the knowledge and understanding that officials had. The elders further thought that the arguments about overgrazing must be a blind, because it was obvious to anyone who had lived on the mountain for years that overgrazing was not occurring; grass and bush cover simply changed with the varied cycles of good and bad rainy seasons. Of course, no one from the administration had lived on the mountain for years and seen these cycles. In the end the scheme was not implemented for a number of quite extraneous reasons, such as preoccupation of the administration with the Mau Mau rebellion that had broken out.

CONCLUSION

If Borana pastoralism is any guide, the main threats to pastoralism continue to be the end of the commons, privatisation and alienation of water and grazing and, most importantly of all, restrictions on their freedom to move in search of water and pastures in desperate times. They can only be resilient and rebuild their herds if they are allowed to move in to water and grazing in emergencies. If not they will continue to be crowded out and the arid lands will revert to ungrazed wastelands.

NOTES

- 1 I depend on the publications of Mario Aguilar, Marco Bassi, Gudrun Dahl, Johan Helland, Anders Hjort, Richard Hogg, Aneesa Kassem, Gufu Oba, Gunther Schlee and Paul Tablino.
- 2 Schlee (1989) has demonstrated in immaculate detail how, again and again, pastoral groupings in northern Kenya have shifted their ethnic identities rather than leave their stock or their grazing.
- 3 See Helland, this volume, note 2, page 79.
- 4 This phrase is drenched with poetic ambiguities: 'flies' are usually first associated with milk and rain and prosperity and joy and dancing, but here they are associates of mass death; 'rib bones' have warm associations of love and plenty, a rib bone with its meat attached should always be given to other villagers, and the lower rib bone of a slaughtered animal is a customary gift to a lover. Here the sign of plenty and sociality becomes a sign of death; *guuraacha* is both 'black' and 'clear' as water without milk is clear, or as the cloudless sky is clear but here it is the sign of blackness and corruption.
- 5 The Sakuye of the Waso suffered terribly during the *shifta* war; 'many became sedentary as semi-urban paupers or farmers on irrigation schemes, but some managed to build up herds and take up nomadism again' (Schlee, 1989, p. 37).

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Changing Gender Roles and Pastoral Adaptations to Market Opportunity in Omdurman, Sudan

Samia El Hadi El Nagar

This chapter examines the responses to the market opportunities among the pastoralists who were driven by the droughts of the 1970s and 1980s to the west of Omdurman town in Sudan. It will demonstrate that the urban context has been generating increasing political, economic pressures and resource competition, and the discussion shows that there are considerable variations in pastoralists' responses. The dispossessed pastoralists have limited choices and considerable constraints generated by the increasing subsistence costs, decreasing value of wages and the increasing competition from the urban poor. They change their strategies continuously and mobilise their household labour to survive. Those who come with assets are able to maintain their pastoralist production and even open opportunities for those who are poorer. They are also able to diversify their income sources. The pastoralists' process of adaptation in Omdurman have contributed to the emergence of new forms of pastoral production and have extended the mobility of labour to rural areas and even beyond the boundaries. These findings are in line with the processes identified in recent literature on pastoralists in town and urban centres (Mohamed Salih, 1985, 1995; Hjort, 1990; Bovin, 1990). The data supports the views on differentiation within the pastoralists' adaptation strategies, transformation in the pastoral production and the importance of diversification for survival in urban areas (Mohamed Salih, 1995; Bovin, 1990; Little, 1985; Hogg, 1986; Baxter, 1993; Manger, 1996). The study contributes by considering how the gender and age inequalities within the household promote differentiation in the adaptation strategies.

The data presented in this chapter is part of research undertaken in Omdurman town in Sudan in the period between 1997–98. The techniques used for data collection include interviews, life histories and group discussions.

The interviews were conducted with 103 males and 62 females. Life histories were used for 15 males and five females and five group discussions were conducted with children and adolescents. Some key persons were also interviewed. The pastoralist groups researched were in different types of settlements, that is, four villages in south rural Omdurman and three urban neighbourhoods west of it. The groups identified are Kababish, Hawaweer, Zaghwa, Dar Hamid, Bataheen, Jawama'a, Rezaiqat. The chapter explains only some trends of adaptation and does not claim to be exhaustive, as there are many variations among the different groups.

The chapter contains six other sections. The first provides a description of the pastoral setting and examines the dynamics of the urban context in which the pastoralists have to survive. An explanation and discussion of the pastoralists' adaptation strategies with an emphasis on gender differentiation is included in the second. The third section considers the competition of pastoralists for other resources basic to survival in urban setting. The fourth presents the cultural changes promoted by adaptation to the market economy. The fifth section discusses the issues and predicaments raised experienced by the pastoralists and the final section provides insights as to the way forward.

THE CHANGING PASTORAL CONTEXT

More than two-thirds of the Sudan is arid and semi-arid land where the largest congregations of the pastoralists live. According to recent estimates Sudan has 23 million sheep, 3 million camels and 17 million goats. Sudan's livestock population has been on the increase since the beginning of this centuarty and two wet periods of exceptionally good rainfall (1914–34 and 1950–65) added momentum to this trend (Markakis, 1993). However, two recent drought periods (1968–73 and 1980–84) have wiped out large numbers of livestock with far-reaching implications for pastoralism and the pastoralists.

There are three types of pastoralism in Sudan. The first is pastoral nomadism which involves the movement of whole families with their animals in search of water and pasture. Such people live in temporary tents but each group has traditional and exclusive rights of residence and resources over a certain territory known as *dar* (homeland). The resource capital is mainly animals. The second type involve movement of part of the family; the remainder are left in the *dar* where they engage in agriculture and other occupations. The third type is the situation of sedentary groups engaged mainly in agriculture and their movement with animals is undertaken from a permanent base.

The main capital resource of the pastoralists is livestock. Land is communally owned so there is no inducement for individuals to invest in it. Money is needed only to buy grain, sugar, tea, gold and silver. Consumption of sugar and tea is very limited while gold and silver are gifts for women but can be turned into cash in time of need. Animals are sold to provide cash for consumption.

Livestock is important not only for its economic advantage but large herds indicate high prestige; in addition it helps in creating useful links and fulfilling vital social obligations. In any pastoralist group there may be a core of wealthy and influential stock owners and stockless or impoverished pastoralists who survive by being dependent on the rich.

The household is an important economic and social unit. The household members share and coordinate the productive activities under the leadership of the elder males who take decisions of movement and sale of animals. A man can build his animal property from the gifts he gets at birth and increase it by working with his father. Opportunities for girls and women are limited. The division of labour within the household is based on sex and age. But the head of the household keeps control of the family and its resources and emphasises its autonomy. The pastoralists have the mechanisms that ensure the expansion and the continuity of the stock-owning unit through time.

The households of close kin groups move together, cooperate in the management of herds and may share the tax burden. Relatives also assist each other in misfortune and have mutual obligations which enhance their solidarity.

Each pastoral group has its political organisation and administrative units that organise relationships among the divisions of the group. These units are responsible for coordinating relations with other pastoral and sedentary groups and the government.

Generally, the pastoralists are dependent on the ecological environment for their livelihood. The pastoral groups have developed their experience to coordinate the use of resources, but there are incidences of competition and conflicts. These have been aggravated by government policy. Despite this the pastoralists continue to contribute to the economy. Only the recurrent and long droughts forced masses of them to move and change their setting. Many of those in Kordofan and even Dar Fur moved to Omdurman in Greater Khartoum.

The history of Greater Khartoum dates back to the Turco-Egyptian rule when Khartoum became the capital and Omdurman was the capital during the Mahadist state, While Khartoum North flourished with the expansion of the railways and Nile transport and for its connection to Khartoum with the Blue Nile Bridge. With the construction of the White Nile Bridge, the three towns became closely connected and since 1956 they form the capital of Sudan, Greater Khartoum (currently referred to as Khartoum State). Since the beginning of the twentieth century the three towns have been expanding in area and population and each town has its rural sections. In 1904, the population of the three towns was estimated as 81,880 and that reached 202,381 in 1930 and 245,736 in 1956. Omdurman's population in 1905 was triple that of Khartoum and double those of Khartoum North (McLoughlin, 1970). It continued to be the largest town in Sudan in terms of inhabitants until 1964/65. The influx of drought victims and the continuous flow of those displaced by war raised the population figure to 684,000 in 1983 and 1.3 million in 1993.

With the increasing population the three towns witnessed extensive physical expansion. While Omdurman's boundaries from the main market to the squatter areas were three kilometres north, west and south in the 1960s, they have now extended to ten kilometres. The squatter areas have been continuously pushed further out as urban populations increase. Now Omdurman is a province with three local councils.

There are three residential groupings in Omdurman, the urban, including the squatter settlements and displacement camps, the sedentary rural population, and the pastoralists. While the first two groups have been increasing since 1956, the 1993 census showed a decrease of 16 per cent in the nomadic population. This estimate does not include the pastoralists who are settled in villages and urban neighbourhoods. According to community records there are more than 7000 pastoralists in the 15 neighbourhoods and four villages in Omdurman.

The residential areas in Omdurman are divided according to the size of plots, income, and types of buildings. The types of buildings easily demarcate the first-class areas, while the old centre of the town is a mixture with regard to residents' incomes and the types of buildings, which does not fit with the official classification, and the new third-class areas are inhabited predominantly by migrants. This is where the pastoralists live in their own houses or adjacent squatter settlements.

With physical urban expansion, there is a growing number of markets such as the 'Libya market' west of Omdurman which is one of the biggest markets in Khartoum State. It was established in the 1970s as a spontaneous market far from residential areas and for goods brought by traders from Libya. The current boundaries of Omdurman are one to two kilometres beyond the Libya market where many pastoralists live in the residential lands given to them by the government.

The growth of Omdurman and the whole of Khartoum State is greatly affected by the political situation and concentration of administration and services in Khartoum as compared to other rural and urban areas. This has encouraged the expansion of the service sector, banks, businesses, universities, hospitals and communications in Khartoum. This is done at the expense of producers in rural areas. The export revenues from agriculture and livestock are syphoned into Khartoum State.

Since the mid-1980s the economic situation has been considered in disarray (Ali, 1985) and the system in the 1990s was considered to be collapsing. The agricultural and industrial sectors are having problems with reduced production because of shortages of funds, power and inputs. Livestock is facing continuous pressures as a result of agricultural expansion and a lack of development efforts for the sector. The subsequent governments' policies, particularly the implementation of the Structural Adjustment Programme (SAP) measures in addition to the environmental hazards that have hit the country since the 1970s have contributed to the deteriorating conditions.

Despite the stagnation in production, the import trade has been expanding profoundly and contributing to the spread of markets. This is in addition to Khartoum being a market for vegetables and fruits from rural areas. The trading activities have been greatly influenced by the construction of roads and availability of transportation.

The result of the poor level of production and increasing war expenditure have contributed to increasing and spreading poverty. In 1992 about 84 per cent of urban families were categorised as poor. 'The command of the poor over food was slipping at a fairly high rate. At the same time the cost of survival as reflected by the poverty line was increasing in real terms at an annual rate of 2.1 per cent (a rate of increase in nominal terms of 30.1 per cent per annum compared to the food-inflated rate). Thus the entitlement of the population at large was slipping as well' (Ali, 1994, p. 55). The middle class is now characterised as the new poor.

With SAP measures, increased government expenditure on war, the service sector has been disintegrating. Education has decreased in quantity and quality and became unaffordable to the poor. Health services where available are expensive and the quality of care are poor. The other sectors are in a similar situation as no efforts are done for maintenance or improvement to meet the demand of the increasing population.

Historically the three towns have been a labour reservoir, since the turn of the century and until 1950, attracting a continuing flow of workers, but it also provided labour to other areas (McLoughlin, 1970). But after independence unequal development and the failure of development policies have encouraged migration to urban areas, particularly Khartoum. The collapsing economy, environmental haz-

ards and poverty have accellerated migration to the three towns in Khartoum and intensified competition in the urban labour market. The labour force in Khartoum State, and the rate of unemployment, have been increasing. However, in the 1990s the 'formal' sectors, public and private, were no longer alternatives for survival because of the decreasing real wages. The 'informal' sector has been growing. The International Labour Organisation (ILO) 1976 estimated the job opportunities in this sector in Khartoum to be between 50,000 and 60,000 and expected to increase yearly by 5 to 7 per cent. ILO 1987 confirmed the growth as the sector included in that year half of the urban labour force. The informal sector has been growing despite the negligence of the successive governments. It is becoming the resort of the poor, for those dismissed from civil service and public corporations and for the thousands of schools leavers and university graduates. It is a source of additional income for those with fixed-income jobs. An increasing number of housewives and children are also seeking jobs in the market. Thus, the urban skilled, semi-skilled, unskilled, and professionals are competing for sources of income in the informal sector. However, opportunities are very unequal, not only because of the differential in skills, but because some have links to credit sources and government institutions, which makes entry to the market easy. But for the majority who are poor, sources are limited and mostly traditional. Informal sector activities are not easily maintained because of the competition and because the increasing prices and poverty contribute to decreasing demand for commodities and services; added to that are the current government's high taxes and the charges of harassment.

Migrants generally seek waged work in farms, industries, restaurants, the construction sector, and even government offices to be able to save a small amount of money towards starting a small business in the future. Urban dwellers are mostly interested in running a small business as a source of income. Competition for jobs includes men, women, and children, all with different skills, levels of education and financial resources. Opportunities for women are also very restricted and many female university students and graduates compete for a poverty wage. Competition is also fierce among the pastoralists, particularly the women. In the urban context the pastoralists have to adapt to the changing market situation and labour competition. Their chances are often reduced by their lack of education and skills for the urban market (Mohamed Salih, 1985). They also have to acquire knowledge and establish links that facilitate entry into the informal sector and ensure economic sustainability.

ECONOMIC ADAPTATIONS BY PASTORALISTS IN OMDURMAN

In response to the limitations of the urban market and competition with the urban poor the pastoralists have been involved in different careers according to job opportunities available and the relevance of their skills. In addition, many were forced to change from one career to other and survive periods of unemployment.

The differentiation and change in career patterns during a life span have been greatly enhanced by the variety of ways the pastoralists used in their local setting and by the wealth inequalities among them. Those who came to Omdurman can be divided into two groups. The first group includes those who arrived poor with no assets, destitute. The second group are those who managed to escape destitution, holding on to minimal animal stock levels.

Survival of the destitute

This group includes the poor pastoralists who were locally dependent on the services of their affluent relatives and whose survival mechanisms failed. Thus, they came to Omdurman with no assets and therefore most of them depended on relief for the first period following arrival.

Case 1

Ali Ahmed is 40 years old and from the Rezaiqat tribe. He arrived in 1983 with his family and six other households including those of his brothers and other relatives. All their animals died on the way and so they arrived with no assets. They settled west of Omdurman in a squatter area. Ahmed and his brothers worked as guards in houses under construction as these were the only opportunities they found after long days of searching. His wife worked washing other people's clothes in a nearby neighbourhood. Ahmed used to leave his sons in charge of the house and go to the market to earn additional income as his wages were very small in relation to his family's requirements for survival. After two years the house construction was finished and they joined other displaced groups in the nearest squatter areas. For six years Ahmed worked digging wells or as a guard and sometimes in construction. In 1991 the group were forced to move ten kilometres for their settlement which was taken over by the plans for the town. The new area they were moved to brought them nearer to the pastoralists' rural settlement and the livestock market. Ahmed worked as a herder on market days and then took up long-distance herding. He now travels with the animals of wealthy pastoralists for a few months of the year. During the rest of the year he takes different jobs in the market. His wife continued in her domestic work and managed to have regular customers, which has enabled her to save; in 1996 she started a small business in second-hand clothes and is contributing to the household income. The family is given residential land and they have been allowed to build a temporary home on it.

Case 2

Fatma Al Amin is 50 years old and of the Kababish tribe. She came with her husband, sons and daughters and settled in Muelih village, and found work in domestic service for two years (1984–86). But then her husband and sons stopped her from working as they were able to secure the needs of the family. Her husband worked as a well-digger for some time, then as a herder in the nearby villages and livestock market. This gave him the chance to develop useful connections and in the last four years he has been working as a broker in the livestock market. The elder son worked as a well-digger, then as a waged worker in the building sector until he got a contract to work as a herder abroad. Her other two sons worked as agricultural waged labourers in the Gezira¹ and in the last two years they have managed to start a small business trading in shoes in the Libya market. They earn enough for survival. The family has been able to buy goats for milk with the help of the emmigrant son.

Case 3

Abdel Malik is 40 years old and a Kababish. He arrived with his mother, brothers and father in 1984. They worked in well-digging for five years, then his brother saved money and in 1993 with the help of relatives, he was able to go to work in the Gulf States as a herder for four years. Since he returned, he changed his work several times and for the last three years he has been working as a broker in the livestock market and, with his younger brother, he invested in a small business trading soap, biscuits and other household goods. His emmigrant son invested money in small stock back home and a small cart that is used for transportation in the Libya market by one of their young relatives.

Case 4

Hassan is 35 years old. He is from the Zaghawa. He arrived with his parents and brother in 1994, working in the building sector for six years, then he became a specialist in tile construction. Although he has connections with some contractors, the demand for his work is not very high, as there are many who do the same work. He and his brother rented a house

for their own families and parents. Despite their long stay in the town they have still not been able to acquire land or a house.

Case 5

Al Nur is 19 years old. He is from the Dar Hamid tribe. He has no education as in the squatter shelters there were no schools. When he was nine years old he used to go to the livestock market and attend the animals of traders while they conducted their trade. Also he took several other jobs in the market. Currently, he works in the car washing trade and when harassed by the police for this he shifts to selling cigarettes or plastic bags. He is saving money in order one day to be able to have a table to sell fruit or buy a cart to rent out. His elder brother works as a herder. His father is a porter in the market. All contribute to the subsistence of the family.

Case 6

Kaltum is 35 years old, from the Kababish. When she arrived with her family they had only her gold. They sold it and managed to pay for some things for the house. Her husband took up several casual jobs for one year, and then worked as a waged worker in construction until he left to go (illegally) to Saudia Arabia to work as a herder for six months. He returned and established a small business, selling soap and oil. Kaltum has been working in the sale of tea since her husband's absence. She contributes to the family income but both their earnings hardly cover their needs and they will probably not be able to pay for residential land, if the distribution takes place soon.

Case 7

Ibrahim is 40 years old, a Rezaiqat who arrived with his family and kin in 1984. He obtained work as a nightwatchman in a government institution with the help of a relative but the pay was very low so he left the job and remained unemployed for some time in Omdurman. Then he went to the Gezira and took on waged work during the peak season and casual work in the market when there was no demand for agriculture jobs. Since last year Ibrahim has worked as a herder for livestock traders in areas near Omdurman. His wife is a tea seller in the market and with both their earnings they can just about manage. Their sons are street vendors and earn enough to cover their needs.

Case 8

Nafisa is 20 years old, a Rezaiqat who arrived in Omdurman when she was two years old. At age ten she was taken by her father and uncle to

work with a family in Khartoum North and her father used to come every month to collect her wages. She lived permanently with the family. After five years she was married to an old man and had to go back home. She stayed married for one year, but then got divorced and returned on her own to work for the same family as before. She now collects her own wage and is planning to go to literacy classes.

Case 9

Altom is 30 years old, a Jawama'a who came with his family and other relatives in 1984. They lived with a relative who had been in Omdurman for a long time. They worked with him in his restaurant in the market, acquired the skills they needed and were able to take the necessary steps to start up a restaurant of their own. Since 1993 Altom has had a restaurant which he has managed jointly with his brother and from time to time they have help from their relatives when they need it. They now have a house in an urban neighbourhood.

Case 10

Obied is 20 years old. He is from the Hawaweer. He came with his brothers and parents. From the age of 15 he has had several jobs in the market and now he is working as a water vendor in the villages west of Omdurman. He also has a waged agricultural job in the nearby villages. His brother is a herder and his father is a broker in the livestock market. Their women never work outside the house. The family still has no land but they do have a temporary house in one of the villages.

The case studies portray the pastoralists' destitution and demonstrate changes in career patterns and skills within a varied time span. Poor pastoralists are more prone to change their occupations for three reasons: when the income generated decreases in value because of rising prices; when an individual fails to sustain their job or business because there is no demand for their skills, or because they are unable to compete for customers; and very rarely, when they acquire knowledge which provides better opportunities.

But some, like Ibrahim, remain unemployed for some time and thus have to look for an alternative. Hassan, though he developed the skills for a particular job, he has become dependent on the market forces which have not been in his favour. For some, herding has been one alternative available in urban areas, mainly for those who failed to withstand the competition for other urban income sources. Very few undertake herding as a strategy for diversification. They work as hired herders 'but as far as pastoralism is concerned, they are in a downward cycle' (case 1) Despite that, some seem persistent and still struggling to maintain a fingerhold in the pastoral economy (case 2).

It is evident that the range of market activities is rather limited for the poor pastoralists. Their response to urban market competition forced the labour back to the rural area and beyond the national boundaries (case 3).

There are gender differentials as to the jobs undertaken. The women are likely to take a very limited range of jobs as compared to men. These involve mostly domestic work. The essential nature of women's economic activities has changed over time with variations among the groups. For more conservative groups who are resistant to public activity by women, women's work has been related to crisis situations on initial arrival when the families are destitute and the competition for jobs for men is very fierce. Further, among such groups women go in search of economic opportunities following 'family status crises such as widowhood or the absence of a migrant husband' (case 4). Thus, the economic involvement of women of the conservative groups is of a temporary nature of short duration or when there is the possibility of male sources of income being secured. In groups who approve women's economic activity, women change their career pattern according to market dynamics, and some are able to secure good earnings.

There is one further important gender difference with regard to economic activity. Women in the pastoral context carry out agricultural activities while men look down on this type of work, indulging in it only out of necessity. For some pastoralists it represents a mechanism they use for survival in the local setting. In towns, women are completely cut off from agricultural production whereas competition for sources of livelihood has made agricultural work one such source for men. Further, by moving to urban areas women have been deprived of the ownership of important resources which they used to have in their homeland (case 5). These resources are significant for women economically and socially and their loss means importance of the central role of women in society is reduced.

Despite poverty, some pastoralists do not consider using the female labour force. Restricting women from extra-domestic activities is linked to a sense of honour, which makes it inconceivable for young women and particularly for young women still of marriageable age to become involved in outside work that takes them out of their husbands' and agnates' control and puts them in contact with men they do not know (case 6). Women working outside the home is dishonourable to the group and resisting it is a means to preserve identity and to distinguish the group from 'loose' town people. Thus, among such groups, women who transgress the norms are losers. Their work has socio-economic adverse consequences, which may lead to weakening the group support of their household, and marks a differentiation between households in terms of economic status (case 7).

While males, even children, control their decisions regarding their work and the disposition of their income, this is the case of only relatively few mature women who, through their experience of work, become empowered economically, or who come from groups that permit women's economic involvement. In all other regards men have control over the work conditions and decisions related to women's work. These gender inequalities are generated by the patriarchal ideology prevalent among the ethnic groups and this is not often challenged by the urban selling.

Age differentiation among men is important. Al Nur's case shows how the younger generation is drifting away from pastoralism and thus losing skills. This is confirmed by group discussions with some male adolescents and fathers. It indicates that children of the poor pastoralists are more vulnerable to becoming urbanised. This may be the case with the few young girls who are allowed to live with their employers.

Further, girls and young women take very different jobs to those who are older. It seems that career patterns correlate with age. Jobs in domestic labour and market services are undertaken by females, children and adolescents, while running a small business is the career for middle-aged and older women. Mature women are protected from market dealings even among groups who do not restrict women's work. Thus, the economic opportunities are not only restricted by market competition but by the values and norms of the groups.

Although there is growing individualism in the economic pursuit of income, household solidarity prevails, as demonstrated by the cases of Abdel Malik, Altom and Fatma's households. The household is still an economic unit pulling resources together and sharing consumption. Ahmed was able to build a house helped by his wife and daughter. Those who migrate to the Gulf States are helped by relatives to get the work, as in the case of Abdel Malik, while Ibrahim's and Altom's cases demonstrate that ethnic connections are still important in the acquisition of a job locally and even in maintaining it. No pastoralist starves in a town as they share food with relatives. Although most poor urban pastoralists have a source of income, many of them are aware that according to 'local' dynamics and basics for survival, they are still vulnerable. To obtain a source of income is not enough for survival. In urban areas one should have one's own house and several sources of income. Many are convinced that pastoral undertakings should be one source of income. Such a vision, though difficult for the poor, is important as it demonstrates an affiliation with pastoralism.

The different responses to urban dynamics show that some have managed to transcend the destitute state. But it is evident that prospects for upward mobility are greatly restricted (case 8) by the increasing costs of living, though there are exceptional cases as with Abdel Malik and Ahmed.

Labour market competition constrains the possibilities of diversification of sources of income and even creates insecurity. Hassan, though, developed a career, yet the increasing cost of living stopped him securing a livelihood as he is not able to secure an important resource – land for a house – or maintain his labour productivity on a long-term basis. Developing a specialisation restricts the search for alternative sources of income. Hassan and those well diggers who sit for hours and days in the market waiting for customers demonstrate this. However, the cases show that the poor are diversifying their sources of income through the use of household labour. This is a means not only for subsistence, but for dealing with the insecurity of the urban market. Poor pastoralists are aware that the diversification of sources of income from family labour along with continued solidarity are basic to their survival in urban areas.

Successful survivors

This is the group whose mechanisms of survival in the local pastoral setting are successful with regard to securing some animal stock and cash assets. However, there are differentials within this group. While for some their animal stock or cash levels are moderate, others came into the urban setting with some wealth. For all, their assets are an insurance against destitution and give them more choice as to sources of livelihood. Further, their assets greatly help them in income source diversification.

The following cases demonstrate some adaptation trends among those who come into the town equipped with a range of assets: 2 cows, 20 sheep and 25 goats or 12 sheep; 20 goats and some cash; few goats and some cash; or cash only.

Case 11

Sakina is 32 years old, unmarried and from Dar Hamid. She came with her father and the brothers and their families. They settled in a squatter area and survived for some time after arrival by selling animals and milk. Her father works as a broker in the livestock market and her brother had several jobs in the market before going back home. Sakina started off with housework because it was easily accessible. Then she realised that food and drinks vending would be more profitable so she changed to tea selling as that can be started with a very small sum of money. She had her small enterprise in the Libya market and that helped her to save and arrange for a shift to the sale of food. She made an arrangement with a relative who is a butcher. She takes meat, fries it, serves it and pays him his expenses at the end of the day. She has been securing good earnings and, with her brother, she managed to buy some animals and he is now back home farming and managing the animals, able to support his family who live with her and their father in Omdurman.

Case 12

Salih is about 50 years old. He is from Dar Hamid. He came with his six sons and daughters and their mother. He has a good amount of money as he sold his animals before they died. He and his elder two sons had several occupations before they were able to buy a stock of animals that his two elder sons are now managing in their original homes. His younger sons have worked in different casual activities and now they are small traders in the Libya market. One sells fruits and the other biscuits, soap and other household items, while one of the married daughters has been working in tea selling since her husband has been away in Saudi Arabia. Each of the two sons and the daughter invest their savings in buying animals which are added to the family stock.

Case 13

Mohamed is 35 years old. He is from the Zaghawa. He moved with his wife and children in 1984 and settled in Zaglona, a squatter settlement outside Omdurman. He brought with him some of his animals and was selling milk in the adjacent neighbourhood. But they were forced to move (in his words: 'we have been thrown away') far from the original area and that means losing milk customers as transporting it was not possible from the new area. Therefore, he decided to get into trade. After some time, he was able to buy a shop in the Liyba market selling clothes, while his wife sells milk, ghee and charcoal near their newly built house. He has a joint investment in livestock with his brothers and they have a herder managing their livestock.

Case 14

Abdel Gadir is 50 years old. He is Hawaweer and lives in one of the villages south-west of Omdurman. He came with his family and other

kin (eight households). They brought some goats and sheep and lived on the sale of these animals for the first year. He worked for two years as a herder in the livestock market. One of his sons worked in several occupations until he secured a contract for a herder's job abroad. The money the son sent was invested in the purchase of small stock entrusted to herders back home. He also bought goats for milk at home in Omdurman. His other sons are in trade in the Libya market. With his sons' help he acquired a stock managed by herders in the vicinities of the villages in rural Omdurman. As the livestock are not moved a long distance, sometimes he has to feed them with commercial fodder and grass.

Case 15

Gasim Alseed is 30 years old. He is a Kababish. He came with his family and other relatives and they had a few milking goats and a small amount of cash from the sale of what was left of the stock. He worked as a waged labourer in construction for three years. Then he changed to herding for a wage. With time he saved some money and borrowed some from relatives and used that to buy a flock of sheep. He now herds the sheep over a short distance and sells them in time of need. His brother was not successful in any activity in the urban areas so he went back home in 1990 and is working as a herder there. Their father is a broker in the livestock market.

Case 16

El Amin is 33 years old and is from the Kababish. He had been to Omdurman several times before 1983. He used to come during the school vacations to work in the market. His father is a wealthy man with a large herd of cows. His brother used to trade with Egypt. In 1983, his father lost most of his cows and he moved to Omdurman and sent for their other relatives. Since then most of the extended family have been in Omdurman. He got married when he was a student in high school and finished his studies in El Obeid in 1986. He worked as a teacher until 1990. Then he became a government employee and currently he is an accountant in the local council near his home. Through his network in the job he was able to help his family and all his kin to get houses in the same neighbourhood. He has invested jointly with his brother in some cows which are herded in the vicinity of the town and they sell milk to milk distributors. He also bought cows and goats in their original homeland and his grandmother is taking care of them. He with his children go to help his grandmother during school vacations. He also does some cultivation.

The second set of cases demonstrate that the different trends of adaptation among the pastoralists in Omdurman have been mainly influenced by the possession of resources which were utilised to secure an income on first arriving in Omdurman. The cases compared to the poor pastoralists seem to have better choices of career available. Thus, they seem to maintain their careers for longer than the poorer immigrants. Further, they can change to careers with better prospects and some change because they have managed to save in order to invest in more secure undertakings.

One predominant trend among this group is the maintenance of pastoral forms of production, with some variations. The sale of milk for Mohamed was not a secure source of income as he found competition from the owners of reconstituted milk factories. His wife had to restrict the sale of milk to the neighbourhood as there is abundant milk provided by dairy farms, and powder milk is available and relatively cheap. There are also 'absent pastoralist', 'urban pastoralist' and 'urban herder' trends. Also noted in the cases of the urban pastoralists is the change in the movement of herds. There is a tendency to move shorter distances and depend partially on commercial fodder.

The case of El Amin demonstrates the career pattern for the few educated male pastoralists. His is the pattern of those with less than university-level education, while graduates seem to obtain stable government jobs and income source diversification is provided via involvement in pastoral production. This category included a judge and a banker. Among the groups surveyed no woman was an employee except for one or two who had migrated into the urban setting decades ago. Girls are not allowed to continue in education to get certificates that qualify them for professional careers.

It should be noted that the processes of income diversification and the sustainability of activities within the pastoral groups are continually challenged by the urban market constraints of street vendors and changing conditions such as relocation, lack of space etc. Sakina had to change her place in the market several times as other tea sellers moved near to her to compete for customers. She also had to stay for days without work after police harassment in the market. Also Salih's sons took a long time to secure a place in the market as every day there are newcomers to the market and places are not registered. They paid a shopkeeper to allow them to use the premises in front of his shop.

The income diversification strategies are based on the utilisation of household labour, thus giving the conventional division of labour a new dimension. The trend is for young males to take different careers, accumulate capital which is used for buying livestock to be reared by one to two older members of the family or left to hired helpers in the homeland. This diversification strategy emphasises the solidarity of the household and linkages with kins beyond the urban areas. Among the groups with less restriction on female mobility, some women are able to play an important role in the diversification of sources of income as some are acquiring market skills and are able to maintain good earnings. Some of these women also invest in domestic animals as diversification. for example, rearing several goats and sheep to secure milk and then to sell them in time of need. These women are far ahead on the path of economic empowerment. This is where the local framework of rules promotes opportunities for women in rural areas. As for other groups the permissiveness of women's mobility is a local norm but it interacts with the norms of the new locality. The influence of the latter is evident in the economic indulgence of the women in the conservative groups. Their activities indicate a process of accommodation by such groups and a challenge to the local framework of rules.

Among the successful survivors, there are the wealthy pastoralists. Their problem is not securing subsistence, but how to maintain their wealth whilst in the new locality. Many of them succeed, but when conditions improve in their local setting, they take their main stock home, and become urban-based travelling with the herds for limited periods and leaving the responsibilities to family members, other kin or hired herders. This is mostly the case of those with a large stock, for example, a few hundred camels, sheep or goats. These are the urban-based pastoralists, whose responses to different conditions also vary. Some restrict their herding activities to areas near Omdurman and manage their herd over short distances, and thus have no production linkages with their homeland.

However, there are different responses. Some shift from animal production to trade and agriculture. This trend includes the majority of the Zaghawa who come from Dar Fur and think that their homeland is too far to manage a herd all the way from Khartoum. In addition, many invest successfully in trade and are dominating the Libya market in cloth and electronics trade. These are the wealthy ones who became urbanised, although they maintain their conventional social institutions (Mohamed Salih, 1995). The following cases represent more trends.

Case 17

Abdalla is 49 years old and from the Bataheen. He moved with some of his herd. He resided in Alsafa village, 17 kilometres from Omdurman. He hired herders for grazing his animals. He invested also in agricultural schemes and transport, and engaged in local livestock trade. His brothers also came with their herds and have been able to build permanent houses for themselves in the village. They are his partners in agricultural and transport investment. They keep some of their herds in small ranges near the village and they depend on commercial fodder. The rest of their herd is kept in its original locality under the supervision of some relatives. They are engaged in livestock trade.

Case 18

Mirghani is 40 years old. He is from Hawaweer. He migrated with his family and had some camels, sheep goats and cash. With his brothers and relatives they were able to maintain large stocks. They depend greatly on hired herders as now they are permanently settled in rural Omdurman. But they sometimes move with their herds. They invested in trade and agriculture.

The wealthy group managed to survive. They learned the lesson as to the consequences of depending on a single productive activity. Therefore, diversification has also been used as a strategy. Some diversify by investment in trade or transportation; among them are the absent pastoralists, but others still move with their herds and their base is the town or the villages near Omdurman.

The establishment of the Animal Wealth Bank has encouraged some wealthy urban dwellers to be involved in livestock trade. These are competitors to wealthy pastoralists and are looking for high profits and are aware of the market mechanisms. To cope with such competition some pastoralists in Omdurman have to pull their resources together to compete with the urban investors, who have alternative sources of credit in livestock trade.

Among the rich, women are not involved in income generation in urban areas and they own no animals or milk for the sale of their products, but many have gold. Therefore, women of wealthy groups became deprived of their sources of income and become totally dependent on their males.

Further, some of the children of the wealthy pastoralists are currently more pastoralism oriented as they are given certain responsibilities related to animals after school; though they are far away from any urban market skills it is uncertain how urban dynamics, particularly education, will challenge their future involvement in pastoral production.

To the urban rich pastoralists the urban settlements have improved their livestock, enriched their knowledge, experiences and enabled them to diversity their strategies and protect their herds and livelihoods against ecological stresses. This is in congruence with Hjort al Ornas's (1990) view of 'the role of small town changes from being an additional arena for pastoralists in the struggle to diversity, to being the motor for market-oriented intensive livestock rearing systems' (case 9).

COMPETITION OVER RESOURCES

Survival in urban areas not only indulges pastoralists in competition for sources of income, they have to compete for other basic resources like land, water and social services. They also have to secure positions in the state institutions, or create their own economic and political organisations to protect their interests and maintain their survival strategies.

For the urban pastoralists securing a foothold – land or a house – in urban areas is one basic strategy for future protection against environmental hazards. At the same time ownership of a shelter is basic for survival in urban areas as the alternatives of renting a house or living in squatter areas makes one vulnerable to harassment and insecurity. The pastoralists have to compete with other rural migrants and the urban poor for that. Thus, while some have secured land and built houses, many are still waiting and are experiencing insecurity.

Competition for other resources like water and social services is part of the daily struggle for the pastoralists in urban areas. The market conditions shape their survival mechanisms and achievements, particularly those of the poor pastoralists, as the state has shifted the responsibility of provision of services and its costs to the people. The amount of water consumed, the continuity of the children in schools and the utilisation of health services depend on a family's earnings. The competition is high as local social institutions and the services provided are very limited and costly. Poor pastoralists have to compete with the urban poor for the free services provided by some NGOs in the area. For higher educational levels and specialised health services the pastoralists have to compete with urban dwellers in the centre. For example, for childbirth delivery complications the only maternity hospital is in Omdurman. For malaria, which is a highly prevalent disease, the central Omdurman hospital is the only option for the poor.

While membership in the state institutions has been characterised by avoidance when pastoralists first arrive in urban areas, later, their adaptation strategies necessitate participation and involvement in state institutions at different levels, national and local. These have brought urban pastoralists into competition with urban dwellers and other pastoralist groups. The aim is to promote the pastoralists' interests by influencing competition for resources from within the state institutions. This has enhanced pastoralists' membership of popular committees, local councils and the general assembly. But considering the political dynamics and dominance of certain political groups, it is unlikely that such participation strategies will end the political marginalisation of pastoralists.

Concurrently, the urban pastoralists revived their native administration which gained recognition for activities in Khartoum. Their newly created institutions such as the Council of Shaykhs among the Kababish has not undermined the old leadership in urban areas. Although new leaders appeared, the old and new leaders are engaged in quests for autonomy and socio-economic development. In this connection the pastoralists' local and urban units can be seen as engaged in competition with state institutions. The leaders are aware of the state's neglect of pastoralists and the stress experienced as a result of its policies. The aims of community-based organisations (CBOs) are to protect livestock producers from exploitative relationships generated by state policies and to work for improved quality of life of their groups. The latter are major undertakings that should be the concern of the state. With the negligence of the state of such responsibilities, the NGOs or CBOs are taking over the responsibility. But the CBOs have to work out things jointly with the state getting licences where necessary and cannot disregard its presence. The leader of the Kababaish, for example, in Omdurman struggled to be in control in order to protect the management and use of resources and resolve conflicts in the eastern part of their *dar* as it is nearer to Omdurman, and only recently such responsibilities were officially recognised. This is essential as the expanding agricultural schemes have been limiting the pastoralists' grazing areas. Such a role by the native organisation is sensed as essential to reduce the tension created by government policies. But the establishment of schools, Khalwa and dispensaries undertaken by some groups in villages south of Omdurman and intended by others after settlement have to be created with permission from the state and subsequent contribution of manpower.

It should be noted that the relationship with the state is mainly conceptualised and articulated by the leaders and affluent members of the pastoralist groups. Grassroots consent is never attempted or ensured. Pastoralist interests are usually mediated by the groups' leaders. Thus, the pastoralists are neither completely dependent on the state and market nor on their rural setting. But in both settings, their interaction and engagement with the state is minimal. The aim is to deal with competition for resources within the urban locality as well as the rural setting.

CULTURAL ADAPTATION: ACCOMMODATION AND RESISTANCE

The findings of this study show that adaptation by pastoralists in urban areas has not merely been a process of economic survival and a quest for sources of income. The pastoralists' life in their local setting is shaped by many socio-cultural factors. Their resources and economic assets and production relations are related to a cultural framework. There are certain values and traditions regarding the use of resources, property ownership and the division of productive roles. Similarly, their social institutions are shaped by certain cultural elements that define the bases of their social relationships by identifying resources, activities, actors and roles.

The commoditisation of pastoral production is a process with its socio-cultural bases and linkages. The destitution and insecurity experienced during and after drought and the survival strategies adopted in urban areas have challenged the indigenous values related to pastoral production and the pastoralist way of life. To urban pastoralists, the new emerging values are:

- Pastoral production is not a secure sustainable source of livelihood.
- Prestige is not necessarily reflected only by animal as wealth.
- The successful pastoralist is the one who has a house and an income source in Omdurman and animal stock in the homeland.

Ostensibly, high prestige is associated with the ownership of several houses or plots of land for houses and/or large investments in trade or agriculture or transportation and livestock.

Many urban pastoralists have developed the notion that the traditional pastoralist way of life is difficult while in urban areas there are many services and facilities that make life relatively easy. The pastoral life lacks social amenities which, though limited in urban areas, are available. Such a high evaluation of urban life is more prevalent among women whose responsibilities in the pastoral setting are tedious.

The importance of education for the individual is emphasised by most groups. This shows how they are accommodating urban values. Further, the new pastoral leaders are those who are educated. Those who managed to increase their wealth and successfully diversify their incomes are families with educated members.

Very few credit the urban life with a growing awareness of and accessibility to Islamic teachings and practices, as compared to its negligence in the pastoralist life. This is a value accommodated by a few young educated leaders, but it has not been raised as a central benefit by the majority.

The limited job opportunities and competition for sources of livelihood has maintained and solidified the values related to solidarity, generosity and hospitality. Solidarity is basic for survival despite the change in its aspects. But the pastoralists emphasise generosity and hospitality to distinguish themselves from urban dwellers and protect their identity. In addition solidarity and obligation towards the household have became essential to dealing with urban challenges to income source diversification. For that reason, solidarity within the household persists irrespective of distance. This is evident in economic support given by those who go abroad or that exchanged with those who are in the homeland. Although such relationship patterns are not exclusive to the pastoralists, the general exchange process prevalent among many groups mostly involves dependency of the rural household on members in urban areas. For the pastoralists, the savings from work in urban areas are invested in animals in the homeland and these are used to generate incomes that are consumed again in urban areas.

The set values and ideas related to gender construction have undergone challenges which differ according to socio-economic status and ethnicity but there is resistance to change in gender power relations. No major changes have occurred in the basic ideas and values related to gender power relations except that some permissiveness and flexibility among some groups has developed. For some, this is a continuation of what is prevalent in their urban setting and for a few it is either a response to urban constraints or an accommodation of urban values. This is similar to what happened to the patriarchal values defining inter- and intrahousehold relationships. These responses to urban processes involved changes in the dynamics of household relationships. Due to urban dynamics, economic independence of males in poor pastoralist households is not contributed to by the household and is not related to age and marriage as used to be the case in the rural setting. The sons start economic careers at an early age. Members of the same household may work in different careers. Among the affluent households, economic undertakings are mostly based on family wealth, division of labour and cooperation. Thus many of the processes in the pastoral setting may continue with some variation.

The divergent patterns of economic relationships which are ostensible in urban settings have challenged the power of the head of the household and elders as controllers of economic decisions. In the new setting the head of the household participates in investment decisions but does not control decisions on the income generated. However, the male elders have retained their hold on decisions considering marriage celebrations, extra-household relations and the mobility of females.

The efforts of pastoralists in temporary as well as permanent settlement in Omdurman to cluster themselves together as members of lineages and tribes have resulted in the existence of very small clusters within neighbourhood and larger ones in villages. The pastoralists in urban settings have to deal with other ethnic groups, pastoralists, urban dwellers and migrants. Their interaction for decades with the other groups has involved cooperation and exchange of gifts in everyday life or on social occasions. The framework of relationships is conditioned by rules imposed by males. Interaction is generally rather restricted as the pastoralists are conscious of the need to preserve their distinctions and to resist as much as possible any threats to their cultural framework.

ISSUES AND PREDICAMENTS

Despite that, the pastoralists have been in Khartoum State for more than a decade, yet many are not fully urbanised. Even the losers of the game are still hoping to get a foothold some time in the future. One pastoralist said: 'A pastoralist cannot live without animals for a long time.' Therefore the issues to be raised differ among those who have a strong hold on pastoral production systems, those on the margins and those who are out of the game. The major task is to discuss the major issues and predicaments related to different pastoral groups in order to be able to come out with a vision for development.

There are different views among the pastoralists as to the implications of their urban settlement on their productive pursuits. The affluent and successful pastoralists think that the knowledge and experiences gained by their urban settlement have greatly promoted pastoral production. This is explained by Abdalla: 'We are now not fully dependent on natural resources, we have means to reduce distances between grazing areas, to provide supplementary feeds and to protect our animals from diseases.' Further, producing for the market has reduced the tendency for overstocking and the urban pastoralists now have alternative movement patterns, moving shorter distances and using more commercial grass and feed supplements. To some, this has reduced competition for resources in their homelands but has increased the costs of production which are beyond the capabilities of many pastoralists in Omdurman.

To pastoralists, there are threats and predicaments generated by state policies and market forces. The state has no clear policy for pastoral production. In fact the policies of expansion in private agricultural schemes are generating problems for pastoralists as the schemes interfere with movement patterns. The results are tension and conflict between pastoralists and farmers. The alternative of increased dependence on commercial fodder increases the costs of production (see Ahmed, this volume).

The pastoralists' leaders are aware that there is marginalisation and exploitation of the pastoral producers. The dominance of urban merchants and exporters is greatly enhanced by facilities from banks and the state. The institutions established by some pastoralists aim to challenge the dominance of urban livestock merchants and their exploitation of pastoralists. The issue to be raised here is that these new institutions have not developed alternative mechanisms to end the exploitation of actual producers. Controlling purchases from producers and giving them relatively higher prices does not end exploitation.

An important issue is that the contractual relationship between urban-based pastoralists and the herders involves exploitation. The latter are paid in cash whose value is decreasing rapidly and wages are small in relation to effort. Sixty thousand Sudanese pounds (less than US\$40) a month would not be enough for a household for a week. The original arrangement of paying in the form of animals holds more value to the herders.

One important issue is that it is uncertain how the prevalent high inflation related to urban trade among pastoralists influences the pastoralists' investment choices to the disadvantage of pastoral production. The choices are also likely to be influenced by risks/prospects related to agriculture. Regarding the emerging prevalent exploitative relations in pastoral production, it is a more secure position for waged workers and small stock owners to maintain their marginal status in pastoral production and to seek prospects in other careers. This is a policy issue if the pastoral sector is to maintain its contribution to the economy. It is an issue of urgency because unlike other sectors the knowledge, skills, tolerance and culture needed for pastoral production cannot easily be taught.

One issue related to the future of pastoral production sensed and raised by urban pastoralists is the dissociation of their younger generation from pastoral production. Despite the efforts of some of them to cultivate and keep links between their children and animals, it is unclear how this can be maintained with changing values towards education and the indulgence of children in gainful, relatively easy, undertakings in urban areas. Extended residence in the urban setting has constrained parents from transmitting values related to pastoral production and patterns of life. The issue for the urban pastoralists is how to link their children to the pastoral life and how to maintain and cultivate pastoral production skills in their children.

Gender issues among the pastoralists are sensed more acutely by women than men. This is because the urban setting accelerated the deprivation of and discrimination against many pastoral women. Very few have managed to promote their status in urban areas. One major gender issue is that in the urban setting, many women have lost resources and thus sources of income they used to have in their pastoral setting. They are not able to practise any agricultural activities. The majority are restricted from having any economic undertakings in urban areas. Thus, they have eventually lost the centrality of their role to the household. Some raised the issue of being completely dependent on men as compared to their relative economic independence in their pastoral setting. Another issue for women isolated in their urban homes was the abundance of time they have and the limited alternative activities they can undertake. The change from a busy schedule and heavy burden of responsibility to almost idleness is creating dilemmas for them. They greatly appreciate saving the effort they used to exert in bringing water and collecting wood, but they are bored with the idleness that urban life brings.

Male dominance and the limitations on female mobility is another gender issue adding to the dilemmas of some women and which are creating broadening distinctions among women. Some are isolated at home, others work in the market and a few are allowed to go to market and conduct home-based business. The issue raised by this study is how economically empowered women are able to promote challenges to the male dominance and set the path for other women. It has been argued that the prospects are not very great for such influence because the state policy is to consolidate the domestication of women; the women's movement has therefore been greatly hampered by state policies.

Although education is one of the highly appreciated merits of urban life as compared to the pastoral setting, aspirations are for a limited level of education for women. Domestic skills are still considered as the priority for women. Among the pastoralists cases of girls being deprived from school as their labour is needed home are not uncommon. This is not an issue exclusive to the pastoralists, but a problem prevalent in rural and urban communities. Thus, it is a policy issue that has to be addressed in the context of efforts advocating children's rights and improving the quality of life of the female child.

Two interlinked predicaments for the pastoralists are their marginal status in urban areas and their limited accessibility to social amenities. Several factors contribute to the pastoralists' marginality. They are no longer recognised as displaced. They are not recognised officially by the state or NGOs or donors as a group in need of assistance and development. The pastoralists' attempts to distinguish themselves from urban settlers and maintain their pastoral production and homeland linkages contribute to their marginal status. In their marginal urban setting they have to compete with millions of urban poor for limited social amenities or have to depend on self-help for basic social amenities. This is a predicament if the social amenities are among the merits of urban areas justifying the urban settlement of pastoralists.

Overall, some of these are issues of concern to most pastoralist groups and the issues and their prioritisation vary among the groups, particularly according to wealth and gender. But they are dilemmas identified from a human rights perspective.

THE WAY FORWARD

It is apparent that the pastoralists' main agenda for development is to maintain the urban quality of life with social amenities and alternative career patterns in addition to developing pastoral production. It is clear to all pastoralists, even those who are outside the system, that survival can only be achieved by secure undertakings in both the urban and local settings and not only one of them. To consider the pastoralist agenda, there is a need to deal with the issues and predicaments challenging and constraining their urban adaptation. That in turn entails identifying the development actors, their expected contributions and constraints to effective roles for integrated development.

Considering the government policies and priorities, and pressures of war (see Ahmed, this volume), very little input should be expected from the government. As to the national NGOs the prospects for an active role are great as they have been carrying burden of development in the country since the beginning of the decade. The problem is their low awareness and concern with the pastoralists' problems and needs, while the community-based organisations (CBOs) are the main actors that are responsible for mobilising pastoralists towards a participatory role in improving their situation and for negotiating the government support. They are further responsible for raising the concern of the NGOs with the pastoralists' needs. Both the CBOs and NGOs are responsible for identifying priorities for the development of urban pastoralist communities and the necessary strategies for mobilising local resources. Then they have to seek support of UN Agencies and donors.

The CBOs have to address their constraints to make their role effective. They have the conceptual problem of attempting to share power at the centre rather than pressurising the centre for resources with which to address the local problem. They have to concentrate on strengthening their relationships with their constituencies. The CBOs among the different ethnic groups must network with each other to decide on their agenda and roles in the development of pastoralism. That may entail questioning their linkages with the Pastoralist Union with which all claim to have no knowledge or connection. The dilemma in this context is that the pastoralist CBOs need to build capacity for planning, networking and mobilisation. This can be addressed through partnership with NGOs and the support of donors.

The orientation of the government and other development actors should focus on how to develop a new thinking about pastoral development. This rethinking must consider constraints of wider societal contexts, the needs of the local setting and changing situations as well as the issues and predicaments of the urban pastoralists. Thus, development thinking should go beyond the traditional views which concentrate on technical aspects and animal wealth and neglect the humanistic and quality of life perspectives. This can only be developed with the integrated efforts of the CBOs and NGOs as the latter can assist the CBOs to consider human rights issues to which the CBOs have low sensitivity.

Although the constraints on the actors of development are tremendous, the CBOs and NGOs should not be discouraged. This is because there are some strengths and opportunities that can be a base of action.

The strengths are:

- the awareness of CBOs
- the existence of many migrant CBOs with experience in rural development
- the readiness of affluent pastoralists to provide resources
- the persistent linkages of with home areas
- some priority issues for pastoralists are also priority for many NGOs with concern and experience
- the initiative of some educated men to find assistance in planning community development.²

The opportunities are:

- there are international NGOs with concern and experience of pastoralists
- many NGOs concentrate their activities in providing education and health services which are priorities to pastoralists.

The responsibility of the researcher is to orient the pastoralist CBO leaders with research findings and recommendations and to discuss with them the way forward.

NOTES

- 1 The *Gezira* is the largest agricultural irrigation scheme in the world. It is located between the Blue and the White Niles about 80 kilometres south of Khartoum.
- 2 The approaches of two of Kababish leaders to the staff of the Economic and Social Research Institute and that of the Hawaweer member of the National Assembly to the Ahfad University For Women are good examples.

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Research-Led Policy Deliberation in Eritrea and Somalia: Searching to Overcome Institutional Gaps

Martin Doornbos

Situations of resource scarcity and post-conflict reconstruction contexts, along with various others, throw up the need for institutional mechanisms that facilitate arriving at relevant choices among alternative priorities and agendas. Such mechanisms, which can help address competitive claims on resources or reach consensus about actions to be followed, have been found needed at all times and in widely different situations. A history of mankind hence also contains a chronicle of innumerable efforts made to try and devise relevant institutional processes for the deliberation and reconciliation of strategic choices. Still, it is equally plain that constantly changing contexts tend to cause them to loose their effectiveness, turn them obsolete, and place them in need of revamping, revision or replacement.

Clearly, then, the search for relevant institutional mechanisms towards reconciling resource conflicts and prioritising policy actions is inevitably a never-ending one. Such mechanisms have run from time-honoured procedures for the resolution and management of conflicts over access to natural resources among rival pastoral groups, to novel institutional approaches for international dispute settlement and post-conflict agenda setting pioneered by UN agencies and others. Of the former, Ayelew Gebre provides an interesting example for the case of the Karreyu and their neighbours in this volume. Of the latter, the present chapter will discuss one specific instance that was recently initiated. Generally, the urgency to have adequate mechanisms in place only gets enhanced as institutional gaps and failures in this respect may continue and exacerbate the conflicts of interest concerned, and leave agendas for rehabilitation and reconciliation ambiguous and without relevant choices.

Whatever their vast substantial differences in other regards, what such institutional mechanisms have, and must have, in common to be viable are essentially two attributes. One is a capacity to bring in all the different stakeholders on a particular issue; the second is their ability to provide adequate information about the implications of alternative choices to be made. Beyond this, of course, many other elements may be found added to meet a variety of different purposes and requirements.

This chapter seeks to explore this area of institutional innovation with reference to the problems faced in respect to post-conflict rehabilitation in two countries in the Horn of Africa, Eritrea and Somalia. I will discuss the scope which forms of participatory action research may offer towards clarifying policy issues and choices in societies emerging from severe internal crisis and warfare, based on experiences with the UNRISD War-torn Societies Project (WSP) started in 1995 in Eritrea and Somalia as well as some other countries. It is this chapter's premise, though, that the search for adequate institutional mechanisms which this project represents is of similar relevance to situations of protracted resource conflicts, which only with adequate information and deliberation about likely outcomes and repercussions of actions taken stand a chance of being properly addressed. Also, the specific approach discussed here is only one out of a broad and growing range of methodologies that emphasise the importance of research-based and participatory modes of collective problem solving (cf. Leeuwis, 2000).

BACKGROUND

Where havoc reigns, everything becomes a priority. It is a commonplace to say that in countries emerging from profound conflict, especially internal conflict, key and pressing problems of numerous kinds must be addressed all at once: demobilisation and re-integration of ex-combatants, resettlement of returning refugees, physical reconstruction of roads, bridges and telecommunications, establishing effective and legitimate government structures, provision of food security, health facilities, schools and other basic services, mobilising trade and productive activities, ongoing efforts towards reconciliation among former adversaries in fragile situations, and many more. But then, how does one prioritise among key problems, and how do they in turn relate to one another? To what extent are there common outlooks as to what should have priority among the main actors on the policy front, and how do their agendas compare? Is there in fact a common understanding of what is at issue in various areas? What basic data are available on which to base judgements and initial policy action, or what would need to be mobilised in this regard?

Evidently it would not be too difficult to extend the range of these questions. Together, they point to the need to address a potentially critical gap in the chain of steps required for sound reconstruction initiatives and policy formulation towards political, social and economic rehabilitation in post-conflict situations. This gap is basically twofold, namely, first, to mobilise adequate fact finding on (a) the dimensions of basic needs and issues in key policy areas, and (b) the actions that various actors on the policy front are undertaking or intending to undertake; and second, of ensuring meaningful feedback between research findings and policy action, and vice versa. Implicitly, though, addressing these needs may at the same time serve another, equally important purpose, namely of bringing about a dialogue among different, possibly opposed, policy actors and thus enhancing mutual understanding about each other's priorities with respect to various issues. In short, the question is through what mechanisms research can be made relevant to policy dialogue and action, and how policy actors can be drawn more closely into discussion of research results as well as of identifying research needs. To put this question in context, however, it may be useful to first say a few words on the proliferation of war-affected contexts in the post-Cold War era, and on various lines of action and research that have followed in its wake.

NEW AREAS OF ACTION AND ANALYSIS

With the increasing incidence of internal conflict in various parts of the world since the subsiding of the Cold War, there has been a proliferation of efforts and approaches to conflict mediation, reconciliation and resolution, as well as at peace-keeping operations. But beyond conflict resolution, if successful, a whole set of relatively novel situations have emerged (that is, novel at least in terms of their frequency), namely of post-conflict contexts in which rehabilitation, reconstruction and development are the order of the day.

Such post-conflict situations may differ sharply from case to case, depending on the nature of the conflict out of which they emerged as well as many other contextual variables. Typically, however, they also have a number of characteristics in common, such as:

- a certain fragility of the new situation, potentially requiring ongoing reconciliation efforts among former adversaries
- a possible policy vacuum, or at least a multitude of issues requiring urgent policy attention
- a whole range of policy actors, internal as well as external, trying to get a grip on the situation and seeking to make a meaningful contribution towards a return to normalcy
- among these various agencies, a fair chance of overlapping agendas,

if not mandates, and a need to avoid duplication or cross-cutting activities

• last but not least, a new government trying to establish or reestablish itself.

Almost invariably in such post-conflict contexts, among the immediate challenges requiring policy attention and resolution will be:

- programmes for the return and resettlement of refugees
- issues of demobilisation and reintegration of ex-combatants
- the safeguarding of food security and the rehabilitation of agriculture
- the reconstruction of basic infrastructure
- resource mobilisation for human and social development
- the establishment or re-establishment of effective and meaningful governance, including a workable judiciary.

Of course there are usually numerous other more specific areas in need of rebuilding, such as school systems, health facilities, police functions, courts, trade regulations, taxation capacity, and many more. It will be evident, however, that the amalgam of broader issues just mentioned and the range of actors and activities typically involved have rapidly come to constitute a novel field of attention and engagement, in terms of practice and of analysis. It may be useful, therefore, to further demarcate this emerging field.

On the policy and actor side, one will typically encounter multilateral agencies such as UNHCR, FAO/WFP, UNICEF, UNESCO, UNDP, UNFPA, WHO, UNCTAD, plus various bilateral agencies and the EU, a host of international NGOs such as OXFAM, MSF, ActionAid, ACCORD, Christian Aid, Lutheran World Service, and so on and so on, all in addition to the relevant government bodies and ministries, if in place, that have been charged with handling issues of reconstruction and development from the internal side. Besides, depending on the particular situation, there may be another broad range of community groups, civic organisations, professional bodies, and, last but not least, political groups, keen to have an involvement in restoring and reshaping social and economic relations in the society concerned.

Again, on the analysis side, it is generally useful to recognise a dividing line between research on conflict situations (with a focus on causes, prospects, exits, mediations, reconciliation methodologies, etc.) on the one hand, and research on post-conflict situations (with its main

focus on rebuilding, rehabilitation, reintegration, etc.) on the other. Nonetheless, a focus on the anticipated needs, issues and potential for future cooperation in rebuilding can at times be helpful and illuminating as a point of orientation towards finding an exit to conflict situations (Doornbos *et al.*, 1992).

On post-conflict rebuilding, one has seen a rapid proliferation in recent years of research, academic as well as commissioned, on several key dimensions of the processes concerned. Numerous studies of returning refugee programmes, of different modes of reintegrating ex-fighters, of food aid and food security requirements, of the scope and need for human resource development, and of the processes and prospects of social, cultural and political rebuilding, have been undertaken by policy-oriented research centres, NGOs, and multilateral agencies. Naturally, there is a strong policy orientation to most of this research being undertaken, and in principle an interest to illuminate issues and policy choices through relevant fact-finding research. In some specific areas, also, such as that of reconciliation, the research concerned is more directly action-oriented and has come to be based on highly specialised methodologies.

Many of these themes are interrelated, both substantively or as research themes. There are actual or potential interconnections, for example, in regard to the reintegration of ex-combatants and of returning refugees, and the pros and cons of separate programmes or single comprehensive programmes in catering to their respective livelihood needs (Klingebiel et al., 1995). Other interconnections can be identified between policies of resettlement and of the provision of food aid, focused on the question as to which kind of approaches may best safeguard and promote self-sufficiency and food security for returnees. Again, resettlement itself as well as food aid per se constitute terrains of ongoing debate on the relative merits of alternative kinds of policy interventions (Clay et al., 1998). While many of these and other specific sub-fields have already generated substantial bodies of literature, one important need concerns the development of perspectives which, while highlighting such interrelations as exist, may promote better theoretical understandings of the field of post-conflict rehabilitation as a whole. One such perspective concerns the political economy of reconstruction, asking, among other things, what the economics literature has to contribute to an understanding of the issues concerned (Carbonnier, 1998). Similarly, adopting a gender perspective across various thematic areas helps to highlight the role of women in many issues arising during post-war transitions (Sorensen, 1998).

Lastly, one analytical dimension of 're-building' which, though probably the most intangible, in the end may well be among the most significant, is that of the broader social, cultural and historical context within which, and towards which, all these different actions are undertaken: what visions are prevailing of the kind of future community or society one is trying to (re)construct, and how do these relate to images carried over from the past?

In sum, one can say that new areas of praxis as well as of analysis have been rapidly developing in a variety of directions. Significantly, new fields require new designations, and several labels have indeed been introduced to denote different dimensions of the 'post-conflict' condition, each with its own connotations and emphasis: thus, 'complex emergencies' draws attention to both the complexity and the urgency of the issues involved (Moore, 1996); 'post-conflict reconstruction' emphasises the challenges of rebuilding and rehabilitation; 'peace-building' addresses the need for continued reconciliation efforts in various forms; while the term 'war-torn societies' seeks to denote the pervasive havoc and fragmentation, socially and physically, characteristic of many societies thus emerging out of conflict. However, the term 'war-torn society' was felt to be inapplicable in a country like Eritrea, as it was argued that Eritrea had emerged as socially homogeneous and united from its 30-year war with Ethiopia as could possibly be imagined. (And today, under renewed threat, it almost certainly can count on that unity again.) In Eritrea, at least, the victimisation and traumatic helplessness which the phrase 'war-torn' suggests were felt to convey the wrong picture relevant as it might be elsewhere.

THE WAR-TORN SOCIETIES PROJECT IN ERITREA AND SOMALIA

The focus of such projects is on post-conflict reconstruction; they seek to make a contribution to this through action-oriented research activities. In each of the two countries dealt with here, Eritrea and Somalia, as well as some others (Mozambique, Guatemala), research was initiated on what were perceived to be the key issues in reconstruction – mapping out what was being done, and what needed to be done, in such areas as demobilisation, returnee integration, provision of basic needs, establishment of justice, as the case might be. The choice of themes would be made by a project group, comprising all interested parties, national and international as the case might be, in the project. Invariably, though, national views would get priority in the making of these choices. The research would be implemented in several successive phases according

to a particular common scenario, and would be carried out exclusively by teams of qualified national researchers.

Around each chosen research theme, a working group of up to 10–12 members would be formed, consisting of representatives of national and international agencies taking a special interest in the respective theme. On food security, for example, a working group might comprise members from the Ministry of Agriculture, from farmers organisations, from NGOs involved in the provision of food aid and rehabilitation schemes, FAO or World Food Programme representatives wherever applicable, etc. On refugee resettlement issues, similarly, one would have representatives from the main national organisations responsible for returnee programmes, UNHCR, international and national NGOs engaged in resettlement schemes, UNFPA, and others with an involvement or interest in the field. These working groups would meet regularly, approximately once a month, during the course of the research, giving both direction to the research activities and feedback to the field data and results. In this sense, the research was a kind of participatory action research, but here with the active participation of people from various agencies with a stake in the broad policy field, and thus like participation at a macro- rather than the more usual micro-level.

As it turned out in the different pilot projects, the research theme plus associated working group set-up became significant in two major ways. First, the research material gathered did itself often constitute the first compilation and stocktaking of relevant and up-to-date information and analysis on the given field in the country in the post-war situation, and thus could have a direct relevance to many parties involved (for example, Fadal et al., 1999). But second and at least as important, was the dialogue that ensued in most working groups in connection with the research. This was dialogue fed by the research, and in turn feeding into the research, but it was also a research-induced dialogue among various stakeholders in the respective policy area itself, which in several cases turned out to be extremely valuable. Indeed, involvement in informal WSP working groups enabled representatives from different ministries, agencies, political parties or other organisations to compare notes, get a better understanding of other members' involvement and perspectives, of the rationale for certain policy positions, or of the shortcomings of particular policy measures. While there was an inclination, and perhaps an implicit objective, to try and move towards consensus, it certainly did not mean that participants would yield, or be expected to yield, to other parties' positions. Invariably, the dialogue aspect in all pilot cases so far, judging by numerous expressions of interest by participants concerned has proven a particularly striking feature of the WSP projects.

What made it even more interesting, however, was that in each case a dialogue in this sense tended to emerge between different kinds of broadly defined actors. As we will see, in Eritrea the basic division became internal–external, while in Somalia the emphasis was on internal divisions. In a way this was only natural and to be expected, since each particular social and political context per definition is different and will show a different set of dynamics and key divisions. Launching one and the same 'tool' in such different contexts, even if, or in particular if, it remains as unspecified as research-driven dialogue, or dialogue-driven research, thus means there is every chance it may be taken up in a different way, or driven into a different direction, as can be illustrated by the Eritrean and Somali examples.

The Eritrean and Somali cases, along with Mozambique and Guatemala, were selected as representative of quite contrasting post-war contexts in which a WSP role with regard to generating and formulating reconstruction agendas could be tested out. The two contexts in fact were located at virtually opposite ends of a continuum from 'stateness' to 'statelessness'. Their contrasted histories of conflict may be assumed to be sufficiently familiar so as not to need much recapitulation here: Eritrea in 1991 had emerged from a prolonged war of liberation from Ethiopia's Derg regime, fought to regain its separate status as an ex-Italian dependency. This war had left pervasive destruction of physical infrastructure and industry in various parts of the country, but as a nation and society Eritrea at the time represented itself as a strongly cohesive and united entity, precisely due to the many years of confrontation with the Derg regime. Somalia in contrast at roughly the same time had fallen apart into a number of regional fragments, controlled by clan-based militias and warlords who had been engaged in a common fight against the regime of Syad Barre, but who had not been able to agree on any common framework for power sharing. On the contrary, mutual animosity and severe conflict has persisted in various parts following the collapse of the Somali state structure in 1991, and though in a somewhat subsided form continues until today. Only in some regions, notably the north-east and in Somaliland, which broke off its connection with the Somali Republic and returned to its former, separate status, did relative tranquillity resume. This remained long enough to allow a renewed orientation towards reconstruction and development, including the reestablishment of government functions, though now at the level of regional states.

The two selected cases for WSP activities thus comprised one context (Eritrea) with a strong government presence and a seemingly highly united popular front, and another (Somalia) without either of those two 286

elements. Evidently, these presented entirely different points of departure and challenges to test the relevance of a WSP project aimed at generating common understandings on policy issues and priorities.

ERITREA

In Eritrea the WSP project in 1995 thus was initiated in a context in which the government was firmly based on the liberation front which in a 30-year war with Ethiopia (which had annexed it) had carried the country into independence, the Eritrean People's Liberation Front (EPLF), since then renamed the Popular Front for Democracy and Justice (PFDJ). The government had good reasons to feel in complete command over all matters of policy, even if numerous issues still needed resolution. During the liberation struggle, many original solutions had been developed in a learning-by-doing manner to problems that were cropping up, and after the war there was a strong feeling in government and party circles that the new challenges of reconstruction and development could be tackled in much the same informal, improvising fashion as before. The resulting practice was that there might be a fair amount of discussion and debate within the government prior to adopting a particular policy line, but once it was there all cadres would abide by a united front vis-à-vis the external world. By its own admission, meanwhile, the Eritrean government had not been particularly communicative to external agencies or even to the society at large about its policy thinking (Doornbos and Tesfai, 1999).

For most representatives of international organisations and NGOs working in Eritrea, this was a new and frustrating experience. Elsewhere in Africa they were used to being very close to the processes of policy formulation, at times to the extent of playing a key and initiating role in them. The Eritrean situation was quite the opposite from a donor-driven policy context: here external agencies found themselves at the receiving end of the line as far as policy communications were concerned, and what they received was usually brief and intermittent. For the rest, they were often groping in the dark as to the government's policy intentions and how they could most meaningfully orient their own programmes to that.

Thus, when the WSP had come to Eritrea and had started its research phase involving joint working groups with Eritrean officials and researchers and external agency representatives, for the first time there were opportunities for informal discussion and dialogue about matters of common substantive interest. These discussions were generally lively and productive, based on a good deal of mutual learning, and they certainly seemed to serve their purpose of giving guidance to the various research themes and drawing broad policy conclusions from the results. During and after the project's implementation in Eritrea, both external actors and Eritrean participants in WSP working group activities expressed their strong interest in these activities, particularly because of the possibilities for dialogue they had opened. External participants would say that through their involvement they had come to better understand the rationale for various policy measures taken by the Eritrean government, while Eritrean participants observed that through the WSP experience they had discovered how much they had lacked a suitable way of communicating with external actors. Both sides in fact had agreed to find ways of extending the project's experience on a more permanent basis, though due to other priorities this has so far not materialised.

SOMALIA

Somalia is a different case by many standards, especially due to the fact that since 1991 after the fall of the Syad Barre regime it has had no central government. Besides, civil war, though in 'low-intensity' manner, still continues in several parts of the country, specifically in the South (Doornbos and Bryden, 1998). Nonetheless, conditions of normalcy had returned sufficiently in the northern part of the country to allow consideration of a WSP project in the north-east (partly following the encouragement from UNDP, which is now in charge of most UN operations in the country). Currently, project activities are also underway for the north-west, which has separated itself from Somalia as independent Somaliland.

In a situation without government like that of north-east Somalia, WSP first had to gain the confidence of local groups. Preliminary contacts and recruitment of researchers were done in a cautious and transparent manner, and the first task researchers set themselves was to survey and document the actual situation in the three districts of the north-east region that had come to exist following the ending of armed conflict. They did so on the basis of scarce primary data and numerous interviews with local groups and individuals, on the basis of which they were able to sketch a picture of current conditions and needs with which, as it turned out, local people could very much identify themselves. This in turn gave an important boost to the researchers concerned and to the project as a whole, the next phases of which became anticipated with keen interest from various sides.

By sheer coincidence, WSP had started its preparatory work and fact-finding in north-east Somalia just some time before a new momentum to set up basic government structures began to gain ground in the region as a whole. This had to do with the fact that the three districts concerned, North Mudug, Nugal and Bari, had now gained some experience in developing common positions on various issues during a seven-year period of relatively peaceful conditions. Mention might also be made here of important low-key training activities of local administrative cadres carried out by the Uppsala Life and Peace Institute in earlier years (Heinrich, 1997). But the local political leaderships had also become frustrated and impatient with the various fruitless efforts undertaken by different external powers (Kenya, Ethiopia, Egypt) to try and mediate a national reconciliation for Somalia as a whole, though mostly with a central role accorded to various competing warlords. Thus, time had come, it was felt among leading circles in the north-east, to first restore order in one's own house while, following that, one might be in a better position to reconsider relations to the rest of the former Somalia.

In this new climate, sponsored by the Somali Salvation Democratic Front (SSDF) and regional traditional leaders, attention was soon directed on the supportive role WSP might be able to play. On behalf of the constituent assembly taking place towards the establishment of a Puntland State in June, 1998, the WSP team was requested to draw up a document outlining the main challenges of reconstruction and development which the region is facing. Besides, several calls were made at previous meetings for WSP to reconstitute itself as a kind of planning and policy preparatory arm of the new government.

The latter idea might not be realistic or opportune, and might in fact go way beyond the role that could reasonably be expected of a WSP project. Nonetheless, it underscores the new and different ways in which WSP in north-east Somalia has contributed usefully to the shaping of a policy dialogue through action-oriented research. While external actors played only a minor role in project activities within the country (the encouragement had largely come from external agencies external to it), WSP through its activities actually has seemed to play a role in getting different local groups to accept common positions vis-à-vis certain choices of policy.

PARTICIPATORY POLICY DIALOGUE AND THE ROLE OF THE STATE

While WSPs have been notably active in generating research and policy dialogue, how has the political leadership responded to it? The short answer is that this has been with a certain amount of ambivalence, which in itself is hardly surprising. Clearly, WSPs enter terrains of policy discussion that are of immediate interest to most governments and political leaderships; some would regard these as falling essentially under their own sphere of engagement. WSPs indeed operate very close to areas of government engagement, but do not do so at a formal level. Their distinctive quality and potential advantage lies largely in the informality of dialogue they may facilitate.

While recognising the advantages of informality, however, it is important also to note the limits to WSPs' relevance this entails. One question, for example, is what validity, in final analysis, does WSPs' non-committal policy dialogue have and what in the end does it lead to? It is important in this connection to recognise that WSPs as presently constituted are relatively 'innocent' and inconsequential - which might be considered their weakness as well as their strength. They do not directly influence policy making as such, but engage key policy actors in brainstorming and researching on alternative options, whether for formulation or implementation of policy. If such policy dialogues were concerned with real stakes, and meant to be decisive about them, an entirely different picture would no doubt emerge. Numerous procedural and other safeguards would then have to be observed for the sake of equity and other considerations, and obviously the process could not be the same. In brief, WSPs' potential value as a research and dialogue promoting methodology appears sustainable only as long as, or in particular when, the limits associated with its informality are recognised.

While realising that the processes would be non-committal and informal, governments, or aspiring governments, as in the Somali case, in any case appear to have reacted with a mixture of interest and support on the one hand, and reservation and 'jealousy' on the other, towards WSPs operating within their domain. Government interests in WSPs basically tended to be motivated by the improved communication they seemed to be able to establish with actors or sectors which the government itself, for whatever reasons, had difficulty reaching. This interest may become even stronger where people in government believe the WSP could be made to serve as a tool in advancing the government's own communicative objectives. However, seeing lively if non-committal policy dialogue take off under WSP auspices among various actors relevant to their own operations and goals, for some governments can become a ground not so much for interest but for some envy. In the end in fact it may prompt a certain guardedness within government as to how far it will tolerate what it would see as inroads into its own playing field. Typically, governments and proto-governments may show both kinds of reactions, sometimes switching from one to the other in the course of time.

These reactions are real and understandable, and must be seriously taken into account when contemplating new ventures based on the WSP experience so far. Clearly, it would be preposterous to conceive of WSP beginning to play a quasi-government role or enter into any kind of competition in this respect. At the same time, there is also an inherent ambivalence at the WSP end. On the one hand, it needs a certain autonomy and neutral ground of operation to be able to do what it seems it can best do. On the other, it needs itself the presence of a state, or a focus on a possible future state as in the Somali case, in order to have a focal point for its policy dialogue and research-based policy recommendations. Without such a focal point, real or imagined, WSPs might seemingly have more difficulty determining whom to address their policy dialogue to, even if only indirectly.

CONCLUSION

Applicability to other contexts: some reflections

The experience with these WSP pilot projects suggests that there is some scope for action-oriented research playing a role in generating policy dialogue and improved understandings of issues in societies emerging from prolonged conflict and devastation. Though the specific modalities may need to be in subsequent instances, the key element would be to build on certain forms of participatory action research as a strategy for broader deliberation with the involvement of all relevant groups, including marginal groups, which need to be heard. The Eritrean, Somali and other WSP pilots appear to indicate that there is scope in principle for generating some meaningful policy dialogue on the basis of collective action research at a macro level. Moreover, it is interesting to note that in several of these experiences, though more so in the case of north-east Somalia than of Eritrea, the process was largely captured by internal dynamics and forces, thus providing an example of how 'people mediate institutions', a topical theme in social science research today. The examples at any rate seemed to confirm the potential of developing new modes of participatory action research in conjunction with more inclusive forms of policy dialogue, while avoiding the pitfalls of international interventionism.

If this constitutes a basic viability test, what could be said about the applicability in other kinds of contexts? More specifically, to what extent could this kind of approach be made applicable to issues of environmental resource competition in Eritrea, Somalia, or even beyond the wider Horn region? In the context of WSP research this was only tangentially explored, yet it would indeed seem that further application at the micro-

or meso-level could well be fruitfully undertaken, and that it could be worthwhile to develop appropriate methodologies for different kinds of situations, extending the range of relevant approaches. Some such situations could be less than 'macro' in magnitude, yet reach well beyond the 'micro', including those involving issues of broad long-term policy choices for environmental resource management and the management of resource conflicts. On such issues one increasingly finds state bodies, NGOs, pastoral associations and farmers' organisations involved. Arriving at common research-based dialogues and scenarios could possibly help clarify the options concerned.

Take, for example, the problems faced by various pastoral groups in maintaining a niche for their livelihood amidst shrinking resources and increasing competition for the same, either from other pastoralists, from farmers, or from state agencies intent on putting environmental resources to different uses. Research-based deliberation of the whole range of consequences which current modes of resource exploitation carry for all the parties concerned, and with all stakeholders participating, could help create more realistic perspectives on the overall situation and emphasise the need for alternative solutions that may accommodate the livelihood interests of groups threatened with marginalisation. It would not necessarily need to be the government concerned taking the initiative for such an exercise. Indeed, as state agencies in various cases have become a party directly involved in environmental resource conflicts, there is much to be said for other bodies taking the initiative. By some stretch of the imagination, for example, one could conceive of a pastoral association, or even better a joint pastoralists-cum-farmers platform, calling for a participatory research-led exploration of alternative resource utilisation possibilities. What it requires, though, is acceptance of the process by all stakeholders concerned, a precondition that cannot necessarily be taken for granted.

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