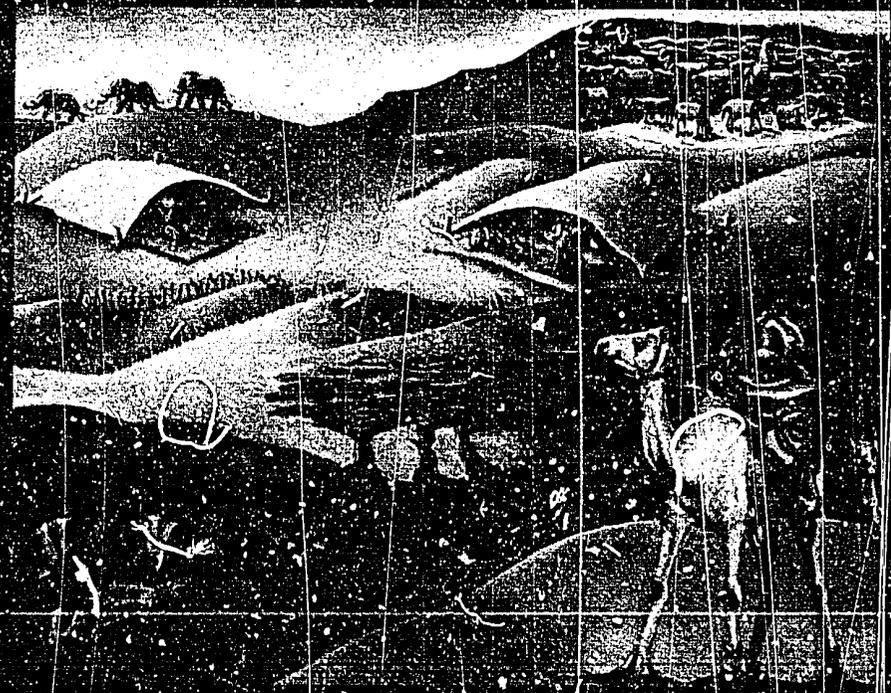


PN-ABQ-059 84860

Non-Governmental Organizations and Natural Resources Management in Africa's Pastoral Sector: Where to Go from Here?



PVO-NGO/NRMS Project
(managed by:
World Learning Inc., CARE,
and World Wildlife Fund)

**Cover illustration by Sylvie Barcelo
Cover design by Mannie Tobie**

**PVO-NGO/NRMS Project is funded by the
U.S. Agency for International Development
The project is managed by World Learning Inc.,
CARE and World Wildlife Fund.**



recycled paper

**The project office is located at
1250 24th Street, NW
Suite 500
Washington, DC 20037 USA**

Non-Governmental Organizations and Natural Resources Management in Africa's Pastoral Sector:

Where to Go from Here?

A Synthesis Document

August 1993

By:

Michael Brown

Edited by:

Kerry O'Connor

**The PVO-NGO/NRMS Project:
Funded by the U.S. Agency for International Development**

Managed by:

World Learning Inc. (founded as the Experiment in International Living)

CARE

World Wildlife Fund

PVO-NGO/NRMS Project
1250 24th Street, N.W.
Suite 500
Washington, D.C. 20037
202 / 293-4800

TABLE OF CONTENTS

I. Introduction	1
II. Current Status of Pastoralism in Africa	3
III. NGO Approaches to the Pastoral Sector: Development and Natural Resources Management	9
IV. Appreciation of the Pastoral Sector Workshop Synthesis and Recommendations	11
V. Possible Next Steps	13
VI. Conclusions	17
Annex I	21
Annex II	43
Annex III	53
Annex IV	63
Bibliography	73

FOREWORD

The purpose of this document is twofold. First, the document synthesizes various work supported over the past two years by the PVO-NGO/NRMS Project (a USAID Africa Bureau-funded consortium managed by World Learning Inc., CARE and World Wildlife Fund) which studied the impact of non-governmental organization (NGO) programming on natural resources management (NRM) in Africa's pastoral sector. Second, it takes a step beyond the synthesis and examines the possible future direction of NGO programs in NRM and development so they become more effective in the sector.

As preliminary work to this synthesis document, two background assessments and a workshop were undertaken in collaboration with the Institute for Environment and Development (IIED) in London, along with the Comité de Coordination des Actions des ONGs (CCA/ONG) in Mali; and most specifically, its Cellule d'Appui Technique et Financier (CATF) which manages the PVO-NGO/NRMS project in Mali.

This final synthesis document examines the original assumptions underlying the preceding pastoral sector assessments and workshop, and examines the results of the assessments, workshop and preliminary synthesis documents. Building on this foundation we propose a potential NGO orientation to pastoral sector issues and approaches which builds upon strengths and weaknesses noted in the various activities we have supported. While the document is intended to be forward-looking, it also is judgmental; one could imagine that others might have reached different conclusions regarding priorities and strategies, given the opportunity.

While we assume that the majority of readers are somewhat familiar with pastoral sector issues in Africa, we also assume that many will not be experts on African pastoralism. For this reason, a discussion of African pastoralism and prior development approaches to the sector is presented. While this review does not pretend to be exhaustive, it means to provide a wider context to understand, and from there to question, the rationale of NGO (and other intermediary)

approaches to NRM and other development work undertaken in the sector.

At the same time, we admit it is both dangerous and difficult to generalize too broadly about pastoralism in Africa given the tremendous ecological and cultural diversity of the continent. The World Conservation Union (IUCN) in its mapping of Sahelian natural resources (IUCN, 1989) identified 28 vegetation categories for that region alone. Nonetheless, this document strives beyond a basic synthesis of the previous assessments and workshops, in order to carve out future direction.

The document refers to the *background assessments*, the *assessment synthesis document*, and *Pastoral Sector Workshop Report*. Major extracts from all these documents are found in the annexes. The IIED/London synthesis, or *assessment synthesis document*, is found in its entirety, as is the Mopti workshop report.

The present document is referred to as the *final synthesis document*. *Final* here refers only to the series of analytical activities in the pastoral sector that PVO-NGO/NRMS has supported over the past two years, and does not imply "ultimate" in terms of NGO approaches to NRM in the sector.

Annex 1 consists of extracted highlights from the two background assessments undertaken by Richard Hogg in Ethiopia and Kenya, and Jean Dakouo in Mali. Hogg's paper examines NGO performances in the pastoral sector in East Africa and Dakouo's is similar for West Africa. The two assessment documents served as the foundation for the assessment synthesis document written by Camilla Toulmin and Richard Moorehead of IIED entitled *Local Strength and Global Weakness: NGO Experience with Pastoralists in Africa*. This document (found in Annex 2) served as the basis for discussion at the NGOs in the Pastoral Sector workshop held in Sevaré, Mali (5th Region, with its regional capital in Mopti) from February 22 - 28, 1993. Highlights from the Pastoral Sector Workshop Report prepared by IIED are found in Annex 3. Finally, synopses of the specific case study

presentations by NGOs for the Pastoral Sector Workshop are found in Annex 4. Some of the case study synopses were prepared by IIED; others were prepared by PVO-NGO/NRMS.

Finally, while the recommendations presented here are based primarily on the background assessments, the assessment synthesis document and the Mopti workshop, this document also includes opinions and interpretations of the author. Wherever necessary, distinction between conclusions drawn from background assessments and the Mopti workshop versus those of the author is noted to avoid

possible false attribution of recommendations. We hope that this document will spur further debate on the future direction of NGOs in conducting appropriate and feasible NRM activities in Africa's pastoral sector. Now that desertification is again being tabled at Post-Rio conferences on a negotiated international convention, the rediscovery of arid lands and the plight of their marginalized pastoral inhabitants make this publication timely.

Special thanks to Peter Little for helping identify consultants for the background assessments and for critiquing the last draft of this paper. All shortcomings remain the author's.

Michael Brown
Project Director, PVO-NGO/NRMS
Washington, D.C.

August 2, 1993

I. INTRODUCTION

Background Assessments and Workshop: Assumptions

In 1990, the PVO-NGO/NRMS Project undertook NGO Pastoral Sector Assessments in east and west Africa. The assessments, undertaken separately by different consultants, examined the impact of NGO approaches to natural resources management (NRM) work in the pastoral sector. The key assumptions prompting the PVO-NGO/NRMS-sponsored assessments were as follows:

- (1) pastoral economies in Africa, based on extensive transhumant or nomadic land use systems, appear increasingly endangered.
- (2) a plethora of studies and workshops undertaken over the past 10-20 years have examined the status of pastoralism in Africa from both a land use and cultural perspective; however, they have done little to *positively* influence how donors and government policy makers actually plan pastoral sector policies and on-the-ground interventions.
- (3) pastoralism as a proven and still potentially rational land use management system has not always been promoted by NGOs, let alone by governments traditionally antagonistic to pastoral nomadic production and land use management systems.
- (4) NGOs have been successful at small scale, localized activities in the pastoral sector and could, given the confidence, tools and proper context, be much more effective in promoting pastoral sector development and sustainable NRM than they have been to date.
- (5) the effective contribution of NGOs to sustainable NRM and pastoral development has been inconsistent.
- (6) establishing fora where the various stakeholders in the sector's activities can explore commonalities and differences in their perception of constraints, opportunities and potential solutions, would provide solidarity and help shape NGOs' overall direction.

The PVO-NGO/NRMS purpose in supporting the two assessments and subsequent workshop was twofold. First, the project examined assumptions 1 - 6 to determine whether they were credible. Second, assuming reasonable validity of the assumptions, PVO-NGO/NRMS wished to review the reasons why NGOs choose to work on particular aspects of pastoral sector activities, how effective they actually are in promoting pastoral development and sustainable NRM in the sector, and where NGOs and others interested in the sector should orient subsequent programming. The desired outcome of the assessments and workshop was therefore to critically analyze effectiveness of NGOs in the sector, share information on successes and failures in NGO approaches, and strive for consensus on where and how NGOs and their partners should approach the pastoral sector in coming years, both collaboratively and independently. *On these objectives both IIED and CCA/ONG were supportive partners with PVO-NGO/NRMS.*

NGOs and Natural Resources Management in the Pastoral Sector of Africa: Strategies for Enhancing Performance and Impact, the report of the workshop, succeeds in reaching some consensus on the kinds of priority activities and strategies which NGOs can promote in coming years. The workshop report confirms a number of the underlying assumptions driving the assessments, and indirectly disputes others. This document is found in Annex 3, with the exception of the case study section which is found in Annex 4.

This final synthesis document further contextualizes NGO work in the pastoral sector by providing more information on the sector than was attempted in the background documents. Some of the rationale for strategies that NGOs now choose to employ (or avoid) can better be judged when put in the context of broader sectoral trends.

In the following section, the current status of pastoralism in Africa is discussed. In section III, NGO Approaches to the Pastoral Sector specific to development and NRM is presented. In section IV, the Pastoral Sector Workshop Synthesis and Recommendations are addressed. Section V identifies possible next steps and section VI concludes the paper.

II. THE CURRENT STATUS OF PASTORALISM IN AFRICA

Definition

Pastoralism refers to the activity of livestock owners in which over 50% of household gross revenues comes from livestock and related subsistence and commercial activities (Swift, 1988). Pastoralism occurs throughout arid, semi-arid and sub-humid tropical areas of Africa. Its limits are determined by climatological, ecological and political factors. The prevalence of trypanosomiasis, transmitted by the tse-tse fly, has effectively set "biological boundaries" to pastoralism throughout much of coastal west, central and southern Africa.

Pastoralism is often intertwined with agriculture, representing one sector within more complex farming systems (Turner and Brush, 1987). Groups specializing in livestock raising, who depend on animal products, and are, to a large extent autonomous of, or loosely linked to agriculture, legitimize pastoral systems as distinctive forms of human subsistence economies (Galaty and Johnson, 1990).

Pastoral systems may involve considerable mobility to capitalize on spatially and temporally dispersed commonly-owned natural resources which are regulated at the level of collectivity, rather than by separate landowners (Bonfiglioli with Watson, 1992).

Agropastoral systems are a subset of pastoral systems, and balance agriculture and livestock raising. These systems often center around permanent or semi-permanent villages. In so far as sedentary agriculturalists entrust their livestock to herders who migrate with the stock, agropastoralists participate in extensive pastoral economies even if they, as primary resource owners, do not migrate with livestock. Thus, the degree of mobility does not define pastoralism for any given household, rather, it is the proportion of income derived from the economic activity.

Comparing areas where livestock is raised through seasonal transhumance ("patterned" nomadic movements) recent studies show that African pastoralism provides excellent

returns on per unit land area, superior even to North American commercial ranching (Bonfiglioli with Watson, 1992).

Challenges

While pastoralism remains an essential economic and cultural activity for millions of Africans on some of the world's most marginal arid and semi-arid lands, pastoralism as a production system may be contending a losing battle in many parts of Africa. Despite the diversity of Africa's dryland regions and the particular histories of pastoral peoples, a number of broad trends emerge in the sector as a whole (Bonfiglioli with Watson, 1992):

- increased pressure on natural resources, due to growth in human numbers, development of markets and commercial opportunities, and lack of clarity in tenure rules;
- increasing levels of conflict, pushing many pastoral peoples into refugee camps; and
- declining levels of per capita income throughout Africa.

To this could be added variable rainfall patterns which lead to short-term (and in cases arguably long-term) changes in pasture composition and vegetative cover. Furthermore, note that in West Africa, the prior symbiotic relationship between pastoralists and sedentary agriculturalists has become much more confrontational, significantly disrupting the structure of Sahelian economies to the detriment of pastoralists (Little, 1993).

Development Policy

Donor and government decisions regarding activities in the sector have historically given priority to animals and rangeland rather than herders (Vedeld, 1992). These activities were arguably based on partial understandings and assumptions of how pastoral systems work. They were *not* based on a holistic understanding of the ecological, cultural and sociopolitical dynamics within which pastoralism operates.

Given both the market-driven world view of western donors and the desire to exert control over pastoral people expressed by African states, sectoral activities have not led to sustainable development.

At the same time, development policy has not been informed by its own technical successes in the sector; pastoralists have adopted veterinary programs involving inoculations and dipping where the rationale for the intervention and the delivery mechanisms have been appropriate.

Development policies have advocated programs to integrate pastoral peoples into the state society and economy, but have minimized the human costs incurred by these policies. This "global integration program" assumes that the pastoral way of life is inadequate, that "progress" is inevitable, and that "integration" will improve the quality of life. This approach, conceived as part of various development aid programs, has only benefitted individuals. Mainly, it has exacerbated inequalities and undermined the ability of local communities to defend and manage their own resources, to protect their lifestyle, and to cope with recurrent ecological and nutritional crises (Bonfiglioli with Watson, 1992).

Much of the current thinking on pastoralism has been shaped by twenty years of disappointing project results in the sector. Meanwhile, within academic circles, theories on pastoralism have substantively evolved. Still too often, decisions based on outdated assumptions are being used by governments to support inappropriate purposes. In addition to the assumptions justifying the "global integration" of pastoralism noted above, the following assumptions continue to inform thinking on the sector even as the new paradigm evolves.

- Pastoralists are economically irrational because they maximize herd size and do not respond to market incentives.
- Because pastoralists are economically irrational, and because pastoralists maintain individual herds within communal land tenure systems, these factors lead them inexorably to degrade the natural resource base upon which their livestock depend.
- Alternative land use systems such as irrigated agriculture (for developers) and national parks (for conservationists) are therefore more appropriate forms of land use in pastoral areas.
- Pastoralists do not perceive their irrationality, hence

remain irascible, and thus do not participate collaboratively and effectively as citizens in their respective countries' development.

- Pastoralists are therefore incapable of participating responsibly and competently in national, regional and even local planning exercises.

Pastoral communities in Mauritania (Peulh or Fulani), Senegal (Peulh), Mali (Tamashek), Niger (Tamashek), Sudan (Hodendawa, Nuer, Dinka), Eritrea (Beja), Ethiopia (Afar and Somali), Kenya (Samburu, Turkana, Maasai), Tanzania (Maasai), and Somalia (all clan families outside of the immediate circle controlling previous administrations) have been politically marginalized to varying degrees. Evidence of marginalization includes: reduced access to natural resources traditionally depended upon, limited involvement in political decision-making, and limited access to development resources brought in through government channels. Marginalization results from planners' purposeful or unconscious ignorance of pastoral development as pastoral communities would define it. Consequently, pastoralists have suffered from "development" imposed by outsiders which has been neither appropriate nor feasible. Pastoralists have also suffered from simple neglect, as aid often goes to other productive sectors of a given country's economy.

The expropriation of the Mbegué (or Khelcom) savannah woodland in Senegal is one of the clearest examples of government support of agricultural expansion onto agropastoral lands which is neither sustainable from an NRM perspective, nor defensible from an equity perspective (see Schoonmaker-Freudenberger, 1991). According to the Comité de Soutien de Khelcom (1992), 6,000 pastoralists and 100,000 head of livestock were negatively impacted when 5,000,000 trees and shrubs were cleared and 30 seasonal ponds destroyed to allow for peanut cultivation by a powerful religious brotherhood on 45,000 hectares of formerly classified forest.

The forest which was always the resting place of pastoralists and their herds was destroyed in about ten days. Medicinal plants were also destroyed, thereby denying local populations of their traditional pharmacopia. The degazetting of the forest has increased pressure on remaining pastures, creating greater environmental precariousness and pastoralist vulnerability (translated from Comité de Soutien de Khelcom, 1992).

Governments and the world community are becoming increasingly preoccupied with the scientifically problematic and

"slippery" concept of desertification, and question if desertification is *primarily a man-made or natural phenomenon or some combination of the two*. Cases like Mbegué illustrate how vulnerable pastoralists are to politically powerful stakeholder groups, and how directly man-made policies can contribute to the kind of land degradation many would label as "desertification" which others call "development."

The lingering dissatisfaction of pastoral communities in Kenya and Tanzania over the lack of adequate access to and/or equitable compensation for pastoral resources in traditional pastoral areas which currently are gazetted for national parks or reserve areas continues to threaten the long-term viability of both the protected areas and the pastoral systems (Moehlmann, 1990; Berger and Parkipuny, 1989). Local Maasai, together with conservation groups, continue to have very different views on how and to whom land should be allocated in the Serengeti-Ngorongoro area of Maasai land (Kasiaro, 1993).

Justification for diverting resources away from the pastoral sector and towards other purportedly more productive sectors relates to the perception that extensive pastoral systems are insufficient. The perception has been that pastoral sector investments represent *too high an opportunity cost*, or waste vis à vis other agricultural sector or tourism objectives. For instance, in the Sudan between 1969-1984, the government devoted an entire chapter in its party charter to the sedentarization of nomads without their livestock as a solution to the sector's problems (Bonfiglioli with Watson, 1992:41) on the assumption that extensive pastoralism had little to contribute to the national economy. Similarly in Turkana, Turkwell, Katilu, and Kapitur, where irrigation schemes were placed in traditional pastoral areas, pastoralists were denied access to natural resources, further marginalizing a "hitherto selfesteemed people" (Dismus, 1993). Finally in Tanzania, debate between Maasai, conservation groups and government emerged from the government's decision to allocate a hunting concession on Maasai lands, a move inconsistent with ongoing management planning for conservation areas in Tanzania. This situation endangers the Serengeti-Maasai Mara ecosystem at the same time it raises the likelihood of increased inter-tribal conflict in Maasailand over indigenous land use rights (Boshe, 1993).

Organizational Challenges

Pastoralists have traditionally exercised the necessary rules and exhibited the flexibility required to maintain, if not expand, the viability of livestock, people managing the livestock and the resource base upon which people and livestock depend. Pastoralist rangeland tenure systems all

strive to maintain the preconditions of reproduction of the natural resource base. The specific manner by which pastoralist rangeland tenure systems achieve this balance varies. For example, Ethiopian Borana access to rangelands is unrestricted, while access to wells is supervised by clan-level councils who regulate animal numbers and labor requirements among well users (see Bonfiglioli with Watson, 1992). This system effectively limits how, when and where rangelands are grazed in Ethiopia's Sidamo and Kenya's Northern Districts. Among Rendille of northern Kenya, large clan settlements stick together and migrate to commonly chosen areas with their livestock (Bonfiglioli with Watson, 1992). In contrast, Somali, Maasai and Tamashek pastoralists make individual herding decisions on the basis of clan (Somali), lineage (Maasai) or patron/client (Tamashek) affiliations.

On the other hand, pastoralists have largely been *unable to organize themselves* into effective units to confront the challenges posed by nation states and donor-driven aid agendas. Their inability to organize stems from the decentralized nature of pastoral communities where resources – families, herd managers and herds themselves – are often widely dispersed. Spatial management strategies are geared to optimize seasonal grazing/water availability, political considerations vis à vis other pastoral groups and resource use rights, disease considerations for different classes of livestock, availability of markets, education and health services, etc. As noted for the Maasai (Western, 1993), there was little need to reach communal decisions except when it involved ceremonies, raids, defense and sometimes access to pasture and water.

Resource Level Challenges

Access to reliable dry season water and grazing for livestock are important resource constraints. These constraints demand an internal organizational capacity to manage resources such that resources are optimally available to both herds and families. Maintaining the necessary internal flexibility to adapt to different situations which impact the resource base is also crucial, particularly with drought and warfare. The ability of pastoralists to utilize resources over which they may or may not have traditional tenure rights, then, becomes a function of political relations.

Pastoralists manage both livestock and rangelands. The management of livestock is by and large undertaken by individuals or families, while the management of rangeland natural resources is often regulated by communities under common property management systems. One of the great problems of the pastoral sector in Africa is arguably that *formerly effective common property regimes are being trans-*

formed with increasing frequency, willfully or otherwise, into open access situations where corporate entities lose effective management over natural resources. While common property by definition does not "belong" to an individual, it can be considered to be private property when it is managed under the umbrella of a corporate body (see Bromley and Cernea, 1989). This evolution can lead to the "tragedy of the commons," which Hardin (1968) popularized and which the donor community has used to justify much of its programming since the 1960s (see Bennett, 1984). Western (1993) signals how, from an ecologist's perspective, the maintenance of a viable ecosystem in Kenya's Amboseli National Park "has succeeded to a great extent due to the traditionally benign relationship between Maasai and wildlife." Moreover, monitoring revealed that the ecosystem has remained open, wildlife migrations viable, and elephant populations growing in a context where communal land tenure is slowly evolving to individual land ownership. Thus, pastoralists under certain communal tenure systems cannot only manage rangeland resources sustainably, but wildlife resources as well.

Technical Challenges

Since 1965, the World Bank alone has parachuted \$625 million into livestock development projects in Africa (Dyson-Hudson, 1985:158). Still, as noted, pastoral sector interventions over the past 20-30 years have largely failed, oftentimes miserably. Major donor efforts have focused on technical approaches to livestock or rangeland productivity to the exclusion of pastoralists and their socio-economic rationale.

Some argue that environmentally balanced development can only occur if *pastoralists' food production is secured* (Hjort af Ornäs, 1989). In the Maasai of Ngorongoro Conservation Area, for example, though pastoralists' herds have remained stable for 30 years, the ratio of livestock to humans has decreased, threatening food security. Enforced land use policies denying cultivation exacerbate this threat, as they force a higher proportion of reproductive-age, female cattle to be sold. Thus, somehow, nutritional values previously obtained through pastoral products must be made up elsewhere. This trend in decreased livestock to human ratios is generally common among pastoral populations in East Africa, as pastoralists are depending less on livestock for their subsistence and more on agriculture, wage labor, and famine relief food (see Little, 1985; Sperling, 1987; McCabe, 1990).

Others state that "livestock development" must be distinguished from pastoral development (Salih, 1987) so that broader social objectives -- education, credit, access to cereal

stocks and range resource tenure rights -- will supplant technocratic approaches to livestock development or range management (itself a sub-category of natural resources management) (see Swift and Toulmin, 1992). In this way, food security should be satisfied concurrently with longer-term NRM approaches (Frankenberger, 1993). Securing food production is challenging considering the reproductive parameters of pastoral production systems. Species-bound rates of production, mobility requirements, lactation frequency, market value and meat requirements for festivities (Hjort af Ornäs, 1990:93) all contribute to management complexity facing pastoralists. In addition, pastoralists require large herds if the bulk of their sustenance is to originate from pastoral products. Here, the role of grain, produced or purchased, is important in supplementing pastoral production.

Most large rangeland projects have assumed rangeland productivity to be low, due to a degrading resource base resulting from outmoded pastoral practices. Even considering the several major droughts of Sahelian Africa over the past 20 years, degradation was still attributed to pastoralists' as opposed to the arbitrary climatic fluctuation which has been inherent to the region over the last 500 plus years (see Baier, 1980). Some argue that climate, not the pastoral practices, may be primarily responsible for resource degradation in much of the Sahel (Timberlake, 1986), as remote sensing data indicates the Sahel is as capable of northward retreat into the Sahara as it is to southern incursion into productive lands (see Tucker et al, 1991).

When people-centered approaches were introduced to large pastoral sector projects, technical fixes continued to take precedence (see Brown, 1984). This focus on technical approaches to problems in the sector created inappropriate priorities en route to solving highly complex sociopolitical and cultural-ecological adaptations. Technical orientations predominated in pastoral sector projects because no institutional framework existed for government and herders to communicate effectively (see Swift, 1988), only technocratic approaches to policy formulation were given credence. And without an institutional framework, natural resources management is impossible (Swift, 1988).

Now, the extent to which traditional pastoral institutions can and should serve as the basis for revitalized future pastoral sector programming has become a key question.

Positive Prospects

In response to disappointing project results and persistently inappropriate government actions in the sector, factors

representing current thinking on the sector include:

- an increasingly sophisticated theoretical understanding of the basic strength of traditional pastoral systems: flexible/ opportunistic spatial and capital management (see Sandford, 1983);
- the fact that pastoral systems are already as productive on marginally productive lands as more purportedly sophisticated ranching schemes (Behnke and Scoones, 1992);
- further diversifying pastoralism into agricultural and other income generating pursuits which complement pastoral activities and minimize risk (see Behnke, 1984);
- high productivity on a per unit of land area basis when compared with commercial beef production systems (Behnke and Scoones, 1992), and;
- an evolving consensus on the nature and dynamics of African range ecology and rangeland management systems which indicates that pastoralism is well adapted to the ecological contexts.

These points refute the long-held idea that pastoralism is inherently unproductive and ecologically destructive. In fact, pastoral techniques of range exploitation and recent developments in scientific range ecology have converged on several points. This convergence does not constitute a blanket endorsement of African pastoralism. However, pastoral land use practices have proven to respond effectively to the exigencies of a difficult natural environment. It is now clear that the development of livestock production in dry Africa requires the refinement and adjustment of pastoral practices to changing circumstances, not their outright elimination (Behnke and Scoones, 1992).

Anthropological Context and a New Paradigm for Pastoralism

Pastoralism is arguably one of the most studied areas within anthropology. African pastoralism in particular has received a striking amount of attention. While the early work of anthropologists on pastoral societies focused on culture and society (see Herskovits, 1926), the later work of British Social Anthropologists such as Evans-Pritchard (1940) in

the Sudan, Baxter on the Boran (1954), I.M. Lewis in Somalia (1961), Gulliver with the Jie and Turkana (1955), and Stenning with the Fulani (1959) introduced the rationale of pastoralism as an economic and socio-cultural adaptation. In this way, pastoral peoples became, arguably, less romanticized as cultural oddities, and better understood for their capacity to successfully adapt to extraordinarily challenging environments.

Empirical anthropological research continues to demonstrate the inherent logic of extensive pastoral production systems in dryland ecosystems (see Galaty et al, 1981). From an ecological perspective, research increasingly demonstrates that pastoral systems are well adapted to their dynamic ecological contexts (White, 1993). This research further evidences an emerging consensus on the need for a new paradigm of range ecology (Vedeld, 1992), one which would downplay the adverse impact of man and livestock upon Africa's ecological systems, and re-emphasize the dynamism and resilience of plant productivity in dryland ecosystems (Toulmin and Moorehead, 1993; Behnke and Scoones, 1992; Hanan et al, 1991; Mortimore, 1989; Tiffen et. al., 1992). If accepted, this paradigm should alter the way development planners perceive and approach activities in Africa's pastoral sector, and faulty assumptions about pastoralists' presumed detrimental impact on rangeland ecology will be corrected or eliminated.

In the new paradigm, mobility in pastoral systems is the key contingent variable which enables pastoralists to exploit the spatial and temporal variability of rangeland resources. Thus, attempts to accurately assess rangeland carrying capacity in systems where spatially disparate resources are used in different stages of transhumant cycles pose an enormous analytical problem (Behnke and Scoones, 1992). If planners and implementing agencies work on the basis of the new paradigm, pastoral policies and programs may be reformulated, with new programs based on the inherent strength of existing pastoral production systems, and more dependent on local resources management capacity. If so, NGOs may play an important role in assisting this reformulation.

III. NGO APPROACHES TO THE PASTORAL SECTOR: DEVELOPMENT AND NATURAL RESOURCES MANAGEMENT

As the discussion above suggests, the context for development in the pastoral sector is daunting. Nevertheless, NGOs have been among the most sympathetic and engaged in bettering the plight of pastoralism and pastoral peoples.

This section draws on key points raised in the background assessments, the assessment synthesis document, and the Pastoral Sector Workshop report on NGO approaches to NRM and development in the pastoral sector. The discussion moves away from the broader context of African pastoralism to focus on past experience and potential niches for NGOs in the sector.

The background assessments for Kenya and Ethiopia (Hogre, 1991) suggested that NGO approaches to NRM in the pastoral sector appear seriously flawed because:

- they often fail to adequately define and identify the target community;
- they fail to collect baseline data on the relevant traditional pastoral systems, and fail to monitor project progress in achieving objectives;
- they lack technical assistance backup;
- they fail to work with government; and
- the small scale and community focus prevents them from tackling the wider problems imparting rangeland areas with increasing populations and a depleting resource base.

The background assessment for Mali (Dakouo, 1992) noted similarly that in addition to the small scale nature of projects, NGO projects in the pastoral sector fail to stimulate multiplier effects across wider areas. NGOs also often forget that the pastoral economy cannot develop in and of itself; rather,

commercial marketing networks must be utilized, the system of traditional land use systems must be appreciated, resource tenure constraints must be addressed, and organizational issues in regard to pastoral societies must be consistently borne in mind. In particular, more holistic system approaches which are participatory and iterative must become the norm and not the exception.

On the positive side, training initiatives, milk production, animal health initiatives, certain infrastructure-building activities and bourgou (*echinocloa stagnina*) regeneration projects have been successful (the latter in Mali).

The Pastoral Sector Workshop report resulting from the workshop held in Mopti in February 1993 addressed the issues of NGO project identification, project implementation, and project results in the pastoral sector. The synthesis portion of the Workshop Report suggested in regard to *project identification* that, based on NGO experience, there is a need to:

- (1) move from emergency food aid programs to long-term pastoral development;
- (2) adopt programmatic approaches versus project by project approaches;
- (3) emphasize applied research and participatory planning to identify viable pastoral sector initiatives;
- (4) focus on systematic monitoring and evaluation of activities;
- (5) design activities which will be sustainable;
- (6) cultivate adaptive management skills; and
- (7) better apprehend pastoral sector issues from a policy and programmatic perspective.

The report suggested that NGOs are often *weak in project implementation* because they:

- (1) allow elites to co-opt projects;
- (2) allow themselves to participate in activities non-representative of local social diversity;
- (3) consider neither pastoralists nor, more particularly, pastoral women in project activities;
- (4) compete versus collaborate with one another;
- (5) shy away from collaborating with government and research institutes;
- (6) have weak networks and conceptions of their role in pastoral sector development and particularly NRM; and
- (7) do not deal with land tenure and other key policy issues.

In regard to *project results/impact*, the report suggested that NGOs:

- (1) have minimal impact in geographic and institutional terms;
- (2) have marginal national level impact; and
- (3) often create an unrealistic dependency given their needs vis à vis available financial resources.

Recommendations

The workshop *recommendations* can be grouped into several categories:

- (1) programmatic considerations;
- (2) networking considerations;
- (3) personnel considerations; and
- (4) philosophical considerations.

Programmatic considerations recommended that:

- a long-term perspective with transition from emergency relief to development assistance be taken;
- policy advocacy with donors be undertaken, and a coordination role between NGOs, rural producers, donors and government be effected;
- participatory rural appraisal (PRA) methodology be promoted;
- socioeconomic analysis be more rigorously incorporated into NGO work in project planning stages;
- pastoralists and local communities be appropriately trained by NGOs to ensure programmatic sustainability;
- training in ascertaining land tenure rights and developing advocacy programs be promoted; and
- technical, financial and institutional support be provided to pastoral organizations in NRM.

Networking considerations recommended that:

- an international NGO pastoral sector network be launched;
- bulletins such as "Baobab" and "Harmattan" be used by NGOs to promote networking; and
- NGOs and other partners in development coordinate activities to avoid duplication.

Personnel considerations recommended that:

- staff with real world experience in pastoral affairs and an understanding of poverty issues confronting pastoralists be recruited by NGOs.

Finally, *philosophical considerations* recommended that:

- pastoral populations benefit from research undertaken in their zones; and
- NGOs increase their efforts in the sector.

These findings and recommendations to address NGO weakness are consistent with several of the original assumptions which PVO-NGO/NRMS had made prior to sponsoring the assessments and workshop, but they raise a number of other interesting issues related to working relationships, networking and specific technical problems. Importantly, NGOs self-recognition of technical and institutional deficiencies in the sector was forthright and addressed in the recommendations.

IV. APPRECIATION OF THE PASTORAL SECTOR WORKSHOP SYNTHESIS AND RECOMMENDATIONS

In this section, several issues raised in the synthesis section of the Pastoral Workshop Report in Annex III will receive more explicit review. So too, certain aspects of the background assessment documents which were not highlighted in the synthesis document will be more directly considered.

Overall, the assessment of NGO strengths and weaknesses in the background assessments and workshop report was frank and constructive. Yet, in considering the weaknesses noted in NGO approaches to the pastoral sector, and at the same time considering the workshop's recommendations, there are several questions which were not discussed in the workshop report which still need addressing.

Do NGOs, international or national, now have the technical and institutional capacity to implement the workshop recommendations? If not, what needs to be done for either individual NGOs or NGO networks to operationalize the recommendations and become more effective overall in the pastoral sector?

Many of the workshop recommendations presuppose developed NGO capacity. While the workshop recommendations suggest that NGOs incorporate more social analysis, including gender analysis and tenure systems analysis into diagnostic planning and monitoring and evaluation, it is not clear whether NGOs have the capacity to achieve this on their own. To promote appropriate policy advocacy; to make the transition from food aid to development based on

sound, applied research; to instruct and facilitate local communities in PRA, all these require *technical skills* which many international NGOs working in the pastoral sector arguably do not possess at this time. If NGOs do not now possess these technical skills, but they are needed to implement sound pastoral sector activities, what steps should be taken for NGOs to obtain these skills?

The background assessment by Richard Hogg (1991) concerning NGO work in Ethiopia and Kenya calls into question NGOs' ability to define seemingly basic concepts such as "community" or "traditional institution." While "community participation" and "institution building" have become the new NGO stock phrases of the day, Hogg contends that the sense of community is often so vague that the term means little more than "local people." Similarly, Brown noted (1985) during design of a USAID-funded PVO umbrella project in Somalia that PVOs (private voluntary organizations, the U.S. government recognized equivalent to NGOs) often have difficulty in identifying inherent variation in socio-economic circumstances within communities, such that socio-cultural feasibility issues are often not appropriately addressed. This problem stemmed from the inability of PVOs to distinguish different pastoral *communities* within an otherwise seemingly homogenous sea of Somali pastoralists. Thus, while it is urgent that NGOs cultivate more sophisticated analysis of pastoral sector activities, the question of how NGOs will undertake such analysis requires careful consideration and strategic planning.

V. POSSIBLE NEXT STEPS

This section proposes five prioritized courses of action as next steps for NGOs to help implement the assessment/workshop recommendations in the pastoral sector. The suggestions made here build on analysis and recommendations from the background sector assessments to date and the Mopti workshop which were supported by PVO-NGO/NRMS.

It is important to reiterate that the priority courses of action identified here do not necessarily reflect the consensus view of the Mopti workshop participants, nor of the various assessors. The 17 workshop recommendations which were *fully adopted* by the consensus during the plenary in Mopti are found in section 6 of Annex 3.

The five priority activities identified below are based on discussion in the previous sections. Our purpose is to stimulate reflection as to what actions are currently most relevant for NGOs to undertake in the sector, and how they might be best achieved.

1. PVO/NGO advocacy for pastoral production systems: the reconstitution of viable resource tenure regimes

Consensus is evolving among the scientific community that extensive pastoral production systems in arid and semi-arid rangelands may often represent the most efficient adaptation for productive and sustainable utilization of dryland natural resources.

In this evolving theory on the credibility of pastoral systems in drylands, the priority activity for PVO/NGOs over the short-term to support sectoral activities involves *advocacy for creation of an appropriate enabling environment* for pastoralists. In other words, strive to secure the rights and potential of pastoralists to engage in sustainable pastoral sector activities which build upon the foundation of extensive, opportunistic livestock/range management, where pastoralist mobility remains a cornerstone. To date, this has not been a PVO/NGO goal.

To systematically advocate pastoralists and the logic underpinning extensive pastoral production systems in most drylands, PVO/NGOs can heighten regional and nationwide awareness by targeting donors, governments, and both the international and national NGO communities working across Africa. In the Sahel, raising awareness of pastoral production systems could (and must) take place in the context of evolving decentralization programs which fall under the rubric of *approche aménagement/gestion de terroir* (AT/GT). In AT/GT, land use planning on a local level, at the interface between sedentary agricultural populations, agropastoralists, and pastoral nomads, depends on the identification of respective rights and responsibilities of different resource user groups. These rights include formal and informal land and other resource tenure rights. While decentralization implies privatization, it will be crucial for NGOs to ensure that in the course of decentralization of previously efficient common property resources, controlled access systems do not convert to inefficient, open-access systems which benefit local elites or absentee stock owners. If this were to occur, it would be to the detriment of sustainable NRM and the overall pastoral system.

The USAID-financed PVO-Pivot Project in Mali, implemented by CARE/Mali in partnership with the CCA/ONG, should offer an excellent opportunity to test NGO approaches to AT/GT in different pastoral contexts (see Dembele and Dakouo, 1992), and should be monitored by NGOs for lessons learned as they evolve.

In east Africa awareness raising could, perhaps surprisingly, be best linked to the efforts of conservation organizations working in savannah ecosystems such as the Serengeti National Park or Ngorongoro Conservation Area in Tanzania, Lake Mburo National Park in Uganda, or Amboseli or Maasai Mara in Kenya. One recent example of the convergence of conservation NGOs' and pastoralists' interests is in the Serengeti-Ngorongoro area of Tanzania (Boshe, 1993). The World Wildlife Fund (WWF) has recently taken a lead in trying to mobilize the NGO and donor community to encourage the Tanzanian government to

reconsider the granting of a hunting concession to an individual. WWF is advocating against the concession because it feels that granting the concession would:

- (a) threaten the conservation and integrity of the core Serengeti National Park and surrounding areas;
- (b) lead to denial of grazing and other forms of land use rights for the Loliondo Maasai;
- (c) create/cause inter-tribal conflicts within the Ngorongoro area; and
- (d) eliminate possible public and local support of conservation initiatives.

To date, USAID and OFA on the donor side have voiced strong support for WWF's advocacy initiative. NGOs may wish to monitor this initiative for future lessons to be learned.

An alternative to development and wildlife conservation not relying on advocacy per se is being developed by African Wildlife Foundation (AWF). Through its Neighbors as Partners Program (Snelson, forthcoming), AWF begins from the premise that local community participation built on community self-interest in rural development (involving long-term dialogue with communities living in areas adjacent to national parks, facilitated in this case by AWF working in partnership with east African national park services) can lead to community conservation. Under this program, pastoralists share both the responsibility for wildlife and the benefits they can derive from it (Snelson, forthcoming).

The program offers a potentially interesting model for NGOs and donors interested in pastoral development to determine how effective NGOs can be in enabling pastoral development in wildlife-rich areas of east Africa. The program should help answer whether conservation in these pastoral areas can be achieved without, at the same time, supporting traditional resource tenure rights of pastoralists inside national parks, as many feel may be a prerequisite. In other words, can development be successfully integrated with conservation as has recently begun to be tested (see Kiss, 1990; Wells et al., 1992), and if so, how (Brown and Wyckoff-Baird, 1992; Snelson, forthcoming)?

In whatever situation, NGOs must concentrate on formulating *objective advocacy*, i.e., maintaining objective and critical evaluation of pastoral sector strengths and weaknesses (or proposed alternatives). This will be crucial for

NGOs wishing to be perceived as objective stakeholders. One critique which could be leveled against NGOs and their advocacy of pastoral sector issues in the past is that advocacy, where it has existed, may have been based more on the philosophical side of pastoralists' rights than on the analytical side of *why* it is important for national strategies to support pastoralism. Future advocacy work, wherever possible, should emphasize *why* it is in the economic interests of African states to support pastoralism in either a traditional or revamped mode, or why it is important to *avoid* initiating activities which will compromise pastoralism.

NGOs could also raise awareness as to the gamut of *natural resources management options* available to NGOs and others intervening in the sector. These options involve technical approaches for raising herd and pasture productivity, such as regeneration of pastures through seeding and scarification, the construction of soil and water conservation structures (Toulmin, 1991), and potential grazing. They also take the form of policy actions which promote improved legal definition of rights to manage, use and control access to given resources, and the devolution and affirmation of respective management responsibilities held by local populations and government. Improved NRM will only occur if both the definition of rights *and* their enforcement are effective (Toulmin, 1991a).

The ongoing international discussions on desertification will lead to a post-UNCED desertification convention organized by the Intergovernmental Negotiating Committee for a Convention to Combat Desertification (INCD). These discussions, in which NGOs are actively participating, offer an excellent opportunity for the advocacy of coherent pastoral sector policies to impact a broad regional basis. This opportunity may help establish an enabling environment from which specific national and local-level donor and NGO programs for feasible pastoral NRM/development may evolve. Given that in many countries NGOs are now the principal players in pastoral sector development, it appears all the more important to seize such an opportunity.

2. Institutional and technical capacity building

Service-providing NGOs working with pastoral communities and/or specific pastoral organizations (POs) could benefit from increased technical and institutional capacities. It is not evident that NGOs working in the pastoral sector have the capacity, or perceive the necessity, to systematically *provide themselves* with the institutional and technical capacity to identify and implement priority, feasible NRM and

sustainable development activities in the sector. Nor is it apparent that pastoral communities or associations have the capacity to impact significantly on regional and local government and donor planning.

For POs, the skills required are summed up as follows:

Pastoralists find themselves in a world which demands certain new types of know-how and skills. They need new technical and managerial knowledge for the management of range and dryland agriculture. They have to be able to communicate with the government in the official language; comprehend the new laws governing their traditional resources; practice some form of accounting and bookkeeping to manage their local institutions; deal with political organizations; struggle for better marketing facilities and more reasonable terms of trade; and relate to rural banks and other sources of credit. Pastoralists may also need to find additional income opportunities in non-resource based activities (Vedeld, 1992).

Several other sets of skills are also needed. Internally, POs need to identify how their production and NRM objectives can efficiently be achieved. It is essential that the role of women pastoralists be objectively identified, and that any capacity building initiatives take into consideration the importance of gender roles in planning and implementation. In addition, pastoralists must also be made aware of the larger context within which they operate. It may be appropriate to introduce rudimentary notions of systems analysis to examine the larger constraints and opportunities confronting pastoralists. Awareness of how reigning development theory constrains and creates possibilities could also be an important skill for pastoralists to better negotiate with government and donors.

With greater emphasis on *refining* existing pastoral communities' adaptive and opportunistic management capacity to promote sustainable NRM (as opposed to overhauling them), a second priority would be to *bolster NGO delivery capacity* to provide technical and institutional capacity building activities to pastoral communities and associations on a widespread basis.

Unfortunately, few models for successful pastoral institution building (see Shanmugaratnam et al, 1992) exist. Few, if any, projects in the sector have successfully strengthened pastoralist capacity to the point where pastoral associations are self-sustaining programmatically and financially. Current pastoral institutions cannot enforce common property

usufruct rights to rangeland resources. Thus, the NGO community will need to develop an *operational strategy for institution building*.

3. Understanding Available Options

It is unclear whether NGOs help pastoral communities they are working with understand the range of development options available to them. Helping pastoralists identify options or alternatives for land use management, through the use of participatory rural appraisal (PRA) and astute use of rapid rural appraisal (RRA) and other applied research methodologies, would be a key component to technical capacity building initiatives. At the same time, it should be clarified that PRA and other applied research methodologies are complementary tools for NGOs to use; neither is meant to be a substitute for the other.

In some ways, NGOs and the pastoral communities they work with already assess options in informal ways. What is called for here is developing the capability to *more systematically and rigorously* assess options at the community level. Here, too, NGO capacities will require strengthening.

4. Pilot field level projects for the building of technical skills and the refinement of proven pastoral techniques and practices in NRM

The new paradigm allows many potential pilot field level activities in NRM and pastoral development to be envisioned. First and foremost are institution building activities where different methodologies to develop pastoral institutional capacity could be tested by NGOs and pastoral communities.

Secondly come a range of technical activities which logically would *come out* of the PRA process at different local levels. These activities emerge from all aspects of range management and soil and water conservation, including water point management, bush fire control, natural forest management, tree planting, sand dune stabilization, bourgou regeneration in the Sahel, etc. As Veit (1993) notes, small technologies that manage local resources and provide multiple options; facilitate collective sustenance; have minimal or no labor demands while being compatible with prevailing religious beliefs; and that improve on existing technologies, are fundamental to any development or NRM activities occurring in drylands. To help pastoral communities assess available technological options and *build upon* existing technologies, PVO/NGOs have an array of options in recruiting pastoralist participation.

5. Applied research towards finetuning the existing pastoral systems

Through applied research activities, NGOs can help pastoralists finetune their productive and resource management activities for given *management systems*. If the dynamics and broad production parameters of particular pastoral systems remain unknown, identification of the most appropriate field interventions is likely to be constrained (see Behnke and Scoones, 1992). Both NGOs and pastoral communities must be involved in problem identification and data collection and analysis, to sustain the goals and management objectives of particular systems.

What is critical, therefore, is identification of the goals and objectives of the particular management system. Is it to maximize the number of people that can be maintained on a certain land area or to achieve maximum profits from yields of beef (Little, forthcoming)?

While beef ranching is unlikely to be a priority NGO area, the issue is for NGOs to help both pastoral communities and other planners identify the management objectives of communities, and how they can be achieved.

In specific cases, NGOs have some experience collaborating

with research centers. Nevertheless, one could imagine potential cases of collaboration with international agricultural (and national) research centers (IARCs), such as the International Livestock Center for Africa (ILCA), or the International Center for Research on Agroforestry (ICRAF) or the International Center for Research in the Semi-Arid Tropics (ICRISAT) on specific themes relevant to pastoral sector activities. So too, the various ministries of livestock, especially in the Sahel where authority is devolving to more local level structures, are now *in theory* better positioned to assist NGOs with applied research activities. NGOs should be prepared to explore, in conjunction with pastoral organization partners, the types of applied research activities most meaningful for the long-term.

Specific research could include topics such as: understanding of definitive resource trends; means to mitigate or counteract *apparently* inappropriate natural resources utilization; trends in conflict over resources and their use by competing groups; designation of the appropriate unit for NRM activities, be it on a land area basis or around specific water points.

It is essential that the specific applied research topic that an NGO chooses involves issues which pastoralists feel are essential to their economic and cultural sustainability.

VI. CONCLUSIONS

The pastoral sector in Africa is at an important crossroads. The mistakes incurred at the expense of pastoral peoples through development activities over the past 20 years are beginning to be recognized by donors and government planners. At the same time, new development opportunities are arising as donors and governments emphasize decentralization activities, democratization and empowerment of local peoples in many African countries. The opportunity to initiate activities which will positively impact pastoralists, the natural resources base, and their production systems would *theoretically* appear never to have been more promising.

It is particularly at the level of advocacy and awareness raising that NGOs would appear to have both a comparative advantage and key strategic niche in the short-term. Advocacy must promote both further research/field activities and retrospection of lessons learned *so as to avoid* the pernicious impact of inappropriate development activities. In his presentation at the Mopti Workshop, Kisopia (1993) alluded to the Pastoral Steering Committee in Kenya, a prototype forum for development workers and pastoralists to discuss issues and form a "lobbying group on politics affecting pastoralists." This activity warrants monitoring (if not support) to determine its efficiency in advocacy over the coming years.

Another model for avoiding inappropriate development comes from Senegal (see Section II). The Comité de Soutien à Khelcom, comprised of many Senegalese NGOs and other interested parties from Senegalese civil society, signed a declaration in May 1992 deploring the destruction of the Khelcom Forest (Le Comité de Soutien à Khelcom, 1992). They requested the government to stop expansion of peanut cultivation in sylvo-pastoral zones while respecting the rights of pastoralists; to respect existing official and unofficial government engagements regarding the protection of low lying depressions to prevent soil erosion; and to respect the usufruct rights of pastoral populations to the remaining 28,000 hectares of forest at Mbegué. This declaration exemplifies the kinds of advocacy activities in which NGOs

can engage. Ideally, this type of activity will increasingly occur before, rather than after, actions with negative impacts are taken.

While NGO advocacy of dredging the Okavango Delta waterways under the Southern Okavango Integrated Water Development Project (SOIWD) is not a pastoral sector advocacy initiative, the apparent success of the NGO community together with local people in advocacy have, for the time being, encouraged the government of Botswana to reconsider its water development policies in the Okavango. Pastoral sector NGOs can learn much from the Botswana NGO Okavango experience including that advocacy over land use policy must be handled delicately. If the message is perceived by government as overly strident or biased, cooperation may be placed at risk.

To increase their advocacy effectiveness, NGOs will need to engage in activities which ratchet up the quality of analysis serving as the foundation for pastoral advocacy. At the same time, the medium of the message itself will also require serious consideration.

While there are notable exceptions, as it now stands, NGO advocacy for pastoralists appears often to be based as much on philosophical and/or moral imperatives about inequitable development as on solid analysis that pastoral development offers the *best development options* to a given pastoral situation. As NGOs develop greater technical skills, not only to defend pastoralist rights but also to argue constructively why promotion of pastoral sector activities makes good development sense – it promotes both productivity and sustainability – the more likely NGOs will positively impact the sector as a whole. By this promotion of pastoralism, NGOs will also correct a problem that Dakouo, Hogg, and Toulmin and Moorehead all cite – that the scope of NGO projects is too small to create a broad impact on the sector. Supporting the evolving theoretical consensus on pastoral systems as inherently resilient, and establishing mechanisms to ensure *temporal and spatial flexibility of pastoralists* (see Behnke and Scoones, 1992; Little, 1993) may be the most

important contribution which NGOs can make in advocacy activities for the remainder of the 1990s. On the applied research side, NGOs may help to determine what types of organizational structures can best accommodate the inherent ecosystemic (and political) instabilities of the sector.

On the other hand, we have discussed in this synthesis document how deeply certain assumptions and prejudices against pastoral peoples and their production systems still run. Thus, while an opening for sustainable development activities in the pastoral sector appears to be true, the political realities affecting their successful implementation in the sector remain challenging.

Included in these political realities is the fact that, with the exception of Scandinavian donors, major bilateral and multilateral donors have increasingly withdrawn donor aid from the livestock sector in the arid and semi-arid African tropics in favor of the semi-humid tropics, where economic returns appear more promising. During the 1970s and early 1980s, the multilaterally-favored ILCA program focused considerable efforts in the semi-arid African zones where pastoralism thrives, but by the 1990s had seemingly all but abandoned research in arid zones. This trend means that very little applied research is being undertaken to improve the technologies available to African pastoralists in arid and semi-arid zones, i.e., improved livestock breeds, forage and fodder, water harvesting techniques, etc. While NGOs cannot substitute for an international research center like ILCA, this gap in research offers NGOs an array of applied research opportunities, particularly if *partnerships with research institutes specializing in applied research are pursued.*

On another level, the East Africa background assessment (Annex 1) stressed the need to reassess the high level of attention paid to institution building, and called for greater technical excellence. Toulmin and Moorehead, in the synthesis of the two background assessments (Annex 2), note that the balance between institution building and technical excellence is crucial.

Institutional development serves little purpose where there is nothing for such an institution to manage. And exclusive emphasis on technical actions serves little long-term purpose unless the rights to manage and control access to the resources subject to technical improvement are clear. It is important to understand the linkages between the technical and institutional initiatives, particularly when dealing with resource tenure issues, as different resources may be managed by

different institutions within and between communities. (Toulmin and Moorehead, 1993).

Related to advocacy is the issue of 'working relationships' with government. The distance that NGOs choose to separate themselves from government is based on numerous factors. Dakouo, Hogg, and Toulmin and Moorehead all note in their assessments that there are definite costs which NGOs incur in distancing themselves from government. These costs include: constraints to NGO impact given periodic government disapproval and subsequent blockage of activities; lack of any spread effect from potentially model activities, since NGO programs are not part of government programs; and unsustainability of specific NGO programs for the same reason. Dakouo particularly admonishes NGOs for working in isolation of government services because it limits their impact on national-level strategic planning. Here, the CARE/Mali-CCA/ONG-PVO-Pivot Project funded by USAID, which strives to complement the government of Mali's pilot program under the Plan National Pour la Lutte Contre la Desertification (PNLCD), offers a clear platform for NGO/government collaboration in activities which stress decentralized, participatory approaches to NRM. This work may also lead to strategy formulation for how NGOs and communities can best address the constraints and any funding opportunities offered through the INCD process in the coming years.

This transition will not be easy. As Toulmin and Moorehead recognize, to maintain credibility with local populations, NGOs often feel obliged to distance themselves from governments that discriminate against pastoral people.

Still, with the devolution of authority to local levels, there seems to be a better opportunity today than ever before for government and NGOs to collaborate in pastoral sector activities. Be it across the Sahel where *approche aménagement/gestion de terroir* is coming increasingly to the forefront; be it in Uganda where the Resistance Committee (RC) system enables local representation of key issues to filter up to the national level; be it in Madagascar where due to a combination of drought in southern pastoral areas and dramatic political changes at the national level, pastoral communities have a chance to achieve recognition and representation. Now appears to be the time for *NGOs to reach out to governments* as potentially viable partners. While the political environment is clearly improving on certain levels, tremendous obstacles remain which NGOs can help pastoral communities and governments to resolve. To do so, a willingness and *flexibility* on both the part of NGOs and governments will be crucial.

On a practical level, NGOs often criticize donors and government for their unwillingness to take NGO concerns and approaches seriously and for their failure to collaborate on development issues. There seems to be no evident reason why NGOs cannot collaborate between themselves, government and donors, as Toulmin and Moorehead (1993) suggest, or through NGO networks such as CCA/ONG/Mali, PVO-NGO/NRMS/Cameroon, PVO-NGO/NRMS/Uganda, COMODE/Madagascar, CONGAD/Senegal, GAP/Niger, etc. Precedent for NGO/government collaboration exists in a number of the NGO networks cited above, and could serve as models for government/NGO collaboration on African pastoral sector issues.

The background assessments and synthesis allude to the lack of technical quality in both preparatory analysis and monitoring and evaluation of impact. The recurrent question over NGO technical capacity to discern the pastoral communities and specific institutions to support remains fundamental for all the analysts. Unless NGOs can distinguish between the functions that institutions have regulating access to communal and/or household level natural resources for example, action plans for managing natural resources may remain elusive. Capacity building is therefore not only a challenge at the level of pastoral institutions, but is critical for NGOs as well. NGOs may increasingly turn to applied research centers for support if their own internal capacity building proves impracticable.

One underlying theme which unites the background assessments and workshop activities that have informed this final synthesis document is the confirmation that NGOs will have an increasingly key role to play in the pastoral sector, given government and major donor retrenchment. To more systematically and sustainably impact on the pastoral sector, NGOs' policy vision will need broadening while capacities to impact on policy are strengthened. NGOs may blame their historical relations with government and donors for pastoral underdevelopment, but the time has come for NGOs to broaden their field of vision. While there may remain situations where NGOs can work independently, one hopes that NGOs will capitalize on the

spectrum of new opportunities for collaboration which the end of the Cold War era has helped unleash.

And who knows, collaboration may, if based on feasible and sustainable development and NRM initiatives, lead to effective partnerships between NGOs, governments and donors in ways previously thought impossible. An overly optimistic note perhaps, but one worthy for all interested groups. The quality of NGO participation in the ongoing Desertification Convention process (INCD) in 1993-94 could indicate the potential for NGOs to impact pastoral sector development and NRM in coming years. This participation could involve applied research to better determine cause and effect in desertification processes, as well as pilot activities in reversing environmental degradation. Such projects would build on the work that NGOs have long been undertaking. As donors and governments become aware of the need to bring NGOs into the discussion on international issues like desertification, NGOs will have a greater opportunity to demonstrate how they can contribute constructively to sustainable development, on both a regional and localized basis.

Finally, returning to the assumptions identified earlier about the negative perception donors and government have of pastoralists, NGOs can go a long way in advocating how and why specific pastoral adaptations are not only rational, but in many cases, optimal. Again, aiding the rethinking of how pastoralists can adapt organizationally to meet the ecological and political challenges to their environment remains a top priority. Helping pastoralists adapt will require that NGOs maintain the passion for defending pastoral rights and pastoral systems' logic where appropriate. It will also require helping empower pastoral peoples so they can, to as great a degree as possible, speak to their own interests. Most importantly however, it may require that NGOs take a more objective, technically competent look at pastoral sector issues analytically to assess where opportunities for refining systems exist, or where alternative courses of action may be most appropriate. The better NGOs project themselves as objective and honest brokers, the more likely they will positively impact the pastoral sector which so desperately needs our help.

ANNEX I

Pastoral Sector Study: Mali
NGO Approaches to Natural Resources Management in the Pastoral Sector 23

By: Jean Dakouo, Coordinator, PVO-NGO/NRMS/Mali, CCA/ONG

Developing the Commons:
A Critique of NGO Approaches to Pastoral Development 33

By: Richard Hogg, March 1991

Previous Page Blank

Pastoral Sector Study: Mali

NGO Approaches to Natural Resources Management in the Pastoral Sector

By Jean Dakouo
Coordinator, PVO-NGO/INRMS/Mali, CCA/ONG (Mali)

EXECUTIVE SUMMARY

The crisis that pastoral production systems have undergone in the Sahel, first noticed in the prolonged Sahelian drought of 1972-73 as well as of 1984-85 was characterized by the massive and compulsory sale of livestock at low prices, the reduced carcass weight of livestock, and the migration of herders towards the southern borders of Sahelian states (as well as all the way down to coastal states). The reduction in herders' revenues as well as the diminished contribution of livestock raising to Sahelian nations' gross national products (GNP) was also notable.

Although the drought was not the only cause of the crisis confronting pastoral systems, it did accelerate the effects of the principal constraints to pastoral production. These can be summarized as follows:

- the level of rangeland productivity was reached or surpassed in the Sahel, in the central delta of Mali, and in the southern savannah zones;
- the drought reinforced degradation resulting from overgrazing of dry season pastures; and
- the lack of effective land tenure and land use regulations in otherwise pastoral zones favored agriculture at the expense of pastoralism.

Development strategy in the pastoral sector has long rested on animal health interventions at the expense of animal production and natural resources management (NRM).

All the livestock development projects failed overall globally because they quickly displayed their limitations; the social dimension of livestock raising was rarely if ever considered. Recently, such projects have shifted emphasis and now stress more global, holistic development approaches. These approaches fall under the general rubric of what in French is called "approche aménagement/gestion de terroir (AT/

GT)", or macro-level, ecosystem oriented land use management. The AT/GT approaches place considerable accent on *the beneficiaries* of development in a given "terroir" (or land area that is habitually used by members of an agrarian or pastoral community, and which in instances may, and often does, overlap between the two).

In addition, in government programs in the sector, concepts such as *decentralization, participation, involvement, and empowerment* of populations figure centrally in all programs and specific projects. NGOs, in contrast to the large livestock projects (the latter with their arsenal of significant financing and personnel), generally intervene with small scale, grassroots initiated projects. These focus primarily on two activities: pastoral production and institutional support via training, information support and awareness raising. At the same time, while they especially placed an accent on *partnership* with grassroots actors in initiating the production activities, they generally have evolved at a localized level so that the scale of intervention is small and the results obtained have not allowed for a wider, multiplier effect impacting on larger pastoral communities.

NGOs often forget that African pastoral economies cannot – and should not – develop in isolation. NGOs have not studied commercial circuits and they therefore remain unappreciated; they have not well defined the crisis in pastoral land use; and their programs do not deal with conflicts rooted in land tenure disputes.

NGO activities which have had the most success are especially in the areas of training, milk production and animal health, creation of physical infrastructure, *bourgou* (echinocloa stagnina) regeneration in seasonally inundated depressions. At the same time there remains a tremendous amount to accomplish in pastoral societies on the level of organization and empowerment in the management of what holistically are agro-sylvo-pastoral landscapes.

NGOs must increasingly integrate their pastoral sector

programs into existing overarching programs of natural resources management or environment if they are to contribute to reversing current trends in the degradation of pastoral production systems. Their approaches must themselves become even more global, participatory and iterative.

The Context

A. Introduction

This study was requested by PVO-NGO/NRMS through its regional program working in collaboration with the International Institute for Environment and Development (IIED) in London. The study was undertaken by Jean Dakouo, PVO-NGO/NRMS' (ONG-GRN in French) Coordinator in Mali.

The study objectives were to:

- identify and evaluate NGO approaches to NRM in the pastoral sector in the context of multilateral, bilateral, and other donor interventions supported by the government;
- diagnose both positive and negative trends occurring in the sector while identifying methods and means by which NGOs in particular, donors and government can more effectively act in the sector, specifically regarding natural resources issues;
- analyze NGO successes and failures in the sector in terms of technical interventions and/or institutional support, with accent on NRM issues and the impacts of these interventions;
- propose innovative approaches to the sector and define methods and means to operationalize these innovations based on previous lessons learned and ongoing trends.

The study took place in four phases:

- *bibliographic*, in which relevant organizations were contacted for background information;
- *identification of methodological approaches*, in which a categorization of NGOs was undertaken by type of activity and put into the logistical context of which NGOs could be visited given the ongoing civil strife in Timbuktu, Gao and Mopti at the time of the study;
- *fieldwork*, in which NGOs were visited in Timbuktu and Gao;

- *synthesis*, in which the literature and fieldwork phases were combined.

The Problematic

Improving the lives of rural dwellers, agriculturalist and/or pastoralist, remains the first development objective in Mali. Mali, together with other Sahelian governments and donors working in the region, has attempted this over the past thirty years.

Unfortunately, few rural people have benefited from these investments. On the contrary, the conditions of life have degraded in the Sahel. At the same time the alarm bell rings: the land cannot support the galloping population growth. In fact, the needs are monumental and the means appear to be decreasing. There are simply too many humans and animals to feed, and with the population doubling again in 25 years, the pressure on natural resources will only continue to intensify. All efforts undertaken up to now have failed because they have not considered the *environmental* aspect of development. This itself was due to the existing methodologies to promote rural development.

In effect, the pastoral sector which most concerns us, governments, donors and others intervening in the sector used "vertical" approaches in which programs and projects were (and are) designed *for* pastoralists without their slightest participation. On the contrary, they were conceived of, and designed by, outside technical specialists. Moreover, the setbacks created a climate of failed confidence vis à vis any future programming.

On the other hand, NGO interventions studied in this report involved a great deal more participation and involvement of rural peoples in all steps in the project cycle. It seems as if these activities have provided better results on the ground than government programs (see the *National Seminar: Malian NGOs and Private Enterprise - What Future?* PVO Co-financing Project, Microenterprise group, July 1992).

In fact NGOs more often execute small scale activities initiated at the grassroots level; in villages, hamlets, or pastoral camps, and with involvement of the local people in the activities.

On the pages that follow we do not attempt to provide an exhaustive rendering of NGO activities in the sector but rather, we examine NGO approaches in NRM through the lens of three NGO projects in Mali: (1) the World Vision pastoral project in Menaka; (2) the ACORD pastoral project

in Timbuktu/Gao; (3) the *Vétérinaires Sans Frontières* (VSF) project in Timbuktu.

We analyze the strengths and weaknesses of the different NGO approaches in terms of their impact on technical and institutional capacity building of pastoral society. Finally, we will identify future potential development opportunities for NGOs in the sector.

This study cannot be complete without attempting to provide a sense of the reality of pastoral life in Mali. For this reason the first part of the paper deals with the importance of the pastoral sector to the national economy; the actual practice of pastoral systems today in Mali; the changes in the livestock sector endured since the recent major droughts of 1970-73 and 1984-85; and the appreciation of livestock sector strategies in Mali. It is in light of this reality that we place the NGO activities in the broader national context.

IMPORTANCE OF THE PASTORAL SECTOR IN THE MALIAN ECONOMY

The livestock sub-sector of the agricultural sector plays an important role in the Malian economy, guaranteeing 17% gross domestic product in 1987 according to the Central Bank of West African States. Numbers of small stock have been increasing since the 1983-84 drought. Based on the last available statistics, in 1987 there were 4.6 million cattle and 10.6 million sheep and goats in Mali.

The drought modified the structure of the national herd, and there was a notable migration of livestock towards the southern Malian zones, particularly towards Sikasso. The Inner Delta region of Mopti plays a fundamental role and constitutes the pivot point for 40% of cattle raising in the country. This is due to the delta's dry season carrying capacity, particularly in the "bourgoutières" (*echinocloa stagnina*) which is a much appreciated forage.

The current livestock raising situation in Mali

The pastoral systems practiced in Mali are diverse, but one can identify five principal systems which are the product of climatic, local agricultural, ethnic, and sociocultural constraints.

The "pure" pastoral or transhumant system

This system suffered the most during the 1983-84 drought. It is particularly practiced by the northern Tamashek, Peulh and Maure ethnic groups.

In the rainy season, Tamashek and Peulh are spread across north and northeast Gourma – the livestock zone par excellence just south of the bend in the Niger River from Timbuktu to Gao. The Maures meanwhile exploit the Sahelian Mauritanian rangelands.

When temporary water pools in these zones begin to dry after the summer rains (October-November), pastoralists in the north-east return to permanent water points as well as the banks of the Niger River and its tributaries in anticipation of the recessional *bourgou* pastures which will be available from November onwards along the Niger floodplains and those of its tributaries.

Pastoralism associated with rainfed millet cultivation

In this system, pastoralists maintain mobility, with their transhumance tied to agricultural activities in those zones in which rainfall surpasses approximately 350 mm/year. During the rainy agricultural season, livestock are generally passed on to professional herders who move the stock far from the agricultural zones. Animals return after the harvest to graze on post harvest stubble in the succeeding months.

Transhumance recurs during the dry season. Herding is practiced in proximity to permanent water points where sufficient pasturage is available. In this system, the complementarity of pastoral and agricultural activities guarantees pastoral families' subsistence, with livestock products providing the entirety of all income generated through commercialization of stock and animal products. Pastoralists practicing this system include: Peulh located around the periphery of the Inner Delta, as well as Peulh and Maure groups living along the Mauritanian/Mali border.

Pastoralism associated with recessional agriculture

This system is practiced in the seasonally inundated zones of the Niger as well as the western regions of the delta which are drained by the Senegal River and its tributaries. These pastoralists are truly agropastoralists, and include Peulh, Bozo, or Rimaibés (a lower caste group of Peulh). In this system livestock raising represents a capital investment, but for the Peulh especially, represents an important source of animal protein through milk production.

To this end, milk cows and their calves do not transhume with the remainder of the herds. They stay in proximity to villages and herders bring the necessary feed to them. In the

rainy season a large proportion of the overall herds graze near, and benefit from, salt licks.

Pastoralism associated with submerged agriculture

Pastoral production associated with rice cultivation is found particularly in the area of the Office du Niger in Niono, Macina, Markala and parts of Mopti. The peasant farmer of the Office du Niger, for example, is investing more and more in livestock. Purchase stock are kept in rice fields until the latter are flooded. Some steers are used for animal traction but the major proportion of livestock under this system are entrusted to professional herders who take the animals to non-inundated, uncultivated peripheral zones in the Office du Niger.

CHANGES TO THE LIVESTOCK SECTOR AS A RESULT OF THE DROUGHT OF 1983-84

The last drought principally affected cattle in the Sahelian zone. It caused a significant rise in livestock mortality, principally among cows and calves. In addition, ownership of a large proportion of livestock shifted hands; traders and wealthy civil servants benefited at the expense of pastoralists who were forced to sell stock at ridiculously low prices, or run the risk of seeing their livestock perish and gain nothing in return. Pastoralists not selling their stock moved to southern Mali. In particular, sheep and goats stayed in the north and north eastern regions; more emphasis was placed on camel pastoralism in the zones as well. Many pastoralists in these zones meanwhile abandoned their cattle in favor of small stock which are noted for their hardiness in the face of drought and their capacity to rapidly and significantly reproduce after drought.

THE NATIONAL LIVESTOCK SECTOR STRATEGY OR POLICY

The National Livestock Office no longer focuses on increased stock numbers as it did in the past. The strategy now is oriented to rational utilization of forage resources around water points, associated with modification of stocking rates as a function of forage productivity (or rangeland capacity). This shift in approach is evidenced in the different programs and projects initiated since the 1970s and through today. It is opportune therefore, to better appreciate the state's strategic approach in the livestock sector, to discuss several livestock projects according to approach, philosophy, and strengths and weaknesses.

Introductory analysis of livestock projects in Mali

Historically, livestock projects were targeted on livestock rather than pastoralists. The distinction is important.

The first generation of projects in the 1970s were characterized by their failure to appreciate pastoral production systems in Mali. Projects were conceived at this time according to the whims of development planners versus the real needs of pastoralists. The results were unfortunately those we know all too well today. Globally speaking, the projects were failures because they did not systematically consider the indigenous management systems and logic of pastoralists and their production systems.

In fact, project planners focused on meat and milk production, without even slightly considering the organizational aspects and production rationale of pastoral peoples. Privatization of rangelands where naturally occurring fodders and forage were the pastoral system's bedrock were devised with the western Ranching system in mind, without the slightest feasibility analysis or empirical analysis of how pastoralism traditionally functions around the core principle of common property rangeland management.

All these efforts failed and as a consequence, donors have since shied away from investing in the sector. All these reasons create the situation that more and more, *new concepts* are being developed which focus on *participation, decentralization, and empowerment* of pastoralists in management of their "terroirs", or effective grazing areas. This newer generation of projects since the 1980s accentuates a global or holistic approach versus a thin sectoral approach. Pastoral systems are increasingly considered holistically, in which herders, livestock and the environment are considered in both an economic and ecological sense, so that sustainable development can occur.

ANALYSIS OF LIVESTOCK PROJECTS IN MALI

Analysis of livestock projects in Mali, especially those briefly mentioned above, show that as far as pastoral development is concerned, Mali possesses a wealth of experience in the livestock sector. This experience results from:

- the first generation of projects which targeted pastoral production gains, increased water points, improved animal health, herd reconstitution;
- the second generation of projects in which animal

health and herd reconstitution assumed a greater proportion of the overall project portfolio, organization of pastoralists, emphasis on range technologies like fire-breaks and transhumant routes, and the initial reflection on achieving NRM through consideration of demographic factors;

- the third generation of projects whereby the concentration is upon pastoral organizations/associations themselves and pastoralist participation in all aspects of NRM. Here the "terroir" approach leading to empowerment of the appropriate social management units of different (oftentimes overlapping) "terroirs" is the focus.

What can be stated is that based on this overall experience, projects must be conceptualized, identified, and implemented with the effective participation of pastoralists and/or agropastoralists. To accomplish this, pastoralists must be meaningfully involved in all stages of project design and implementation. To avoid doing so is to continue the risk of losing their participation in projects and hence, the risk of continued project failure.

As an adjunct, applied research both prior to design and during implementation is necessary to understand the sociocultural and institutional context upon which any successful activity will rest. In fact, traditional organization of pastoral society, resource tenure, existing agreements prior to, during and after colonization between pastoral groups themselves and between them and respective governments must be understood as the first and foremost step underpinning any activity.

In conclusion, much has been invested in the sector as we see without much real development on the ground. There is still much to do and the following points should be considered in all programs or interventions in the sector:

- analysis of the changes in animal ownership over the past three decades— who owns stock across Mali today, what has been the impact of shifts in holdings among the pastoral populations, and what is the impact of impoverishment of pastoralists on "pastoral space" and livestock management?
- analysis of commercial circuits— where are they and what strategies towards commercialization should now be adopted?
- how can participatory approaches be promoted in all instances?

- what infrastructures can be created with local participation?
- how can a dialogue among all stakeholders in the sector be promoted?
- how can indigenous knowledge of pastoralists be promoted through improved communication, functional training and literacy training?
- what training and awareness raising for public sector planners at the national level in NRM can be provided so that there is a common vision between planners and on-the-ground implementors together with beneficiaries.

In effect, it is opportune to consider the above as "preconditions" to operationalizing all programs and project activities in the sector. In particular, constraints on the level of *national and local tenure rights and the forestry code* have proven problematic; the above is meant to address these constraints.

We cannot expect the full engagement of pastoralists in NRM activities unless they are provided certain guarantees, such that any investment they make in kind or financially in pastoral zones will provide them with *guaranteed property rights*. Today this is as yet the case.

Pastoralists must be capable of receiving commercial banking loans to finance water point construction and/or rehabilitation so that rangelands can be used appropriately. However, problems remain at the level of tenure rights in that the tenure code at the national level stipulates that for areas up to 10 hectares, the governor of a given region must sign off on any land title. Above that, a special decree from the Council of Ministers is required. In addition to this as an overarching complication, all land officially belongs to the state.

Said otherwise, there is a gap between, for example, the pastoralist of Karawassa in the south of the Gourma and the minister in Bamako. Without title, any investment in improving land is, for the time being undertaken without the slightest guarantee to the person or group undertaking the improvement. Pastoral organizations are thus effectively constrained from investing in any NRM or other improvements.

A final aspect to consider involves the role and importance of women in the sector since in many cases women do play a preeminent role in the sector. One has, as is often the case, the tendency in development to forget about the role of women which, as is true in the pastoral sector, is of enormous import.

THE CASE STUDIES

Vision Mondiale "Livestock Reconstitution in Menaka" Project

This livestock raising project was designed and implemented in response to the needs of the Tamashek people after the drought of 1984-5.

Goals of Project

The long term goal of the project aims to improve the lives of pastoral people in the Menaka Circle by introducing social initiatives which are both economically and ecologically appropriate.

To this end, the project has the following specific objectives:

- to educate - to inform and train herders to rationally manage livestock and pastoral land;
- to restore the number of livestock through a system of loans to herders through associations and cooperatives created for that very reason;
- to secure livestock by instituting a system of seasonal reserves of short- and mid-term pasture lands and long-term drought reserves;
- to develop fodder grasses; and
- to construct vaccination parks to insure better inspection of animal health.

Main Project Activities

The project has two categories of activities. The first is technical in scope and centers mostly around:

- livestock reconstitution;
- restoring natural rangelands; and
- animal health initiatives.

The second category of activities seeks to raise the institutional capacities of herders so that they can again relate to their environment. This category includes:

- formal training;
- education;
- literacy training; and
- information dissemination.

Euro-ACORD Project

Until recently, ACORD represented the biggest foreign intervention in northern Mali (regions of Timbuktu and Gao). This was because of its length of time in the sector (since 1973-74), its experience and the geographic expanse

of its actions. The goals of the ACORD intervention in the pastoral sector are as follows:

Long-term Objectives:

- the creation of several satisfactory water points to secure livestock development in the region;
- the establishment of a natural resources management system; and
- the organization and accountability of pastoral communities.

Immediate Objectives:

- the creation of pastoral and market gardening wells;
- the training and establishment of local well managers, who would remain even upon conclusion of the project;
- the maintenance of 30 manual pumps;
- survey drilling;
- the restoration and safeguarding of existing wells; and
- formal and literacy training for herders.

Veterinaires Sans Frontières (VSF) Project Bourgoou Regeneration in the Timbuktu Circle

VSF's work in Mali, and in Timbuktu more specifically, began with an emergency program from December 1984 to May 1985, created to help respond to the crisis of dried meat. The objectives of the project are as follows:

Social objectives:

- to provide food support through Food for Work programs, when the nutritional situation of pastoral populations demands it;
- to help sedentarize the most abject nomadic groups with work programs and the regeneration of productive lands: bourgoutières; and
- to improve the quality of life of herders by improving pastoral production, and thus, animal production.

Technical objectives:

- to popularize different techniques of cultivating bourgoou, choosing plains or sites, providing plant materials, transplanting, using and managing reconstituted pastures; and
- to regenerate a bourgoutière of about 25 hectares (total surface area of 800 hectares) in each of the 35 collectives, villages or nomadic units.

A Glance into the Future:

Pastoral development and natural resources management: The future of NGOs in the sector.

The observations and recommendations made in this paper are based on professional experience in the sector, case

studies of nationalized projects, NGO interventions, technical specialists working in the pastoral sector and on literature about the sector.

This part of the study looks at lessons learned from different experiences of nationalized projects, from NGOs and from the various constraints facing different programs and projects. It then addresses possible actions to take: new approaches to NRM which have been undertaken by NGOs and have been successful in the pastoral sector, also in relation to national strategies and options for the development herding practices.

A brief review of the history of livestock raising projects in Mali show that these projects have globally failed even if, here and there, some "modest actions were satisfactory."

For the most part, these projects were conceived of by technical specialists who guided their research in predetermined directions in order to obtain the desired outcomes, without considering the desires and aspirations of the herders who would benefit from these efforts.

A few field visits are not enough to determine the real motivations behind pastoralism, especially if the visits are undertaken by "experts" who ignore the mentality of pastoral populations, whose tradition is very much still alive. Questioning the methods used for gathering information about pastoralists and agro-pastoralists is important. In fact, if a herder (or group of herders) does not feel a sense of loyalty to the community to which he belongs, he may give false ideas about his group during fact finding missions.

For this reason, it is increasingly necessary to conceive of and develop projects upon what is called the "population approach phase." This phase is integral to project realization because it calls for the gathering of useful, if not indispensable, information for designing and implementing viable projects. We are convinced that traditional livestock raising methods possess the potential necessary for self development. We must try to discover and recognize the value of this potential.

The three case studies reported in this paper are not representative of all the efforts of the hundreds of NGOs working in natural resources management (NRM) in the pastoral sector. But they are examples of different components of NGO approaches to NRM.

In fact, one important factor evident in the three case studies is the approach which favors the inclusion and participation of pastoral communities in NRM actions in the sector. In

at least two cases, the project attempted to group together herders or pastoral associations. Such attempts are integral to the approach in which decentralization, accountability, partnerships and popular participation are key concepts.

Although the three projects studied each had encouraging results, especially in their technical interventions (regeneration of inundated or reclaimed natural rangelands, animal health, infrastructure, firebreaks, vaccination areas, extension of credit and livestock loans), there are still elements missing from NGO efforts to carry out their NRM projects in the pastoral sector. Here we identify only the major gaps in NGO NRM programming in the pastoral sector:

1. Weakness in research and analytic capacity on questions such as:

- how can or should NGOs effectively operationalize this approach which seeks primarily to reinforce pastoral communities both institutionally and organizationally so as to promote true empowerment in NRM?
- how do NGOs in the context of their programs define and perceive popular participation in pastoral sector NRM?
- can NGOs successfully promote decentralized and participatory approaches to NRM without the authorization of government?
- if the decision making power in the definition and implementation of pastoral sector programming is to be fully realized through local participation, a dialogue between NGOs and communities must take place. This can be achieved if NGOs conduct appropriate applied research as a prelude to any activities. This leads to another major problem identified in the study.

2. The near total absence of data collection in the preliminary phases of project identification involving local communities.

If it involves a project such as "Menaka Oasis" or bourgou regeneration with *Vétérinaires sans Frontières*, one is struck by the failure to consider the full gamut of the pastoral problematic in each situation. So too, trends and changes in the sector in the NRM realm are not well discerned.

NGOs seem not to be preoccupied with this type of preliminary research which is an indispensable tool in deciding *what* projects to initiate, *with whom* to initiate activities, and *how* to undertake them. In the two aforemen-

tioned projects, one passes clumsily from emergency aid for drought stricken pastoralists (or war refugee pastoralists in other cases) to development activities. The transition is made without objectively undertaking studies on the socio-ecological milieu in which pastoralism operates, and in which any future development activity will be contextualized or embedded. In ACORD's livestock project on the other hand, research activity was in fact undertaken.

For ACORD's programming, applied research on land tenure, pastoral social structure and hierarchies, changes in land use, etc. are necessary research topics in defining an overall, coherent program. In our opinion, without applied research one cannot objectively identify the indicators necessary to establish a monitoring program to measure impact on both communities and the natural resources base of any given activity.

3. Another shortcoming that came out of the assessment relates to the *scale of activity* in all three case studies. They all take place at the sub-department, arrondissement (in the French system of zoning) level in which sites were identified. These sites were generally hamlets, where dozens of families settle. The question that recurs in looking at these diverse NGO situations is: can operations at this level generate the kind of spread effect on an ecosystemic or regional level (in an administrative sense)? We have signalled in the analysis that in almost all cases the pastoral economy is not closed, and that it evolves in a multi-dimensional context.

At the local level, NGOs do not examine the interdependencies that exist between different groups of pastoralists. Pastoral associations or herders associations which NGOs often refer to in their documentation should not be defined uniquely on the basis of spatial use considerations but rather, the interlinkages between groups at multiple levels must be apprehended to understand *any single* pastoral group. In this respect, ACORD's pastoral program has shown the flexibility to reorient its interventions in the sector in consideration of a holistic appreciation of the pastoral problematic at both macro- and micro-levels versus the latter exclusively.

In so far as NGOs have succeeded relatively well at the micro-level, they must also prepare themselves to play a catalytic role at the macro-level. It is difficult to achieve NRM in the sector while focusing only on local community issues when factors extending far beyond communities are impacting on the latter. A holistic perspective is therefore needed.

4. Another shortcoming no less important was uncovered in the assessment involving the absence of partnership relations

between government services and these NGOs. In almost all cases, the NGOs needed to sign Protocol Agreements with the government, specifically with the relevant sectoral ministry with oversight responsibilities for activities in a given sector. In fact, the NGOs have implemented activities here and there without strong collaborative linkages with the government technical and administrative services which are charged with national level programs in the sector.

In this manner, NGO activities are undertaken with only their philosophy and principles in mind. This minimizes or ignores the importance of collaboration in the design and implementation of NRM interventions. In each of the three case studies, a certain level of NGO awareness of the functional need to develop working relationships with government was evidenced. The case of ACORD underscores the need for NGOs to integrate their activities within national programs and strategies.

The programs must be defined in collaboration. In so doing, NGOs should demonstrate the ability to provide *self-critique* so as to be able to credibly identify the roles that they potentially can play in the sector in addition to those that have devolved to them.

Finally, a last deficiency we observed relates to the weakness or absence of monitoring and evaluation indicators. This was striking in all three case studies.

In general, one can say that NGOs have had good initiative in working with communities but, the translation of this initiative into appropriate project activities has not proven easy for them. Very often, it appears that objectives are imprecise and vague, so much so that anticipated results are hard to discern. Even if the objectives are not clearly defined, so too the indicators logically lack clear definition as well. In this sense, it seems impossible to say that realistically speaking such and such a project has achieved its original objectives. Furthermore, if the original objectives proved to either be unattainable or undesirable, the adaptations or corrections made to enable achievement of project objectives are also difficult to discern due to the weaknesses in baseline and monitoring data.

There is no doubt that NGOs must pay considerable more attention to monitoring and evaluation in their programming. It is difficult to speak sensibly about NRM questions in the pastoral sector otherwise. If NGOs do not do so, it will be impossible to confirm that their activities are in fact any more efficient than the large first and second generation of donor projects we have taken pains to bemoan.

CONCLUSION

After having identified NGO weaknesses in NRM in the pastoral sector through focusing on the three case studies a host of auxiliary questions come to mind:

What will tomorrow bring? What will NGOs be doing? Are there any miracle formulas and promising approaches waiting on the sidelines to be extended? What are the opportunities for NGOs in the future?

It is to this group of questions which we must now address ourselves if we wish to respond to that Senegalese Anthropologist who in regard to the life conditions of pastoralists of the Senegalese Ferlo states: "poor child of the Sahel, you live in a difficult present and a more uncertain future."

It is for this reason, beyond the philosophical differences and the particularities of each NGO, it is now urgent that NGOs confront weaknesses in the conceptualization, design and implementation of their pastoral sector programs.

Of first order of importance, NGOs should prioritize pastoralists as the principal actors. Often, we forget that governments, bureaucrats and NGOs and even conferences do not produce food. It is the peasant farmers and pastoralists, as Robert McNamara said, that produce food. These people must enjoy political, social, economic and ecological rights to operate and produce.

In second order of priority, NGOs should address these major needs in pastoral sector programming:

- training and functional literacy;
- applied research and establishment of baseline and monitoring data;
- extension and transfer of locally adapted technologies; and
- communication with the major stakeholders to pastoral sector development.

In third place of priority, NGOs should integrate into existing government programs in NRM. To illustrate in a pastoral area like Gao or Timbuktu, it would be illusory for NGOs to not inscribe their pastoral programs in the major, government sponsored pastoral project for northeastern Mali.

It would be unrealistic for NGOs active in NRM to not integrate in the nationally sponsored land use management program known as "approche aménagement/gestion de terroir" (AT/GT) which is now in fact the national NRM strategy applicable to pastoral zones. For within this strategy, NGOs have the opportunity to test a number of local or higher level approaches in land use management while at the same serve as catalysts for regional or nation level activities. The implications are thus important.

In terms of the definition of roles and responsibilities of different stakeholder groups involved in NRM in AT/GT, NGOs can help generate important information on potential roles that respective stakeholders may actually play.

Finally, the primary need for NGOs who are truly interested in concretely contributing to the sector: *NGOs must be convinced that the principal challenge to NRM and pastoral development will never be revealed through a simplistic approach which targets one or two technical factors of production in project design and implementation.*

If there is to be a solution, it must be *global, participatory, and iterative. In a word, it must involve actions that will collaboratively include the major stakeholders in the sector: donors, technical government services, NGOs and of course, pastoral populations themselves.* Political decision makers must at this time provide a political economic context which will enable the execution of programming which will be for the happiness and welfare of Mali's pastoral populations.

NOTE: The above is a translation from the original French. The Case Study section of the original paper has been greatly abridged for this Annex.

BIBLIOGRAPHY

- Band Aid. 1989. Rapport: Projet Oasis Menaka. Mali: Band Aid.
- CILSS. 1985. Synthèse: Rapport CILSS.
- CISSE. 1985. *Les Facteurs de Production et Socio-économique des Petits Ruminants au Mali*. Doc. 125. Bamako: Ministère chargé des ressources naturelles et de l'élevage.
- Coulibaly. 1983. *L'Unité Pastorale Comme Approche d'Organisation des Sociétés Pastorales: Cas du PDESO Sénégal*. Thesis. Université Dakar.
- Crowley, E. 1991. *Tenure Foncière au Mali. Analyse Anthropologique des Institutions Locales*. Paris: Club du Sahel/OECD.
- Direction Nationale de l'Elevage. Rapports Annuels 1987-1988-1989-1990.
- Direction Nationale de l'Elevage. Analyse des Conditions de l'Elevage et Propositions de Politiques et Programmes- Note de réflexion.
- Gayon, G. *Développement et Prise en Compte des Problèmes de Gestion et Préservation des Ressources Naturelles en Afrique de l'Ouest*.
- OMBEVI (Office Malien du Bétail et de la Viande). 1985. *Etudes et Recherches pour L'Etablissement de Codes Agro-Sylvo-Pastoraux au Mali*.
- Solidarité Canada Sahel. 1990. *Partenariat et Participation Populaire à la Gestion des Ressources Naturelles au Sahel*. Acte: Seminaire Novembre 1990.
- Thomas, G. 1980. *Profile of a Fragile Environment*. Report to the Rockefeller Foundation.
- Yattara, I. 1990. *Etude du Secteur Pastoral d'Anderaboukane: Cas du Foncière Pastoral*.

Developing the Commons: A Critique of NGO Approaches to Pastoral Development

Richard Hogg

March 1991

1. INTRODUCTION

Increasing disillusion with the effectiveness of large donor rural development projects at alleviating rural poverty has seen a gradual shift of donor resources in recent years to Non-Governmental Organisations (NGOs). NGOs are widely perceived by the public and donor community alike as more "effective" than larger donors at reaching the rural poor (see Farrington and Biggs, 1990). The actual record of NGOs in this field, however, is difficult to assess—particularly as the monitoring and evaluation component of NGO projects is often either non-existent or poorly developed. Typically, NGOs operate small scale, community based rural development projects with the accent on participation, appropriate technology and institution building. Whether such an "operational" approach is appropriate in tackling the longer term environmental and resource management problems of resource poor areas, however, many of which involve local and even regional political and economic factors *outside* the local community, is open to question. In the following paper I examine, largely from the perspective of natural resource management, the record of NGO involvement in pastoral sector development in three projects in Eastern Africa—the CARE Borana Rangelands Project in Ethiopia, the OXFAM/ITDG Lokitaung Pastoral Development, and OXFAM Samburu Development Projects in Kenya. I argue that the NGO approach to pastoral development in certain projects is seriously flawed because:

- it fails adequately to define what it means by community;
- it fails to collect baseline information on the traditional pastoral system and monitor project progress in achieving project objectives (less so for the CARE project);
- it lacks technical backup;
- it fails to work with government; and
- its small scale and community focus prevents it from tackling the wider problem of rangeland areas of an increasing population and declining resource base.

2. BACKGROUND

2.1 Pastoralism

East African pastoralism has undergone profound changes in recent years. Pastoral groups are increasingly marginalised and impoverished as a result of national incorporation and market penetration, and many pastoral groups have been caught up in local and regional conflicts (see Markakis, 1987; Hogg, 1986). Loss of power to the centre has resulted in a diminishing resource base and increased vulnerability to drought. Yet a feature of pastoral societies and environments is their remarkable resilience in the face of these changes. As the overall context of pastoralism has changed so pastoralists have had to adapt their way of life and management practices to a new and changing environment. The fundamental task of development agencies working in pastoral areas is not only to understand the nature of these changes but their implications for the kinds of technical and institutional interventions that are likely to improve the welfare of pastoralist populations over the long term.

2.2 Pastoral Environment

The variability and marginality of pastoral environments imposes limitations on the dominant forms of economic exploitation. Generally agriculture is restricted to pockets of higher potential land or better rainfall years and "open" access pastoralism, combining a range of livestock species, is the norm. The precise economic and organisational forms that this pastoralism takes, however, varies a good deal, depending on local conditions and cultural systems.

2.3 Environmental and Socio-Economic Trends

The major environmental and socio-economic changes which have taken place in recent years are largely a result of national incorporation and market penetration. Some of these changes are:

1. Population Increase

A soaring population—the rate of increase in Kenya alone is 3.7%. In surrounding countries it is not far behind. While pastoralists tend to have lower rates of increase than neighbouring sedentary groups the long term trend in pastoral areas is still upwards (Henin, 1969). This trend is exacerbated by the influx into marginal areas of landless agriculturalists pushed out from surrounding higher potential areas. With no new rangeland areas for pastoralists to expand into the result is increasing pressure on grazing resources.

2. Expansion of Cropping

Cropping appears to be increasing in nearly all rangeland areas both as a result of population increase and the influx of landless farmers as well as government policies, which favour the development of irrigation schemes and agricultural over pastoral production (see Hogg, 1983). The long term consequence is likely to be the loss of important dry season grazing areas to permanent settlements and agriculture.

3. Livestock Increase

In spite of short term fluctuations in livestock numbers as a result of drought and disease all the evidence points to a long term increase in livestock populations—largely as a result of improved animal health care. The result is likely to be increased pressure on what is an already diminishing resource base.

4. Insecurity

African governments which are themselves threatened by internal rebellion and civil war find it increasingly difficult to protect pastoralists living in remote border areas from widespread banditry. As a result large parts of the rangelands are effectively 'no-go' areas. This has further reduced available and safe grazing areas for pastoralists (see Hjort af Ornas & Mohamed Salih, 1989).

5. Loss of Power

Since incorporation pastoralists have lost power vis-à-vis the centre. They have little influence on government, which tends to be dominated by agricultural groups. As a result government policies, such as the encouragement of settlement and agriculture and the alienation of dry season grazing areas to national parks and game reserves, are frequently inimical to pastoralist interests.

6. Market Dependence

Associated with national incorporation is the gradual domination of economic life by the market place.

Pastoralists are increasingly forced to sell their livestock or livestock products to buy food and other goods. This increasing dependence on the market has increased their vulnerability to market forces and price fluctuations.

7. Wealth Differentiation

National incorporation and market penetration have brought new opportunities to invest in non-pastoral resources less vulnerable to drought and disease. This has allowed new opportunities for wealth differentiation and stabilisation.

3. NATURAL RESOURCE MANAGEMENT

The focus of this paper is on pastoralist natural resource management strategies. These strategies refer to:

- a) those explicitly "technical" strategies that pastoralists employ to exploit the natural environment, such as dry season reserves, calf paddocks, the collection of *Acacia tortilis* pods and the cutting of grass in the dry season, and the digging of ponds and wells,
- b) those associated institutional arrangements, such as herding associations, well management groups, grazing committees which organise and control access to natural resources, and, finally,
- c) those culturally constructed rights, obligations and responsibilities which define access to natural resources.

Key issues are:

- i) the effectiveness and efficiency of indigenous technology in exploiting the rangeland,
- ii) the cohesiveness and continuing efficacy of traditional resource management groups to control access to natural resources in a rapidly changing environment, and
- iii) the relationship between individual and common rights in property, the relation between usufruct and ownership, and "the connection between the nature of land rights on the one hand and issues of scarcity, responsibility, and land management on the other" (Pauline Peters, 1987:171).

3.1 Land Rights

Pastoral land rights in Africa are changing rapidly. Pastoralists

find themselves marginal members of nation states. As they are increasingly squeezed by processes of sedentarization, population increase, impoverishment and expropriation of higher potential land by government and marginal farmers, they are under increasing pressures both from within pastoral societies, as they become increasingly internally differentiated, and from without, by government and development agencies, to change the basis of traditional rights in land. Hitherto, the dominant paradigm in the debate about pastoral land tenure has been Garret Hardin's model of the "Tragedy of the Commons," which poses an irreconcilable contradiction between individual and system interests in common property resources (see Hardin, 1977). According to the model, wherever resources are held in common, the individual is locked into a system that compels him to over-exploit the common resource. So the African herdsman is compelled to overstock the range, bringing eventual ruin to himself and long term degradation to the environment.

The Hardin thesis has had a powerful constituency in government and donor circles. Whether its central thesis is right or wrong in practice depends, firstly, on the nature of the rights in question—pastoralist rights to graze their animals on the range are generally contingent on a variety of factors and are rarely entirely unrestricted, and, secondly, institutional arrangements to conserve resources. The danger is that because of rapid economic change brought about by national incorporation and market integration traditional controls and institutional arrangements will collapse, leading the way to a real "tragedy of the commons." It is in the prevention of this situation which lies the real challenge for both government and non-governmental agencies involved in pastoral development, and the particular justification for community or institutional based programme interventions in the pastoral sector.

4. CASE STUDIES

4.1 CARE Borana Rangelands Project

4.1.1 History

The ILCA/MoA Joint Ethiopian Pastoral Systems Study (JEPSS), 1981-1984, was intended to examine the Borana pastoral system and identify critical areas for intervention to increase livestock production in the southern rangelands. The study identified poor calf nutrition as a key constraint to improved livestock productivity. In 1985, after the 1984/5 drought, ILCA persuaded CARE to

establish the Southern Sidamo Rangelands Development Project to continue ILCA research work into a new and applied research and development phase. This phase consisted largely of the testing of ILCA research hypotheses, in particular the benefits of calf feed supplementation, provision of water through ponds made by animal drawn scoops and the establishment of exotic forage trials in representative Borana areas.

By 1987/88 the Project had moved away from its scientific and research roots towards an increasingly extension based project interested in working with local communities to build up local capacities to articulate and solve locally perceived development needs. This transition was signalled in 1987 by the first systematic attempt by the Project to assess and survey local needs. In spite of this shift, however, local people still refer to the CARE Project as ILCA, and most CARE technical interventions continue to be based on earlier ILCA research. In 1989 after administrative boundary changes the Project was renamed the Borana Rangelands Project.

4.1.2 Project Objectives

The project's long term goal is to ensure greater food security for pastoralists in the Project area. Intermediate objectives are:

- i) to facilitate the development of the pastoralist's abilities to identify problems, needs and solutions, and implement and evaluate these solutions relating to food security;
- ii) to strengthen the link between the communities through their pastoralist associations and service cooperatives; and
- iii) to assist the communities through the provision of technical advice and materials to implement their own solutions and to improve them-relating to food security. (CARE Borana Rangelands Development Proposal, 1990:4).

4.1.3 Project Target Population

The Project covers approximately 7,500 sq. km. in Teltele/Yavello and Dirre *Awrajas* in Borana Region. The area is populated by up to 30,000 mainly Borana but some Gabbra pastoralists.

The Project does not single out only the poor and marginal to work with. It is recognised that both rich and poor live and

cooperate together, and that the community as a whole should benefit from project in-puts.

4.1.4 Project Management

Project management which has its administrative base in Yavello town consists of an expatriate project coordinator, administrative staff in Yavello, and extension staff based in the field. Management structure is essentially hierarchical, with assistant field workers, who are drawn from the community, reporting to field workers, who in turn are answerable to a field officer, who is responsible for one or more pastoral associations, covering often over 1,000 sq.km. The field officer is in turn responsible to the assistant coordinator and, finally, coordinator, based in Yavello. Excluding administrative and training staff based in Yavello there are currently 5 field officers, 12 field workers or extension agents, and, finally, 14 assistant field workers/ extension agents.

4.1.5 Project Components

CARE project interventions can be divided into technical and institutional. Technical interventions are based on their experience in the area, ILCA research and assessed local needs.

4.2 OXFAM/ITDG Lokitaung Pastoral Development Project

4.2.1 History

In 1979/80 drought and disease killed large numbers of livestock in Turkana District. The Government of Kenya with support from the European Economic Commission (EEC) and United Nations World Food Programme (WFP) established the Turkana Rehabilitation Programme (TRP). By 1982 some 80,000 Turkana were in food relief camps. As conditions improved donor emphasis shifted from emergency relief to rehabilitation of the pastoralist population through longer term food-for-work and development programmes (Hogg, 1982). In 1983 OXFAM financed a livestock consultant to prepare a Turkana District Livestock Plan (TDLP). The Plan recognised the dangers of an indiscriminate use of food-for-work in the construction of water harvesting sites and micro-catchments in the district and recommended:

- a) a more coordinated approach to water harvesting, and
- b) OXFAM finance for a small scale animal draught and spate irrigation demonstration project based on the pre-existing Salvation Army Lokitaung Water Harvesting Project (see TDLP, 1984).

A project proposal was written-up in early 1984 and a two year grant of over USD \$85,000 (sterling equivalent of 45,000 at current rates of exchange) agreed by OXFAM later in the year. The Turkana Rehabilitation Programme agreed to contribute a further \$20,000. The objectives of the Project were to demonstrate water management, crop production and range improvement methods applicable to Turkana, investigate the socio-economic, particularly land tenure and management aspects of water harvesting, and demonstrate animal draught and animal transport systems. During project implementation the project manager who was seconded to OXFAM from ITDG became increasingly concerned that the project should take sufficient account of indigenous organisation and management capacities, and that the project should only move at the pace of the local population. As a result, after October 1985 project objectives were revised and emphasis shifted from a demonstration of foreign technologies, many of which were imported from Yemen, to working with local Turkana to strengthen and improve existing gardening skills and institutional arrangements (see Mid-Term Review, 1986). At the same time the project became concerned that water harvesting should be seen as a supplement not an alternative to pastoralism and that the project target population should be poor rather than destitute pastoralists. This shift was supported in a review of the project carried out for OXFAM/ITDG in July 1987.

In mid-1988 management of the project was handed over to a local management board, and OXFAM/ITDG stepped back from day to day project management. While the project continued to establish improved gardens, and train in animal draught other components were added: local community food stores, hides and skins trading, and an animal health component. In 1989 the project was renamed as the Lokitaung Pastoral Development Project (LPDP).

4.2.2 Project Objectives

The long term objective of the project is to strengthen the capacity of traditional pastoral institutions to sustain and increase local food production, and reduce household level vulnerability to seasonal food shortages. The intermediate objectives are:

- to strengthen the capacity of appropriate pastoral institutions to initiate, manage and develop responsive food security projects;
- to develop a range of sustainable technologies which increase household level food production; and
- to contribute information and lessons learnt to District policy makers and to encourage greater recognition of

pastoral institutions as appropriate vehicles for development (LPDP, Annual Plan, 1990-91).

4.2.3 Project Target Population

The estimated pastoral population of Lokitaung Division is 40,000 with an additional 12,000 settled population (Martin, 1990:7). Project beneficiaries only comprise a tiny proportion of this number. According to project documents only about 152 families are actual registered project members. However, many non-members benefit from the project and have access to project stores. Nevertheless, the total number of direct project beneficiaries is relatively small, probably only a few thousand people scattered in four different locations:

The target population are marginal pastoralists with less than 100 small stock: the project early on recognised that it was these marginal pastoralists who were most likely to directly benefit from the project as crop production was never likely to be more than a supplement to a predominantly pastoral economy.

4.2.4 Project Management

The Project has been managed for the last two years by a management board composed of representatives from the three-now recently expanded to four-project locational committees and project staff. The locational committees consist of traditional area or *ere* representatives and local project technical staff, e.g., stores leader and extensionists. Locational committees have considerable authority in their locations and can override decisions made by the management board. At the grassroots are the *ere* groups which consist of project members living within the *ere*. There are a total of 25 such *ere* groups in the project.

The seventeen project staff are either employed directly by OXFAM or by the Project. OXFAM/ITDG continue to finance and provide technical/training support to the project. The project budget for financial years 88/89 to 90/91 is approximately \$80,000 (sterling equivalent of 42,000).

4.2.5 Project Components

The project technical component has evolved over time as new components have been added to the project. In particular the project has increasingly tried to shift away from its origins as an exclusively "water harvesting and animal draught project" to become a more general pastoral development project covering a broader range of technical interven-

tions/training programmes. Water harvesting for improved crop production has, however, remained at the core of the project, and has consumed the lion's share of project resources.

4.3 The OXFAM Samburu Pastoral Development Project

4.3.1 History

In 1984 large numbers of Samburu were made destitute by drought. It is estimated that in some areas of the district 75% of the cattle and some 30-50% of the small stock died as a result of the drought (Simpkin, 1987:2). OXFAM responded to the emergency by funding a destocking programme exchanging dying livestock for maize meal: the animals were slaughtered locally, the meat dried for local consumption and the hides and skins sold in Nairobi. At the end of the drought OXFAM continued to support families with food-for-work and, at the same time, launched a restocking programme among some of the destitute families. The local committees which had been established at different centres in the district to facilitate the destocking operation continued to select families for restocking and supervise food-for-work. An OXFAM monitor was attached to each of the centres and the whole operation supervised by a Project Manager and his assistant.

In 1987 food-for-work was phased out and increasing emphasis placed on building up the capacity of the local committees to establish viable and sustainable pastoralist institutions to take responsibility for development activities in the Project area.

4.3.2 Project Objectives

The ultimate goals of the Project are to improve food security, facilitate community progress towards self-reliance by using locally available resources to improve, strengthen and diversify the pastoral economy, and to increase the participation of women in the development process. The intermediate project objectives are:

- (1) to improve food security through:
 - a sustainable restocking system in Baragoi Division,
 - improved access to veterinary drugs and the establishment of an animal health training programme for livestock owners, and
 - the development of an effective early warning system.
- (2) to facilitate community progress towards self-reliance

through

- an improved understanding of traditional social organisation, and
 - leadership training and community awareness of development issues.
- (3) to increase the participation of women in the development process through leadership skills training for women, and support for women's groups.

4.3.3 Project Target Population

The Project is located in Baragoi division of Samburu District. The division has a population of approximately 30,000 covering an area of nearly 5,500 sq.km. The majority of the population are Samburu pastoralists but there is a significant minority of Turkana, who have steadily been moving into the area since early in the colonial period. Samburu are mainly cattle and small stock pastoralists, but in recent years have begun buying camels.

The OXFAM project in Baragoi is focussed on communities around nine centres. These centres, which range in size from two hundred to over 800 people, have grown up around trade and market stores, missions and schools. A significant number of those nearest to the centres are poor pastoralists. There are considerable differences in livestock holdings both within and between centres (see ITDG "Report of Baseline Study" by Karen Isles, 1990).

4.3.4 Project Management

Project management is intended to work through and build up the capacity of local groups to be responsible for their own development. At present these local groups are supported by a centralised Project management based in Baragoi. The five Project staff, who include a woman's programme coordinator, are employed on OXFAM salaries and are responsible in the first instance to the Project Manager/Team Leader. The project budget over three years, 1989-1992, is over \$190,000.

4.3.5 Project Components

The Project components have evolved and changed over the life of the Project. Destocking ended in 1984 and food-for-work to establish tree nurseries and plant reserves of drought resistant trees and shrubs ended in 1987. Since the end of the relief phase increasing emphasis has been placed by OXFAM on "institution building" and developing community awareness of development issues. The present project components are outlined below:

5. NGOs AND THE FUTURE OF PASTORAL DEVELOPMENT

Large donor funded pastoral development projects in Africa have generally failed to increase livestock productivity, or to improve the standard of living or food security of pastoral peoples (see Sandford, 1983). In an attempt to develop a new approach to pastoral development based on the active participation of pastoralists, NGOs have experimented in recent years with the organisation of pastoral associations based on indigenous institutions. The key words of this new approach are *institution building/strengthening* and *community participation*. Largely because of its implications of grassroots development, people participation, and emphasis on resource poor pastoralists – the new shibboleths of development – little thought has been given:

- a) to the effectiveness of the new approach *in practice*, i.e., what does institutional strengthening mean in a project context, and
- b) whether such an approach can ever be very effective *without* government support.

In the three case studies under review I have attempted to examine the major constraints of the new approach in the context of NGO supported pastoral development programmes in Eastern Africa. [While it is recognised that the three case studies do not necessarily cover the full range of NGO approaches to pastoral sector development, it is assumed that they nevertheless identify at least one "typical" NGO approach.]

The major constraints identified are the following:

1. The Lack of Attention to Baseline Data

Whether because of their origins as emergency responses to drought and famine or merely because of a lack of money research and the collection of basic data on the pastoral sector, in particular *natural resource management*, appears to be given a low priority in at least two of the three projects.

Without the collection of basic data on the pastoral system and the management of pastoral resources it is difficult to see how any effective pastoral project interventions can be designed nor how project impact can be monitored and evaluated.

2. The Lack of Definition of Community

In spite of the rhetorical references in all three projects to "community participation" and building on tradi-

tional institutions it is difficult to know exactly what is meant by "community" or "traditional institution." It is almost as if it is sufficient just to mention these words in project documents for everyone to know what is being referred to or meant by the word. However, this is far from the case.

These criticisms are not just the grumblings of an anthropologist concerned about esoteric definitions but go to the heart of the new "community" approach to development, for we have to know what we mean when we talk of community otherwise the word becomes entirely meaningless. You might just as well talk of local people in general. By using the word community or traditional institution projects are telling us something about themselves – in distinction to other kinds of projects – which they need to be prepared to define and explain.

3. The Lack of Any Monitoring System

Objectives are so vague and diffuse as to be virtually meaningless. What do we mean when we talk of empowerment, enhancing food security, developing women's leadership skills. If ultimate project goals are vague then at least intermediate objectives have to be sufficiently clear – at least at the level of project outputs – so that we can monitor them.

In the past, larger donor projects have been heavily criticised by NGOs for being both costly *and* ineffective. NGOs run a similar danger. By being much smaller they are not necessarily any more cost-effective. Indeed, it is one of the myths of NGOs that smallness has anything to do with cost effectiveness. The trouble is that the paucity of physical achievements is obscured by:

- the rhetoric and ideology of institution building and/or community participation, and
- by the lack of any monitoring system which can even start to measure costs and benefits.

Effective monitoring, however, is crucial if we are to be able to judge the success of the NGO approach. Unfortunately, to date it is an area which has received relatively little attention in NGO projects. Until it does we just do not have the data to tell us that the new approach is any more successful than the old one.

4. Poor relations with Government

It almost appears as a *sine qua non* that NGO relations with government have to be poor. This is unfortunate because it can only effect the ultimate sustainability of

the NGO approach. It is one of the weaknesses of many NGO programmes that they fail to lock into mainstream government programmes. There is little point developing a community based approach to pastoral development only to see it collapse because government does not recognise the approach. There are signs in all three projects under review that the NGOs concerned recognise this and are trying to develop their relations with government. However, much remains to be done because of the long legacy of distrust between the two.

In pastoral areas, where the problems faced by pastoralists often stem from external government interventions, it is particularly important that NGOs act as a bridge between the two sides. Development education is as much a matter of educating government officials as local pastoralists. Much greater emphasis than hitherto needs to be given therefore to the NGO acting as interlocuter. This can only realistically happen if *institutionalised* channels of communication are opened up with government.

To perform this role at all effectively NGOs will have to put much greater accent on research – on knowing exactly what is happening in the pastoral area/sector, stimulating debate on key issues which are likely to effect the welfare of pastoral communities in the future, e.g., land tenure, land adjudication, and implementing *with* government and larger donors experimental or pilot projects based on community participation, and monitoring and disseminating the results/lessons of such projects.

5. The Inappropriateness of the Small Scale Project Approach

A focus on small-scale development projects is all very well if the problems facing people are resolvable at the local level. However, many of the problems facing pastoral peoples and areas are *regional* and *national*, and cannot be resolved by local community interventions. A criticism of the NGO approach is that it is so small scale as to be irrelevant given the larger context of pastoralism. If empowerment as a process is to stand any realistic chance of helping local communities it has to be pitched at a level which provides real voice to local demands.

NGOs have to be prepared to work at both the micro and macro levels and to trace the linkages between the two. A community focus should not preclude wider regional considerations. OXFAM in Kenya has made

a start in this by establishing a pastoralist steering committee at national level to discuss wider national issues affecting the position of pastoralists in the country, e.g., land tenure. This represents an important development, but needs to be expanded by establishing institutional contacts with:

- the main Kenyan government ministry concerned with arid and semi-arid lands development, and
- other large bilateral/multilateral organisations operating in the pastoral sector.

An opportunity to do this has recently occurred with the establishment of a pastoral unit in UNICEF/UNSO based in Kenya.

6. Lack of Technical Backup

It is noticeable how the shift towards a more sociologically aware approach to pastoral development has been combined with a de-emphasis of the role of technology in development. Yet, in spite of the general NGO reaction against quick technical fixes, technology has an important role to play in pastoral development. Western veterinary drugs are regarded by most pastoralists as far superior to their own indigenous preparations. In the same way, while animal draught may be more "appropriate," Boran pastoralists would rather hire heavy machinery to improve their wells than depend on hand labour or their animals to do the job for them. They would also rather use cement than clay to line their cattle troughs.

Appropriate technology may not always be the best or most cost effective technology. Too often the labour and opportunity costs of "appropriate" interventions are ignored.

If NGOs are to respond to the needs of pastoralists in a cost effective way then they need to support their programme interventions with appropriate technical advice. The shift towards a more sociological approach to pastoral development should not be at the expense of technical support for programmes. This support may have to do with the best crop combinations and pesticides in Turkana district, the best methods to cure hides and skins in Samburu or the best way to build water tanks in Borana region. Whatever the identified need NGOs should not down-grade their technical support capacity to such an extent that they can no longer offer timely technical advice. This is an area where closer relations with government departments, who might have this expertise, would be useful.

6. CONCLUSIONS

In recent years NGOs involved in rural development in Least Developed Countries (LDC's) have ridden on a crest of a public and academic reaction against older, top-down, development approaches. They are considered sensitive to local people, relatively cheap and good at community development. However, in spite of the widespread praise in development circles for the NGO approach to development, the actual record of NGO projects is rarely critically examined. This almost across the board willingness to suspend critical judgement cannot help either the NGOs in re-defining their programmes to improve their impact nor the intended beneficiaries of their projects to reap maximum benefit from them. In this paper I have examined the record of three NGO pastoral development projects in Ethiopia and Kenya. In spite of the differences between them the conclusions are the same for all three projects:

- a) a need for NGOs to more clearly define their objectives and role in pastoral development. If they are to empower local communities then we need a more adequate definition than hitherto of what these communities are, what the process of empowerment is, and exactly how the communities are to be empowered *without* government support.
- b) a need for NGOs to open up a dialogue with government and larger bilateral and multilateral donors on the future of pastoral areas. If NGO project interventions and approaches are to be sustainable then they must become part of mainstream government programmes. Without this they run the danger of only further marginalising pastoralists.
- c) a need for NGOs to redirect attention away from small scale operational projects towards a more explicit advocacy and experimental role. If NGOs are to have a wider impact than just on the local community then they need to more clearly define their roles as:
 - a catalyst, experimenting with a particular approach which can then be picked up by larger donors, and
 - an advocate, speaking out for pastoralists in national and international forums.

If they are to take on these roles they need to improve on their knowledge of pastoral systems, and build up their research capability/capacity.

- d) a need for NGOs to more closely monitor project objectives and achievements. If NGOs are to pioneer

new approaches then it is important that we have the necessary information to tell us how successful the approach has been in achieving project objectives. To-date there is a dearth of information available on just how successful NGO projects are.

Ultimately, the plight of Africa's pastoral populations can only be addressed by the joint actions of governments, international donors, NGOs and pastoralists alike. If this joint action is to be achieved it will only be on the basis of a common agenda in which *all agree* that pastoralism is an economically viable, sustainable and worthwhile way of life. If NGOs have a contribution to make to setting the terms of this agenda rather than just responding to periodic crises in the pastoral sector it will mainly be through:

- informing policy makers of the local, national and international economic and political processes which are at work helping to increase the vulnerability of pastoralists to drought, and
- on the basis of the above, the design and implementation in collaboration with other donors and government of effective experimental interventions to reduce this vulnerability in the future.

ACKNOWLEDGEMENT

I am grateful to OXFAM-Kenya, the Intermediate Technology Development Group, and CARE-Ethiopia for allowing me access to project documents and files.

REFERENCES

General

Farrington, J. & Biggs, S. 1990. NGOs, Agricultural Technology and the Rural Poor. *Food Policy* 15, 6.

Hardin, G. 1977. *The Tragedy of the Commons*. Reprinted in 'Managing the Commons' eds. Hardin, G. and Baden, J. W.H. Freeman & Co. San Francisco.

Henin, R.A. 1969. Marriage Patterns and Trends in the Nomadic and Settled Populations of the Sudan. *Africa*, 39.

Hjort, A. & Salih M.A. 1989. *Ecology and Politics: Environmental Stress and Security in Africa*. Scandinavian Institute of African Studies.

Hogg, R.S. 1983. Irrigation Agriculture and Pastoral Development: A Lesson from Kenya. *Development and Change*, 14.

Hogg, R.S. 1986. The New Pastoralism: Poverty and Dependency in Northern Kenya. *Africa*, 56.

Markakis, J. 1987. *National and Class Conflict in the Horn of Africa*. Cambridge University Press. Cambridge.

Peters, P. 1987. Embedded Systems and Rooted Models: The Grazing Lands of Botswana and the Commons Debate. In 'The Question of the Commons' eds. McCay, B.J. and Acheson, J.M. The University of Arizona Press. Tucson.

Sandford, S. 1983. *Management of Pastoral Development in the Third World*. John Wiley & Sons. London.

CARE-Borana Project

CARE-ETHIOPIA. 1988. Final Report on Southern Sidamo Rangelands Development Project, October 1985-September, 1988. Available CARE office in Addis Ababa, File 1404.3.11.

CARE-ETHIOPIA. 1990. Borana Rangelands Development Proposal, July 1990-June 1992. Available CARE office in Addis Ababa.

CARE-ETHIOPIA. 1990. Mid-Term Evaluation: CARE/Borana Rangelands development Project, Ethiopia. Available CARE office in Addis Ababa.

Coppock, D.L. 1989. Bigger calves make better cows: Fact or fantasy in variable environments? *ILCA Newsletter* 8(4): 1-3, ILCA Addis Ababa.

Coppock, D.L. 1990. Water and forage development interventions: More benefits to pastoral women or their calves? *ILCA Newsletter* 9(1):3-4,9. ILCA, Addis Ababa.

Cossins, N.J. and M. Upton. 1987. The Borana pastoral system of southern Ethiopia. *Agr. Systems* 25:199-218.

Cossins, N.J. and M. Upton. 1988. Options for improvement of the Borana pastoral system. *Agric. Systems* 27:251-278.

Donaldson, T.J. 1986. Pastoralism and drought. A case study of the Borana of southern Ethiopia. M.Phil. thesis, Reading University, UK.

Hendy, C.R.C. 1990. Report on Mid-Term Evaluation of CARE Borena Rangelands Development Project, Ethiopia, 7th-30th October, 1990. Available Natural Resources Institute, England Report No.1622(R).

Hodgson, R.J. 1990. The Southern Sidamo Rangelands Project 1985-1988: Perspectives on Development Interventions and Extension. Available at ILCA, Library Code 633.75.

Holden, S.J. 1988. Dairy Marketing and pastoralism: Implications for development in the southern Ethiopian rangelands. M.Sc. thesis, Reading University, UK.

OXFAM/ITDG-Lokitaung Pastoral Development Project

Cullis, A. 1988. OXFAM Water Harvesting Project: Handing Over Report. Available OXFAM office in Nairobi.

Cullis, A.; Swift, J.; and Watson, C. 1986. Turkana Water Harvesting and Draught Animal Demonstration Project: Mid-Term Review for OXFAM/ITDG. Available Oxfam Nairobi office.

Cullis, A. 1990. Tour Report to Lokituang. Report prepared for OXFAM/ITDG. Available in Nairobi office.

Gibbon, D. and Martin, A. 1987. Turkana Water Harvesting Project: A Review for OXFAM and ITDG. Available OXFAM Nairobi office.

Lokitaung Pastoral Development Project Annual Development Plan, 1990-91. Available in OXFAM Nairobi office.

Martin, A. 1986. Monitoring Turkana Water Harvesting Project. Report prepared for OXFAM/ITDG. Available in OXFAM Nairobi office.

Martin, A. 1990. Lokitaung Pastoral Development Project: A Review of the Project for OXFAM/ITDG. Available OXFAM office in Nairobi.

Morgan, W. 1974. Sorghum Gardens in South Turkana. Geographical Journal, 140.

OXFAM. 1984. Turkana District Livestock Development Plan. A plan prepared by OXFAM consultant for Turkana District Livestock Development Committee. Available in OXFAM Nairobi office.

OXFAM-Samburu Pastoral Development Project

Fry, P. 1988. Evaluation of OXFAM's Four Restocking Projects in Kenya. Report to OXFAM. Available OXFAM Nairobi office.

ITDG. 1989. Samburu Livestock Project, 1989-91: Project Proposal. Available in OXFAM Nairobi office.

Isles, K. 1990. Report of Baseline Study. Prepared for OXFAM/ITDG. Available in OXFAM Nairobi office.

Kerven, C.; Kisopia, P.; and Munyes, J. 1990. Review of OXFAM's Samburu Development Project. Available OXFAM Nairobi office.

Simpkin, P. 1987. End of Tour Report for OXFAM. Available in OXFAM Nairobi office.

NOTE: Richard Hogg's original paper has been abridged for this Annex.

ANNEX II

Local strength and global weakness: NGO experience with pastoralists in Africa

Camilla Toulmin and Richard Moorehead
Drylands Programme, IIED
February 1993

Paper prepared for the PVO.NGO/NRMS-IIED-CCA.ONG workshop on "NGOs and Natural Resource Management in the Pastoral Sector of Africa - Strategies for Enhancing Performance and Impact." February 22-28, 1993. Mopti, Mali, West Africa.

INTRODUCTION

This paper outlines the major issues facing NGOs working in the pastoral sector of sub-Saharan Africa. It draws upon a pair of studies carried out in East and West Africa, each of which examined the experience of several NGOs grappling with a range of pastoral development interventions. The purpose of these case studies and of this summary paper is to highlight strengths and weaknesses associated with NGO work in this field. Such an assessment can then provide an agenda for discussing how best to build on what NGOs do well, so that others could benefit from their experience. At the same time, the assessment provides evidence of those areas where NGOs could usefully gain greater support, to remedy their weaknesses and to build greater links with other organisations from which they could learn.¹

NATURAL RESOURCE MANAGEMENT AND THE PASTORAL SECTOR

The term "natural resource management" is of fairly recent origin, and its widespread current use stems from growing concern with environmental matters amongst those involved with development issues. Within the context of sub-Saharan Africa, discussion of natural resource management usually focuses on a range of technical, legal/institutional, and economic factors.

On the technical side, such factors concern attempts to reduce the vulnerability of rural production systems to recurrent drought and highly variable rainfall. Interventions include techniques to tackle problems like soil erosion and declining soil fertility, and to rehabilitate grass and tree cover. In the late 1980s, a series of studies brought to wider attention several "successful" projects which showed some promise of raising productivity and welfare for rural people, within seemingly unpromising dry and degraded environments (Harrison 1987; Conroy and Litvinoff 1988; Shaikh et al, 1988; Rochette 1989; Critchley 1991). Of greatest renown have been cases such as the Guesselbodi natural forest management programme in Niger, and the stone lines built to stem water runoff and soil erosion in the Yatenga region of northern Burkina Faso. Such apparent success stories have been highly influential in subsequent design of policy and programmes in the West African Sahel.

However, some critics have argued that in practice the number of real successes is very limited and that little detailed evaluation has been done of the actual costs and benefits

involved. "Success" may be due to heavy levels of investment by a project in that place (and thus be difficult to replicate) or else the result of special circumstances which provide a strong rationale for people being willing to take up new methods. Such special circumstances may include easy access to markets or particular features of the physical terrain that have permitted gains to be made at relatively low effort.

Nevertheless, despite these criticisms, there is now a substantial body of material from projects across much of dryland Africa which shows a number of options for more sustainable rural livelihoods in the Sahel. However, relatively few of these successes have been identified in the pastoral sector.

In legal or institutional terms, the main forms of interventions have concerned the establishment of new, or strengthening of existing institutions at village or camp level. The aims have usually been to provide an organisational partner with which the project can communicate, and to strengthen local people's involvement in decision-making, whether in the field of controlling access to land, managing a system of credit, or maintaining a given asset, such as a water point. Institution building at local community level has frequently been seen as a good thing in itself, providing an arena for debate and for "empowerment" of local people, by demonstrating their ability to make and enforce decisions over resource allocation and use. On the legal side, NGOs have had little formal role to play. Currently, there is much discussion in many countries of sub-Saharan Africa regarding changes perceived as necessary in systems of resource tenure. In the West African Sahel, Niger has a draft Rural Code, Burkina Faso has recently ratified its reform of agrarian tenure, and both Mali and Senegal are in the process of consultation regarding what changes should be made. In East Africa, Kenya set up a commission looking into land tenure issues two years ago, and in Tanzania a presidential commission is carrying out the same work. In Uganda a policy review is underway involving a series of studies on land tenure, with a view to designing major changes in how land tenure should operate in the future. Thus, there is general recognition of the need for change in formal tenure rules and institutions, although considerable disagreement about the form of such changes, the relative importance of private versus communal title, and how best to incorporate customary rules of tenure into new legislation.

On economic aspects, the main focal areas concern provision of credit (for cereal banks, restocking animals, diversifying income generating activities) and interventions in marketing

systems (such as for the purchase of products, and the sale of inputs).

While NGOs can provide much needed support to particular pastoral or farming groups, this is highly localised in its impact. NGOs must work within a broader economic and political context which is frequently hostile to achieving sustainable improvements in people's lives and in increasing their ability to control their own future. It is this broader context to which we now turn.

THE BROADER CONTEXT

Despite the diversity of Africa's dryland regions, their particular history, peoples, patterns of activity, and the political and economic forces at work, a recent comparative study shows that there are certain broad trends common to the region as a whole (Bonfiglioli 1992). These include:

- highly variable patterns of rainfall, set for the West Africa Sahel within a declining trend, producing changes in pasture composition and vegetative cover;
- increased pressure on natural resources, due to growth in human numbers, development of markets and commercial opportunities, and lack of clarity regarding rules of tenure;
- increasing levels of conflict, pushing many pastoral populations into refugee camps; and
- declining levels of per capita income throughout the region.

Rainfall and environmental factors

So far as rainfall trends are concerned, a clear distinction needs to be drawn between the west Sahel region, running from Senegal up to and including Darfur in the western Sudan, and East Africa and the Horn. The first region's rainfall is largely derived from the north-south movement of the intertropical convergence zone (ITCZ), and the strength of such movement seems to depend on relative temperatures and pressures in the southern and northern Atlantic. By contrast, in East Africa and the Horn, rainfall is the result of weather patterns which develop over the Indian Ocean.

In the West African Sahel, a comparison of rainfall between the two periods 1931-1960 and 1961-1990 shows a substantial decline in the last thirty years, with a fall of up to 30% compared with the previous period (Hulme 1992). By contrast, the evidence for East Africa shows no such clear trend. Eastern Africa as a whole seems to have experienced a change in patterns of rainfall distribution so that, while

overall rainfall levels have not changed, there is less marked difference between the wet and dry seasons. In most parts of the continent, there also seems to have been some increase in rainfall variability (*ibid.*).

A variety of reasons have been put forward to explain changes in the level and pattern of rainfall in different parts of Africa: declining vegetative cover leading to increased reflectance and reduced rainfall; changes in patterns of ocean circulation and temperatures; and global climatic changes brought about by rising levels of CO₂ emissions and higher global temperatures. As yet, there is little good evidence to help us choose between the various possible causes (Hulme & Kelly 1992). However, there has been some shift in thinking away from the likely feedback into lower rainfall from loss of vegetative cover, towards a greater stress on the probable forces at work at a global level, and in particular rising levels of CO₂.

Soil and pasture productivity

The drylands of Africa have been widely described as suffering harsh levels of environmental change, the result of falling rainfall levels, and declining soil fertility, leading to decreasing levels of crop and pasture productivity (UNEP 1992, Rochette 1989). However, there has rarely been sufficient data on a broad enough scale to allow a careful assessment of the incidence and scale of such changes.

Recent evidence demonstrates that dryland ecosystems are highly variable, and strongly affected by changes in the quantity and distribution of rainfall. This evidence would tend to down play the adverse impact of man and livestock upon the region's ecological systems, and re-emphasise the dynamism and resilience of plant productivity (Behnke and Scoones 1992; Hanan et al 1991; Mortimore 1989; Tiffen 1992).

However, there clearly are important changes taking place which affect the capacity of human and livestock populations to survive. These include:

- reduced use of fallowing and length of fallowing periods within agricultural systems, leading to falling levels of soil fertility and reduced areas available for grazing;
- localised problems of soil erosion, leading to loss of valuable topsoil and reduced capacity to regenerate crops and pasture in future; and
- reduced tree cover in pasture and farming areas under pressure of drought, clearance of farm land, and increasing demand for wood.

These pressures on ecological systems tend to be greater in

farming than in pastoral areas, given higher levels of population density and intensity of use in the former.

Population growth and its distribution

Annual rates of population growth vary from 2-3% in most of the western Sahel² to 3.5% or more in East Africa. Such levels of increase have produced a more than doubling of population size in all countries since independence. While urban growth has absorbed a small part of this increase, the vast majority of people continue to remain in rural areas. There has been substantial movement of people within rural areas in many countries. For example, in Burkina Faso, many families have moved down from the drier provinces of Yatenga and Dori, to the wetter cotton areas of the south and west. Eradication of river blindness from lands close to rivers has also opened up large areas for cultivation. In other countries, increasing pressure on land use in higher potential areas continues to push people onto lands more marginal to farm production, though of considerable value to grazing systems. Thus, for example, herders in the Ferlo region of Senegal have become increasingly constrained in their movements and access to grazing land, with new areas being brought under cultivation, and loss of easy access to river flood plain pastures, following development of irrigation along the Senegal river (Touré 1991; Horowitz & Salem-Murdock 1990; Schoonmaker-Freudenberger 1991). In the flood plains of northern Nigeria, development of irrigated farms is causing conflict with herders traditionally reliant on these areas for dry season grazing. In many parts of East Africa and the Horn, similar processes of land alienation continue to take place, with land removed from the pastoral sector for farming, private ranches, or wildlife parks (Parkipuny 1992; Lane 1991).

Land tenure and conflict between resource users

Competition for access to land and the ensuing conflict has almost always been resolved in favour of farming populations, in part due to the importance attached by governments to achieving food self-sufficiency in cereal production, and in part to the greater political strength of farming populations in most African states. In legal systems, a clear distinction is usually drawn between the rights over land attributed to users who cultivate, and to those who use land for grazing. Governments rarely recognise grazing as an activity which involves managing and improving the resource base. Use of land for grazing also makes a far lesser impression upon the soils and vegetation than does cultivation (despite repeated references to "over-grazing"). Consequently, it is much less easy for herders to demonstrate use

and occupancy of grazing lands. At the same time, governments and donors have wanted to see the traditional pastoral sector transformed into something more "modern," usually meaning settled, more amenable to control, more easily taxed, and producing primarily meat rather than milk. Hence, governments have seen little interest in affirming rights of access to and control over resources within a system which they would wish to see changed substantially.

The policy context

The last few years have seen an opening up of political debate within many African countries, supported by growing press freedom. Programmes of structural adjustment have forced governments to reduce very greatly their intervention in many fields, leading to major changes in the provision of government services, and an increasingly important role for the non-governmental sector. A shift towards more decentralised power, decision-making and revenue raising has been evident in the development rhetoric of most governments, though less progress has been evident in reality. Considerable attention has been paid in recent years to the role for NGOs in development programmes, and many donors have shifted resources away from government and into NGOs in the belief that NGOs can achieve better results.

Economics, prices and markets

International and national factors are increasingly affecting the ability of pastoral households to maintain their livelihoods. These factors include: declining international terms of trade for the main export commodities of countries with large pastoral populations; falling levels of real per capita income; and livestock markets which face particular difficulties given the penetration of coastal markets by frozen meat exported from the developed world. Insecurity and conflict are severely disrupting markets in much of West and East Africa.

Linkages between natural resource management and other development issues

The management of land and other natural resources - grazing, forests, wildlife, water - is closely linked to many other factors, the most important of which have been outlined above. These factors are also closely inter-related, as for example, where drought and environmental degradation push more people into towns (where they join the urban poor) or onto more marginal land where they degrade more fragile resources and do not have the option of managing

their resources because of their poverty. Conversely rising population density may lead to an increase in the implicit value of land and the evolution of customary tenure systems towards tighter definition of rights. Similarly, if the market price for a crop increases, relative to others, this will increase demand for those resources needed to produce that crop. For example, better marketing opportunities for irrigated vegetables will increase competition amongst producers for irrigable land and sources of water, and for the labour required to plant, weed, water, and harvest those vegetables. Pressures on these resources will grow. The current attention paid by government and donors to reform of tenure and decentralisation is based on the hoped-for linkage between clearer, firmer rights at local level and more sustainable patterns of resource management.

Factors considered likely to lead to more careful, long-term patterns of natural resource management include:

- clarification of the rules regarding who has rights to resources and on what terms, and the mechanisms for enforcing these rules in cases of conflict;
- higher and more assured prices for livestock and crops;
- higher and less variable patterns of rainfall;
- reduced pressure on the natural resource base, through the development of alternative forms of livelihood; and
- development of technical improvements which increase the level and /or reduce the variability in output from crop and livestock systems.

NGO CASE STUDY ASSESSMENTS

The two assessments of NGO work in the pastoral sector covered the following organisations:

Mali

- World Vision, Menaka
- ACORD, Timbuktu and Gao
- VSF, Timbuktu.

Kenya

- Oxfam/ITDG Turkana Pastoral Development Programme
- Oxfam, Samburu Pastoral Programme

Ethiopia

- CARE International, Southern Rangelands Programme.

Each of the NGOs examined has been involved in a range of activities that have usually combined technical, institutional, and economic activities. All of the NGOs covered by the

assessments are "international" NGOs, with a European or North American base, and branches in a number of African countries. These larger international NGOs tend to have greater access to a broader range of information and skills than indigenous African NGOs. Consequently, one might expect their performance to be better than for smaller, weaker NGOs with more limited access to technical expertise and information networks. However, since no indigenous NGOs were included in the studies, such a comparison could not be made here.

Origin of NGO involvement

In five of the six NGOs examined, their intervention had its origin in meeting emergency relief needs following heavy drought losses of stock. This background has certain consequences. As relief needs become less urgent and attention is turned to longer term development, the NGO must then modify the kind of work undertaken to suit a different set of objectives. The kind of site chosen for a longer term development programme may not necessarily coincide with the more random choice associated with relief provision. In addition, having been "operational" for meeting relief needs, it may be difficult for the NGO to change towards a more indirect method of development intervention.

However, there are certain advantages to NGOs from having started their programme in this way, such as the clear demonstration of commitment shown by providing help in times of need. In addition, the disruption to production systems caused by drought can be seen as providing an opportunity for introducing new ideas about ways to protect herds from drought in future.

In the sixth case, that of CARE in Ethiopia, the initial involvement stemmed from contacts between CARE and the International Livestock Centre for Africa (ILCA), with a request that CARE build on the detailed research carried out by ILCA in the southern rangelands of Ethiopia.

Main objectives of the NGO programmes

The stated objectives of the NGO programmes are remarkably similar. For example, ACORD's long term objectives in the Timbuktu and Gao regions are given to be: to improve livestock development in the region by creating a sufficient number of water points; to establish a system for more effective pastoral resource management; and to organise and empower the pastoral community. For Vision Mondiale, the long term goals are defined as: the improvement in welfare of pastoral populations in Menaka Circle, through

an approach based on interventions that are socially, economically, and environmentally appropriate.

Similarly, CARE in Ethiopia outlines its main aims as being: to facilitate the development of pastoralists' abilities to identify problems, needs and solutions, and to implement and evaluate these solutions; to strengthen the link between communities through pastoral associations and service co-operatives; and to assist communities through the provision of technical advice and materials to implement their own solutions, particularly relating to food security. Oxfam's Samburu programme notes its ultimate goals to be to improve food security, facilitate community progress towards self-reliance, strengthen and diversify the pastoral economy, and to increase the participation of women in the development process.

In all cases, after the initial intervention to deal with drought-related problems, the NGO has developed more detailed longer term objectives, which have focused on a range of interventions. These encompass rehabilitation of the pastoral system, but along somewhat changed lines, to make it less vulnerable to future droughts, through:

- improvements to the physical environment (grazing management, fodder production, soil conservation, and rehabilitation of pastures);
- diversification of incomes to reduce reliance on livestock; and
- institution building, empowerment of more marginal groups, and supportive measures to encourage a re-assessment by people of their future options, through "animation," consciousness-raising techniques, etc.

Natural resource management interventions

Each NGO has pursued a range of interventions in the NRM field, but usually with a focus on a few main areas. Over time, certain activities have been dropped while new ones have been picked up. Overall, the issue of resource tenure does not seem to have been their central preoccupation.

VSF's activities in Mali started with a programme to enable the slaughter and dry curing of meat during the drought of 1984, to mitigate the collapse of livestock markets and to provide a source of food to refugee camps. With the passing of this emergency period, VSF has focused very largely on the rehabilitation of the flood plain *bourgou* pastures along the River Niger in Mali. This has involved provision of nurseries for seedlings, the development of methods for planting out, and tests to assess optimal levels of grazing on the pastures

once re-planted. Supportive measures have included the vaccination and treatment of stock, to ensure that rehabilitated areas do not become a harbour for livestock disease and parasites. Similarly, VSF has needed to help support institutions at local level to make decisions regarding who has access to pastures and on what terms.

The Oxfam/ITDG programme in Turkana began in 1984 with a series of interventions focused particularly on improvements to water harvesting methods, including construction and lay-out of earth contour bunds, the introduction of animal traction, and provision of better tools. This approach was strongly influenced by a parallel, very large scale donor programme being carried out in Turkana, promoting water harvesting using high levels of capital and little or no local participation. The Oxfam/ITDG project saw itself as demonstrating a very different approach to working with people, through building on local institutions and involving people in decisions about the project. Over the past few years, the emphasis of the project has shifted away from water harvesting to a much broader range of activities. This is partly as a consequence of the project now being run by a local project committee made up of the Turkana. As a result, water harvesting no longer plays the central role it had formerly. Instead, greater emphasis is being placed upon the livestock sector, the mainstay of the Turkana economy, through veterinary work and marketing of hides and skins.

In the Menaka Circle of north east Mali, Vision Mondiale started in 1985 with a major programme of livestock loans to help reconstitute pastoral herds in the post-drought period, and to encourage herders to re-think their strategies for survival. It has since developed a number of activities aimed at improving the yield and resilience of pastoral resources. These include the sowing and protection of certain pasture areas, development of soil and water conservation measures for pasture and crop production, and simple livestock health interventions. Technical activities are supported by literacy, training, and environmental awareness sessions.

Oxfam's Samburu programme in Kenya began in 1984 to encourage destocking of herds, by purchase of animals against maize meal. As the drought ended, attention turned to restocking of destitute families, with loans of livestock. Since then the programme has expanded into livestock health, credit, institution building and support to women's activities.

Much of ACORD's effort in the early years was spent on support to the herders' co-operative movement, the recon-

stitution of herds through credit schemes, and improvement of water supplies in pastoral areas. More recently, greater attention has been paid to work along the River Niger, and support to irrigated agriculture. ACORD has also been involved to a limited extent in rehabilitation of bourgou pastures.

For CARE in the southern rangelands of Ethiopia, the initial focus was on ways to improve calf survival rates among the Borana. High levels of calf mortality had been identified by the ILCA research team as a major constraint on the productivity of the livestock system. Other activities have now been added, such as improvement to animal and domestic water supplies, and methods to store grain. Support to handicrafts production and development of beekeeping were attempted, and then dropped; handicrafts for lack of marketing opportunities, and beekeeping because people preferred to rely on collection from wild hives rather than managing the bees more closely.

Linking technical interventions to institutional development

All of the programmes described by the assessments try to address both a series of technical questions and the institutional framework at local level necessary to achieve more effective management of resources in the longer term. Such local level structures are intended to be the site for discussion within the community of priority areas for intervention, and the rules determining rights of access to resources. The balance between technical intervention and institutional development differs between the programmes, and is itself the subject of discussion by the case study authors. The East African assessment, for example, stresses the need to reassess the high level of attention paid to institution building, and a need for greater technical excellence. Clearly, this is an important question of the balance to be sought. Institutional development may serve little purpose where there is nothing for such an institution to manage. At the same time, exclusive emphasis on technical actions will serve little long term purpose unless there is clarity regarding the broader pattern of rights to manage and control access to resources subject to technical improvement. It is important to understand the linkages between technical and institutional initiatives, particularly when dealing with resource tenure issues, as different resources may be managed by different institutions within and between communities.

Various elements can be grouped into "institutional development" activities.

- literacy, training, consciousness-raising ("animation");

- creation of local committees to discuss project objectives, manage livestock loans, control access to improved pastures;
- support to local level community organisations, where these exist, to act as a channel for communication between project and beneficiaries; and
- training of project workers to encourage discussion on certain issues such as the need for soil conservation, and to transmit messages regarding technical skills.

Use of existing vs creation of new institutions

In some cases, NGOs have explicitly distanced themselves from structures established by the state, on the grounds that they are neither effective, nor representative of the range of interests found within the community (particularly women, and more marginal households). In such cases, alternative structures have been encouraged with certain functions - such as allocation and collection of livestock loans (Oxfam/Samburu, VM/Mali). Elsewhere, NGOs have used pre-existing institutions and attempted to make them work better (ACORD, Mali).

A number of important questions arise from looking at the NGO's experience with institutional development activities. These are discussed in the final part of this paper.

Relations with technical services

Experience ranges from very limited contact to close collaboration. CARE/Ethiopia has its own project structure and extension workers which has limited its need for links with government structures. This has been partly due to their desire to distance themselves from the then government of Mengistu Haile Mariam. Current circumstances in Ethiopia may make it easier to develop better relations with the state sector. For the Oxfam/ITDG Turkana programme, relations with government structures have been intentionally limited, in order to distance the project from the top-down approach of the large Turkana Rehabilitation Programme. The project approach has also been strongly influenced by the need to give local people a voice in making their own decisions. It was thought that such an approach would not be helped by close association with government.

Vision Mondiale has maintained few links with government services partly as a result of the very weak nature of such services in this remote region of Mali. Instead, it has relied on training of project staff in certain techniques. For Oxfam in Samburu, there are limited links through the local veterinary service.

VSF in Mali has relied on the regional and local development committees for design of programme activities, and on the local veterinary service for vaccination and other treatment of animals. For questions relating to management of rehabilitated bourgou pastures, it has established a committee composed of the local village or camp head, a representative of the local veterinary service, and a representative from VSF.

For many years, ACORD in Mali has provided major support for local government technical services. However, since the late 1980s, this relationship has been reassessed and a new contract developed whereby payment is made only for specific services rather than for more general support.

Clearly, the options available to a given programme depend on the range of activities being undertaken, availability of local extension staff, the appropriateness of such staff for the work to be undertaken and resources available for re-training, and a desire amongst many NGOs to maintain distance from government structures in order to emphasise the NGO's different method of work, and thereby gain local people's confidence. In many cases, NGOs working in the pastoral sector are in areas where there are few staff available within government systems of extension, and these staff are often poorly trained and equipped, and demoralised. Long years within government service may have encouraged attitudes and patterns of work which are not those valued by NGOs. The approach of many NGOs is also to show themselves to be apart from government, with different (and assumed to be better) methods of promoting development amongst the people with whom they work. Consequently, there are strong tendencies pushing NGOs away from close collaboration with the technical services. For ACORD, collaboration has been necessary because of the size and physical scale of the programme. For VSF, they needed specific inputs from government structures. However, in the other cases, it appears that the desire to maintain distance has predominated.

QUESTIONS RAISED BY THE NGO ASSESSMENTS

1. Relations between NGOs and other structures

What should be the role of NGOs in relation to the communities they choose to work with, and their respective governments? Some critics argue that NGO interventions tend to be very limited in terms of focus and the size of area and population covered. This raises a number of issues related to the cost-effectiveness of many interventions, and

the kind of linkages which could usefully be promoted between NGOs and other working in the same region or sector. Linkages might usefully be made between one NGO and:

- other NGOs working in the pastoral sector - what room for useful co-operation and sharing of ideas?;
- government structures/extension staff - contracts should specify the responsibilities on each side and hence prevent the NGO providing a blank cheque;
- other donor/government programmes in the same region - to permit better discussion of common technical or institutional issues;
- research services in-country to help support technical interventions; and
- policy circles at national and international levels to inform debate regarding issues of importance, such as resource tenure, and the impact of decisions made at higher levels on local people's ability to survive.

The justification for the high level of attention paid to much NGO work has rested on several assertions, which include:

- their ability to address more rapidly and cost-effectively the needs of the rural poor;
- through innovation and development of new methods, to demonstrate to governments and donors models for broader replication elsewhere; and
- their commitment to working in collaboration with local populations, rather than forcing certain activities upon them, from which can grow a more participatory style of rural development.

However, it is difficult to assess the extent to which such assertions are well-founded. There are clear cases where NGOs have been highly influential in affecting the design of interventions within broader programmes. Many of the elements of the GT approach in the Sahel are derived from NGO case studies outlining the important role of such things as people's participation, simple technical improvements based on local people's skills, and addressing immediate needs as well as longer term benefits. However, the limited data available precludes an easy comparison of benefits and costs between NGO and other programmes. An explicit policy of maintaining distance from other organisations (whether other NGOs, government bodies, donor agencies) has meant that contacts have often been weak, and possibilities for having a major impact upon policy restricted.

NGOs are caught in a difficult dilemma. On the one hand, their distinctive separateness has enabled them to develop innovative means of working and pursue approaches that

have now had an important influence on how larger programmes are carried out. On the other hand, for the specific programmes in which they are involved to become more sustainable, it may well be necessary to fit them better into government structures. In addition, NGOs would also benefit from greater clarity about the broader context within which the pastoral system operates, in order to understand the constraints this system places upon the likely success of any given activity. Constitution of a working group of those NGOs involved in the pastoral sector is one means whereby NGOs could both pool their experience and information, and identify what they need to know at the broader level in order better to orient their own programmes. Such working groups already exist in several countries and it would be useful to hear of the benefits derived.

2. Technical issues

What evaluation is possible of the degree to which activities undertaken by NGOs have met the aims set for the project? The two assessments summarised here have shown that NGOs rarely invest significant resources in monitoring and evaluation, and rarely carry out base-line studies of the area and people with whom they work. Of the NGOs reviewed here, VSF appears the easiest to assess, not least because the activities of the project are very focused. It is suggested here that if NGOs are to justify the considerable resources that are now being invested in them, they will need to show greater knowledge of the places in which they work, participate in debates on national policy issues, and gather information that will allow a more rigorous definition of objectives, and ability to monitor the progress of work. How cost effective in fact are NGO initiatives, compared to bi-lateral, government or multi-lateral programs?

The NGOs assessed here had limited access to technical expertise, only rarely have contacts with other NGOs, and have very limited linkages to specialist technical institutions (e.g. ACORD/INRZFH - Mali, CARE/ILCA, Ethiopia). However, the latter point is not the handicap it may seem to be, because NGOs are often involved in activities requiring simple methods and modest technical expertise. These requirements could easily be provided by local institutions, and NGOs could improve their planning for such inputs.

3. Community participation and institution building

These issues raise many difficult questions. What are the appropriate institutions with which to work? Is it better to work with existing structures (even if inadequate) or to create new structures which will need to establish their legitimacy

and methods of work? Are general pastoral associations appropriate for more specific management tasks, such as controlling access to valuable resources? If government-sanctioned structures are not used, what institutional viability is likely in the longer term? Is there a trade-off between representivity within such institutions, and its capacity to make and enforce certain decisions? Does representivity confer legitimacy upon the institution and the decisions made?

4. From crisis management to longer-term rural development initiatives

It is now some five years after the last drought in the Sahel, and most NGOs that started work in the region providing drought-relief have now shifted their attention and activities to longer term initiatives. This process has not been without difficulty, and it has been suggested that the original crisis-management role of some NGOs has led to them persisting in a top down approach to their present work. The project cycle of NGOs is often short term and assessed by physical indicators that provide little evidence of sustainability or which evaluate the performance of institutional initiatives.

Have NGOs working with pastoralists enough experience now to examine the lessons of the transition from crisis relief to longer term rural development work? Under crisis conditions identifying projects that need to be carried out is straight forward. For longer-term initiatives, in particular those concerned with institutional and resource tenure issues, project identification and implementation needs to take account of much broader and deeper issues relating to the political economy of both pastoral groups and the country in which they live. To what extent have NGOs working with pastoralists been able to build up relevant background information on the type of herders they are working with, the institutions that exist within their societies, and the broader regional and national economy within which they work? What are the constraints in gathering such information, and the costs of not taking these wider issues into account?

NGOs present the work they carry out in terms of technical and institutional initiatives, and yet rarely examine the linkages between the two. These relationships may be crucial for the success of initiatives in either field. For example, community institutions that control access to pasture and agricultural land in agro-pastoral communities may be quite different, the former being the responsibility of a community or inter-community body, the latter the responsibility of a lineage or household head: how do these

issues affect the management of natural resources by pastoralists?

The questions raised in this paper provide the basis for discussing how best to build on the strengths of NGO performance in the pastoral sector of sub-saharan Africa. We also hope that by identifying certain weaknesses the high expectations held of the NGO community will be realised.

¹ Especial thanks are due to the NGOs concerned who made available their project staff and files to the two case study authors - Jean Dakouo and Richard Hogg; in Mali - World Vision (Vision Mondiale), ACORD, and Veterinarians without frontiers (Vétérinaires sans Frontières/VSF); in Ethiopia - CARE International, and in Kenya - Oxfam and ITDG.

This document has been drawn up on the basis of two assessments carried out by Jean Dakouo and Richard Hogg. The interpretation presented in this paper of the performance of NGOs in the pastoral sector is strongly based on the evidence provided by the assessments. Constraints on our time have prevented a full discussion of this first interpretation with the NGOs examined, which would have permitted a fuller understanding of their strengths and weaknesses.

² However, such figures need to be treated with caution. The Malian census in 1987 showed a national population growth rate of only 1.7% per annum over the period 1976-1987.

REFERENCES

- Behnke, R & Scoones, I *Rethinking Range Ecology: Implications for Rangeland Management in Africa*. Dryland Networks Programme Issues Paper No 33, IIED, London 1992.
- Bonfiglioli, A M *Pastoralists at a Crossroads: Survival and Development Issues in African Pastoralism*, UNICEF/UNSO NOPA Project, 1992.
- Conroy, C and Litvinoff, M *The Greening of Aid*. Earthscan, London 1988.
- Critchley, W *Looking after our land*. Oxfam/IIED, Oxford 1991.
- Hanan, N et al. Assessment of desertification around deep wells in the Sahel using satellite imagery. *Journal of Applied Ecology* vol 28: 173-186. 1991.
- Harrison, P *The Greening of Africa*. Paladin, London 1987.
- Horowitz, M & Salem-Murdock M *The Senegal River Basin Monitoring Activity Synthesis Report* Institute for Development Anthropology, Binghamton, NY 1990.
- Hulme, M 'Rainfall changes in Africa: 1931-1960 to 1961-1990', in *International Journal of Climatology*, vol 12: 685-699. 1992.
- Hulme, M & M Kelly *Linkages between climate change and desertification with particular emphasis on the African Sahel*. A briefing paper prepared for the Overseas Development Administration. London 1992.
- Lane C *Alienation of Barabaig Pasture Land: Policy Implications for Pastoral Development*. IDS/IIED, 1991.
- Mortimore, M *Adapting to drought*. Cambridge University Press, 1989.
- Parkipuny, M S *Pastoralism, Conservation and Development in the Greater Serengeti Region*. Dryland Networks Programme Issues Paper No 26, IIED 1991.
- Rochette, R M *Le Sahel en lutte contre la désertification*. CILSS/Verlag, Weikersheim, Germany. 1989.
- Schoonmaker-Freudenberger, K & M *Pastoralism in peril: A Few Observations on the History of the Compression of Grazing Lands in Senegal* (Unpublished Report prepared for NOPA) 1991.
- Shaikh, A et al. Opportunities for sustained development. E/Di for USAID, Washington. 1988.
- Tiffen, M et al. Environmental change in Machakos District, Kenya. 1930-1990. Working Papers of the Overseas Development Institute, London 1992.
- Touré, O *Where Herders Don't Herd Anymore: Experience from the Ferlo, Northern Senegal*. Dryland Networks Programme Issues Paper No 22, 1990.
- UNEP, *World Atlas of Desertification*. Edward Arnold, London & UNEP, Nairobi. 1992.

ANNEX III

Draft Report on the Workshop

**“NGOs and Natural Resource Management in the Pastoral Sector
of Africa – Strategies for Enhancing Performance and Impact”**

February 22-28, 1993, Mopti, Mali.

1. BACKGROUND

This workshop was jointly organised by the PVO-NGO/NRMS Project, of Washington D.C., and the International Institute for Environment and Development (IIED) of London. It was funded by the United States Department of Agriculture/Forest Service's International Forestry Program (USDA), the USAID-funded Biodiversity Support Program, and the Norwegian Agency for Development Cooperation (NORAD).

The workshop brought together 69 representatives of NGOs, government technical services, bi-lateral donors, research agencies and pastoral organisations from the eleven countries of Burkina-Faso, Cameroon, the United States, Great Britain, Norway, Ethiopia, Uganda, Kenya, Madagascar, Mali and Senegal. The workshop was held in the conference chamber of the Opération pour le Développement de l'Élevage dans la Région de Mopti (ODEM), at Sévare, in Mali's fifth Region.

The Governor of the fifth region formally opened the workshop at 9 a.m. on Monday 22 February, with the assistance of the Director of USAID in Mali. The work over the subsequent six days was divided into three parts: the first two days were given over to an analysis of the technical issues and the presentation of case studies; the following two days were spent on visits to the field; and the final two days concentrated on examining the experience of NGOs working in the pastoral sector, and in identifying promising options for work in the future. The Governor of the fifth region formally closed the workshop at 5 p.m. on Saturday, 27 February.

2. CONTEXT

NGO approaches to the pastoral sector have tended to focus on relatively inexpensive interventions, with a strong emphasis on community development initiatives. Often operating in relative isolation from other larger projects, and almost in reaction to the technology-driven projects of larger donors, many NGOs have placed a low value on the role of technology in pastoral development. This has arguably been at the expense of a coherent holistic approach to both development and the conservation of natural resources.

The challenge facing pastoralists, NGOs, governments, and donors is now to identify approaches to pastoral development which will:

- make best use of the knowledge and skills which

pastoralists have used over centuries and are still relevant and useful today;

- help create the "enabling environment" which will empower social groups and institutions to manage their resources more effectively; and
- develop and extend, where available, technologies which will enable pastoralists to manage sustainably the resource base upon which they depend.

In this light, the Director of the PVO-NGO/NRMS Project set out the preliminary objectives of the workshop as:

1. To identify the technical and operational capacity of NGOs in the pastoral sector working in the field of natural resource management;
2. To review what NGOs have done; and,
3. To identify how NGOs might strengthen their initiatives in the pastoral sector so as to improve herders' livelihoods.

In the afternoon of the first day IIED presented an overview of NGO work in the pastoral sector which drew upon two commissioned reports for the workshop which reviewed NGO initiatives in this field in East and West Africa. The review, entitled "Local strength and global weakness: NGO experience with pastoralists in Africa" set out the areas in which NGOs were presently working in the pastoral sector, including: technical initiatives aimed at tackling soil erosion and declining soil fertility, and the rehabilitation of grass and tree cover; institutional initiatives to create new, or work with existing local institutions, in order to strengthen local people's involvement in decision-making; and economic initiatives focused on the provision of credit and intervention in marketing systems.

The overview stressed the need for NGOs to work in a broader economic and political context which is often hostile to achieving sustainable improvements in people's lives and in increasing their ability to control their own future - particularly in the case of pastoral initiatives. Four processes within this wider context that made working with herders difficult were identified as:

- highly variable patterns of rainfall producing changes in pasture composition and vegetative cover;
- increased pressure on natural resources, due to growth in human numbers, development of markets and commercial opportunities, and lack of clarity regarding rules of tenure;
- increasing levels of conflict, pushing many pastoral

- populations into refugee camps; and
- declining levels of per capita income throughout the region.

A brief review of NGOs working with pastoralists in East and West Africa revealed a number of common themes and areas. Many NGO's interventions had their origins in meeting emergency relief needs following heavy drought losses of stock, and this may have led to them persisting in a somewhat top-down approach when they turned to longer-term rural development work. On a more positive note NGOs who started their work in this way, often built up a reputation for commitment with the communities with which they worked, perhaps making the introduction of new ideas about ways to protect herds from drought in the future easier to introduce. NGOs have generally developed longer-term initiatives after the drought which seek to rehabilitate to pastoral system, and include improvements to pastoral resources, diversification of incomes to reduce reliance on livestock, and institution building.

Overall, the issue of resource tenure as part of natural resource management interventions does not seem to have been a central preoccupation of NGOs. The main areas of work in the natural resource management field have been in: measures to mitigate the collapse of livestock markets and to provide a source of food to refugee camps; rehabilitation of pastures; improvements of water-harvesting methods; introduction of animal traction; provision of better tools; the reconstitution of herds in the post drought period through livestock loans; simple livestock health interventions; literacy, training and environmental awareness education; and methods to store grain.

All of the programmes reviewed in the overview have attempted to address institutional issues, mostly involving literacy, training and consciousness-raising measures, and the creation of local committees to discuss project objectives, manage livestock loans and control access to improved pastures. In their relations with government organisations, however, NGOs have had more varied policies and results, some collaborating closely with government institutions, others keeping a distance, not least because by working with pastoralists they often found themselves in remote areas poorly serviced by technical services and other institutions.

On the basis of this overview four key questions were presented to participants to guide future debate within the workshop:

1. What should be the role of NGOs in relation to the

communities they choose to work with, and their respective governments? Some critics argue that NGO interventions tend to be very limited in terms of focus and the size of area and population covered. This raises a number of issues related to the kinds of linkages which could usefully be promoted between NGOs and others working in the same region or sector.

2. What evaluation is possible of the degree to which activities undertaken by NGOs have met the aims set for the project? The overview showed that NGOs rarely invested significant resources in monitoring and evaluation, and rarely carry out base-line studies of the area and the people with whom they work. It was suggested here that if NGOs were to justify the considerable resources that are now being invested in them, they would need to show greater knowledge of the places in which they work, participate in debates on national policy issues, gather information that would allow a more rigorous definition of objectives, and an ability to monitor their work. How cost effective in fact are NGO initiatives, compared to bi-lateral, government or multi-lateral programs?
3. What are the appropriate institutions with which to work? Is it better to collaborate with existing institutions, or create new structures which will need to establish their legitimacy and methods of work? Are different institutions (grass-roots organisations, national NGOs, international NGOs etc.) better at different tasks?
4. Have NGOs working with pastoralists enough experience now to examine the lessons of the transition from crisis relief to longer term rural development work? Has this led them to adopt a top-down approach, and to what extent has this meant they have not gathered background information on pastoral livelihood systems on which to base their longer-term planning? What have been the costs of *not* gathering this information, and what are the constraints they face in trying to carry out preliminary research before identifying initiatives?

It was on the basis of this overview and the raising of these key themes that the workshop moved on to the presentation of the case studies summarised below.

3. CASE STUDIES

The final session of the first day and all the following day were given over to the presentation of case studies from Senegal,

Mali, Madagascar, Cameroon, Uganda, Kenya, Ethiopia and Tanzania. (Note: This section of the workshop report has been moved to Annex IV of the final synthesis document.)

4. FIELD VISITS

The third and fourth days of the workshop were spent on field visits. The workshop split into two main groups for this work, one group heading east and north to Boni and Karwassa in the drylands, the second group subdividing into two groups, one going south and west to Koro in the drylands and the other to Sofara and Sare Seni in or near the Inland Niger Delta. The objectives of these visits was to review NGO and pastoral association initiatives that were already taking place on the ground, and interview traditional managers of natural resources.

5. SYNTHESIS

The penultimate day of the workshop was given over to the discussion of the major themes raised in the overview of NGO initiatives in the pastoral sector presented on the first day, in the light of the case studies that had been given during the first two days, and the visits to the field. For this purpose the workshop divided into four groups composed of those who had been on the same field visits. The groups spent all day in session, with the main objective of identifying the weaknesses and strengths of NGOs working in the pastoral sector promoting the management of natural resources in terms of the project cycle of identification, implementation and outcomes of initiatives. Their findings were presented to a full session of the workshop in the evening, and a synthesis of the work proposed to the workshop the next morning. The salient points of the synthesis were as follows:

1. General findings:

- i) Emergency relief is often the starting point for international NGO initiatives, and this has led them often to adopt a top-down approach in longer-term rural development initiatives. This is so because funds for interventions are often left over from emergency programmes and have to be spent by a particular time, the NGO is structured to carry out emergency work, and NGOs are generally in a hurry to achieve results.
- ii) NGO staff are often on short-term contracts, and are trained only in emergency relief work. They are rarely

from a pastoral background, and are mainly men rather than women. Due to relatively fast staff turnover, NGOs working in the pastoral sector lack institutional memory. Further, these NGOs often rely on "experts" from outside who do not know the area in which the NGO is working.

- iii) Donors often impose their own agendas and priorities on NGOs, and rarely finance the identification phase of initiatives. Further, donors often work to short term cycles (3 years or so), and impose conditionality on their funding. Donors are reluctant to invest in arid and semi-arid areas.

2. Project identification by NGOs:

Weaknesses:

Research and base-line studies are rarely carried out by NGOs before intervening, and NGOs often lack the technical skills needed to carry out such work. There is a striking lack of social analysis by NGOs, in particular analysis of "community" composition, poverty focus, gender studies and land tenure issues. NGOs fail to keep up with contemporary research on pastoralists, local people are rarely involved in the identification phase, PRA is rarely used and research results are not fed back to the communities with whom it was carried out. Biodiversity issues are rarely considered.

Project identification is often determined by the NGO mandate and other donor agendas and is generally informed by pre-conceived ideas and a lack of analysis. There is overall a lack of emphasis on the livestock sector. In their planning NGOs lack clear objectives and monitoring and evaluation indicators. Phasing-out of NGO activity and sustainability issues are not built in to project planning from the start. Planning is short term and NGOs do not often learn from their own and others experience.

Strengths:

Where NGOs do carry out research to identify initiatives they are effective because of their participatory approach, their knowledge of the area they are working in, the local support they enjoy, and the knowledge NGOs often possess of their own strengths and weaknesses. Some NGOs have the capacity to adopt a process approach, are able to adapt to changing circumstances, and sometimes have a particular competence in specific areas which they have learnt from their own experience.

3. Project implementation by NGOs:

Weaknesses:

Village elites often capture benefits provided by NGOs which are originally targeted at poorer sections of the community, and NGOs often work with "leaders" who are not representative of local groups. Some organisations, known as "briefcase NGOs" speak on behalf of local people and raise funds, without consulting them and without their consent. Herders may be marginal in communities in which NGOs work, and may not benefit from initiatives, and the roles and responsibilities of women and the non-literate are rarely taken into account. NGOs compete and duplicate rather than collaborate and are often reluctant to work with government services, and have limited linkages with research institutions. They are often ineffective at networking and they suffer from a lack of clear definition of what role they play in comparison to other services and development structures (especially with regard to natural resource management issues). NGOs are unwilling to take on sensitive issues such as insecurity of tenure of natural resources.

Strengths:

Many NGOs endeavour to adopt a bottom up approach and where they do so, and use PRA methods, local people have a real opportunity to identify and carry out their own initiatives. Where NGOs do network and collaborate together they can provide linkages to the wider policy debate

within and between countries, and provide models for replicability already tested on the ground. Where there is a strong commitment by the government to decentralisation, these models have a real capacity to affect national policy.

4. Project outcomes:

Weaknesses:

Because of their small size, and the diversity of situations in which they work, NGO projects working in the pastoral sector often have little impact. Their institutional support activities are often weak. NGO initiatives often create dependence, lack long term vision, and information on what they do is poorly circulated with the result that their effect on national policy is marginal. In some cases NGOs are under-resourced for the activities they wish to carry out.

Strengths:

NGOs are good at resolving immediate and practical problems faced by rural producers, and in generating and transferring appropriate technology. Often the strength of what they do results from their support of the coping strategies local producers are already following. NGOs can provide services where governments cannot, and they can teach governments ways of developing policy through local participation. Where NGOs take on advocacy and land tenure issues, they are effective at providing secure access for producers to natural resources.

6. RECOMMENDATIONS

The greater part of the last day of the workshop was given over to the elaboration of recommendations, which were initially drafted by committee and then adopted in full session. The main recommendations of the workshop were:

1. International NGOs should set aside a period of reflection between the end of the emergency programs and the beginning of longer-term development initiatives. International NGOs should work closer with national NGOs both in their emergency programmes and longer-term initiatives, as national NGOs often have a better understanding of how to work on the ground.
2. NGO staff should consist of men and women with a real understanding of the problems faced by poorer pastoralists, and who are sincerely committed to the alleviation of the problems they face.
3. NGOs should lobby donors and other development organisations to invest more in the pastoral sector. NGOs should also act as co-ordinators between NGOs, rural producers, donors and governments in promoting pastoral activities.
4. NGOs and other organisations participating in this workshop should strengthen or promote the creation of a network at both a national and international level to promote activities in the pastoral sector. IIED is invited to oversee and help with this process.
5. The participants at the workshop recommend the extensive use of participatory methods in the project cycle, such as PRA. IIED is invited to help with training and promoting these methodologies.
6. The workshop recommends that greater attention is paid to results of research in the pastoral sector, and that participants should subscribe and also *contribute* to specialised publications that are already available, such as Baobab and Haramata.
7. NGOs should undertake more rigorous analysis and socio-economic study to improve their interventions in the pastoral sector.
8. NGOs should budget for socio-economic, environmental and resource tenure studies in their planning, so as to be able to generate effective indicators for monitoring and evaluation, and to identify clearer objectives.
9. NGOs must integrate local producers into the identification of research issues.
10. Local populations should benefit from research carried out in their areas.
11. Workshop participants recommend that NGOs should increase their involvement in the pastoral sector.
12. NGOs should provide adequate training to local beneficiaries of projects, so they will be better able to decide on the initiatives to be carried out, and so that the skills necessary for carrying out projects can be transferred to the local community.
13. NGOs need to adopt a medium to long term view when working in the pastoral sector, and in the field of natural resource management.
14. NGOs and other partners in development should put in place a co-ordinating mechanism to avoid duplication and competition in carrying out projects in the pastoral sector.
15. NGOs should support the initiatives of grass-roots organisations and provide investment in interest-bearing funds to pay for their running costs, so as to assure the sustainability of those initiatives in the future.
16. NGOs should train local producers so they can understand resource tenure law and so work to preserve and maintain their tenure rights.
17. NGOs must increase their technical, financial and institutional support to pastoral organisations working in the field of natural resource management.

7. WORKSHOP PARTICIPANTS

ETHIOPIA

BURKINA FASO

Armelle Faure
PNGT, Burkina Faso
Fax: c/o CILSS +226 30 72 47
(Attn: Moustapha Yacouba)
or: 60 Rue de la Mare,
75020 Paris
France
Tel: 010-33-46-36-65-83

Seydou Ouedraogo
Directeur de l'organisation
de l'Elevage Traditionnel
Ministère de L'Agriculture et des
Ressources Animales (MARA)
03 BP 7025 Ouagadougou 03
Burkina Faso
Fax: +226 31.03.79 / ONAVET

Salif Guigma
Chef du Service Production Végétale et Animale
CILSS
Ouagadougou
Burkina Faso
Fax: +226 30 72 47

CAMEROON

Francis Tarla
CEEC
BP 410
Maroua
Cameroun
Fax: +237.29.31.01

Joseph Saya
Ministry of Livestock and Animal Production
Cameroon

Johannes Gerhardus van Nes
INADES-Maroua
Cameroon

Dr Ayele Gebre Mariam
Norwegian Church Aid
PO Box 1248
Addis Ababa
Ethiopia
Tel: +251 1 512922/511291
Fax: +251.1.518167

Dr Claudia Futterknecht
CARE-Ethiopia
PO Box 4710
Addis Ababa
Fax: +251.1.613422

Samuel Gelgelo
CARE-Ethiopia
PO Box 4710
Addis Ababa
Fax: +251.1.613422

Tadi Galegalo
CARE-Ethiopia
PO Box 4710
Addis Ababa
Fax: +251.1.613422

Ato Dub Gelma
Norwegian Save the Children/Redd Barna
PO Box 6589
Addis Ababa
Ethiopia

KENYA

Rosemary Benzina
OXFAM
BARAYOR Pastoral Project
PO Box 267
Maralal

Peter Kisopia
OXFAM-Nairobi
PO Box 40680
Nairobi
Fax: +254.2.446 002

Mr James Maina Ndirangu
National Project Coordinator
Pastoral Water Project
Ministry of Arid Lands
Nairobi
Fax: +254 2 217343
Ms Ebla Sugule Muhumed
OXFAM
PO Box 8
WAJIR NEP

Ms Karen Twining
OXFAM-Nairobi
PO Box 40680
Fax: +254.2.446 002

MADAGASCAR

Jean Olivier Ravelomanantsoa
BP 45
Route d'Ambositra
Madagascar
Fax: +261 4 492 22

or: Institut de Recherche et d'Application des
Méthodes de Développement Communautaire
TREDEC
BP 188
110 Antsirabe

SENEGAL

Oussouby Touré
IPAA
Dakar
Senegal
Fax: +221.216900

M. Thierno Kalidou N'Diaye
Président - A D E N A
No 439 HLM 1
Dakar
Senegal
Fax: +221.254521

TANZANIA

Mr Parimitoro Kasiaro
K I P O C
PO Box 94
Loliondo
Arusha
Tanzania
Fax: +255.578710

Martin Saning'o
Orkonerei le Moipo
PO Box 1607,
Orkesumet
Arusha

UGANDA

Mr Eli Kurahanga
N Y D A
PO Box 9566
Kampala
Fax: +256.41 245 711

Mr Godfrey Karamuzi
N Y D A
PO Box 9566
Kampala
Fax: +256.41 245 711

Mr Yosamu Kaberegye
N Y D A
PO Box 9566
Kampala
Fax: +256.41 245 711

MALI

Boubacar Ouane
CARE-Mali
BP 1766
Bamako
Tel: +223 22 22 62/22 91 37
Fax: +223 22 75 32

Mousslim Abdoulaye Maiga
Directeur Général
ODEM
BP 23
Sévaré
Mali
Fax: +223 420110

Yaya Sidibe
Socio-Pastoraliste
Chef Division Population et Formation
ODEM
Sévaré
Fax: +223 420110

Mohamed Ag Sidi Mohamed
Norwegian Church Aid
BP 8031
Bamako

Fadimata Mahamane
CARE-International
Ké-Macina

Issa Guindo
VSF/Youvarou
BP 1660
Youvarou

Mousa Kanté
IUCN
BP 91
Mopti

Ibrahim Ag Idebaltanat
World Vision (Menaka)
BP 12713
Niger

Oumar Kane
NEF
Douentza

Mamadou Bangaly
SCF
Projet Information Alimentaire
BP 166
Mopti
Fax: + 223 22 42 55

Edmond Dembele
CCA/ONG
BP1721
Bamako
Fax: +223 22 23 59

Abdourahamane H Touré
Project Pacl
s/c AFVP
BP 1721
Bamako

Dr Ousmane Guindo
Projet APEX
s/c USAID
BP 34
Bamako

Oumou Dembe
AMRAD
BP 1647
Bamako

Mdme KonéMariam Traoré
AMPJ
BP 09
Bamako

Brehima Sangaré
Projet APEX
s/c USAID
BP 34
Bamako

Bériba Dembele
Chambre d'Agriculture
Mopti

Mamoudou Macina
Projet Gestion des Ressources Naturelles
Bamako

Boubacar Ba
ODEM/Sevare
BP 23
Mopti

Amadou Boureima Dicko
Unité Pastorale Boni
Mopti

Mohamed Traoré
Direction Régionale Action Coopérative
BP102
Mopti

Yéhiya Ag Ehameye
Association Pastorale
Karwassa
Douentza

Cheick S. Diaby
Opération Riz Mopti
BP 167
Mopti

Mme Maiga Sina Dembe
AFOTEC
BP 2211
Bamako

NORWAY

Jon Kr Oiestad
NORAGRIC
Fax: + 47 9 940760

Arne Olav Oyhus
NORAGRIC
Fax: + 47 9 940760

PVO-NGO/NRMS

Michael Brown
PVO-NGO/NRMS
Suite 500
1250 24th Street NW
Washington DC 20037
USA

BSP

Kate Newman
Biodiversity Support Programme
Suite 500
1250 24th Street N.W.
Washington DC 20037
USA

CCA/ONG

Jean Dakouo
CCA.ONG
Bamako
Fax: +223 22 23 59

IIED

Richard Moorehead
Research Associate
Drylands Programme
IIED
3 Endsleigh Street
London WC1H 0DD

ANNEX IV

Case Studies presented at

**“NGOs and Natural Resource Management
in the Pastoral Sector of Africa – Strategies for Enhancing
Performance and Impact” Workshop**

February 22-28, 1993, Mopti, Mali.

In February 1993, a workshop was held in Mopti, Mali on "NGOs and Natural Resource Management in the Pastoral Sector of Africa - Strategies for Enhancing Performance and Impact." The final session of the first day and all the following day were given over to the presentation of case studies from Cameroon, Ethiopia, Kenya, Madagascar, Mali, Senegal, Tanzania and Uganda. The following case study summaries from Cameroon, Ethiopia, Madagascar, Senegal, and Uganda were excerpted from the Mopti Workshop Report prepared by IIED. The remainder were prepared by PVO-NGO/NRMS. Unfortunately the Tanzanian case study was not available for this publication.

THE ROLE OF INADES IN THE THIRD PROJECT FOR THE DEVELOPMENT OF THE PASTORAL SECTOR IN THE EXTREME NORTH PROVINCE OF CAMEROON

Land clearance, the increasing take up of agriculture and an increase in the human population are leading to both a shortage of pasture and a weakened food security situation in this area, according to Johannes van Nes, of the Institut Africain pour le Développement Economique et Social (INADES). There are five categories of people who keep livestock in the zone: transhumant herders who rely almost entirely on their animals; herder farmers who rely principally on their animals, but who also cultivate for their subsistence; farmer herders whose livelihoods come from both animals and livestock; farmers who keep some stock. The majority of producers in the area cultivate some land extensively; and outsiders who neither farm nor are herders themselves, who own livestock.

To some extent, the constraints in the livestock sector depend on which of these groups are being addressed. Transhumant herders identify the delimitation of pastoral areas, and the provision of veterinary services as their primary needs; herder farmers and farmer herders point to their need for water-points, motor pumps to supply the water points, the provision of concentrated food for livestock, as well as veterinary products; farmers, while pointing to similar constraints also mention the need to protect pastures from outside herds; while outsiders owning livestock identify water points and veterinary products as their most pressing needs.

The main objectives of the Third Project for the Development of the Pastoral Sector (financed by the World Bank and IFAD) were to increase the productivity of milk and meat, raise income levels particularly of poorer herders, and reduce the burden on the state in their provision of services to the livestock sector. One of the principal project activities has been to set up special units of pastoralist organisations, and

INADES was asked to fulfil this task in the Extreme North Province of Cameroon. In particular, INADES was asked to identify pastoral organisations that had the capacity to participate in the agro-pastoral management of specific zones.

INADES carried out a number of base line studies of the Extreme North Province including studies of water points, pastures and the communities that used them; the identification of pastoral extension services and pastoral organisations in the area and their capabilities; transhumant routes and pasture quality and availability. On the basis of these studies they drew up a list of the areas with the most promising opportunities for the management of agro-pastoral zones using ten criteria, including among others: the dynamism of local populations; the presence of pasture and water points; the importance of livestock in the local economy and ease of access. As part of this process INADES was able to hold a number of small workshops with local producers which began a process of training them to better manage their pastoral organisations.

At this point, however, at the moment when INADES wanted to move onto a more operational footing, it became evident that there existed almost no co-ordination between the different sections of the Central Services for the Ministry of Livestock, Fisheries and Animal Industries, which INADES was to work. In mid-1992 the donors withdrew from the project as a result of misunderstandings between themselves and the Government of Cameroon.

The main constraints faced by this project included:

- the alienation of pastures to agricultural land, as human population levels are rising;
- the belief by local people that outside interventions will provide free goods and services, and the fact that each development organisation working in the area has its own philosophy, unco-ordinated with what others are doing;
- the uncontrolled and abusive use of the convention that allows herders from Chad, Niger and Cameroon to use the Chad basin and traverse international frontiers;
- lack of co-ordination and collaboration with government services;
- the economic crisis in the Cameroon economy; and
- a surplus of meat production in the area, due in part to a veterinary cordon fence to the south that prevents export of meat to other parts of the country.

INADES believes that a participatory approach is essential for the development of the pastoral sector in this area, and

that this approach must begin with base-line studies adapted to the diversity of local conditions. In particular the NGO believes a study needs to be carried out into the quantity and quality of natural resources available in a given area, and that case studies should be made of areas where communal management of natural resources seems promising. Overall, INADES believes that collaboration between NGOs in this area is both possible and essential, and that local NGOs have a comparative advantage in understanding field conditions. International NGOs should use national NGOs to carry out actions on the ground, and use their linkages at the national and international level to affect policy and attract resources for pastoral development. Above all, they believe it is necessary to give local people rights and responsibilities to manage the resources they depend upon for their livelihoods.

REDD BARNA: EXPERIENCE IN OPERATING AN INTEGRATED DEVELOPMENT PROJECT WITH HAMER PASTORALISTS IN ETHIOPIA

Dub Gelma, of the Ethiopian NGO Redd Barna, described the constraints facing pastoralists in Ethiopia today. Two major processes are threatening their livelihoods: encroachment on pastoralist land, and environmental stress.

In many pastoral areas of the country, the government has established large-scale state farms, game parks, research stations, stock routes and private farms. These policies have led to significant dispossession of pastoral lands: for instance, the Afar have lost more than 88,000 hectares to state farms and the Arsi have lost over 100,000 hectares. Overall, through the establishment of state farms alone it is estimated that pastoralists have lost 250,000 hectares of their customary range. To this is added land alienated for research stations, national parks, the encroachment of farming land, and the lack of maintenance of stock routes for the benefit of livestock marketing systems. Accompanying this the government's policy has been to sedentarise herders and encourage them to take up agriculture. In general terms, the government's attitude to herders - who are often obliged to fight for their livelihoods in these conditions - is that they are violent, backward and intractable.

Environmental stress is adding to the difficulties faced by herders: forced to exploit a smaller area of land due to policies that alienate their rangelands, higher livestock and human densities oblige herders to over-exploit their resources and the marginal resources they are now forced to use. The national ban on the use of fire has led to bush encroachment and the lowering of pasture productivity. Recurrent drought

and erratic rainfall patterns have made many herders now reliant on grain donations from outside.

These conditions have influenced the manner in which Redd Barna has worked with the Hamer pastoralists in the south of Ethiopia. Redd Barna work principally in: primary health care and the training of community health assistants; the provision of water points and their equipment; veterinary health, the training of animal health scouts and the promotion of drought-resistant fodder species; the introduction of new agricultural crops, micro-dams and small-scale irrigation technology; the creation of local markets for livestock and grain; and in the construction of schools and the provision of scholarships for pupils.

In the future, Redd Barna intends to strengthen and widen its interventions in small-scale agriculture and irrigation techniques; improve pastoralists own ability to care for their stock, using their customary knowledge as the starting point for training in more modern techniques; improve the provision of water both for humans and animals through diverting flood water and seasonal rivers; and raise the educational standard of those Hamer who have already received some basic training through Redd Barna.

The major constraints faced by Redd Barna in their work are: the belief by government that pastoralists must change their way of life and that their customary production system is backward and harmful to the environment; the alienation of pastoral land to government and private concerns; the educational system which uses a foreign language and foreign concepts to the Hamer; the absence of trained health workers from the Hamer; the level of civil strife; the increase in human and animal populations using a shrinking resource base; and the weak technical knowledge of pastoralists of water harvesting and management techniques.

Dub Gelma called for NGOs to collaborate in exchanging their experiences of the local conditions in which pastoralists operate and they should expose the pressures and encroachments on pastoralists' land and culture. A clearer understanding of environmental changes, and their linkages to herders' livelihoods was also needed, he said. NGOs should act to influence government policy, change the ideological climate that perceives herders in a negative light and so legitimates the alienation of their rangeland. Applied research rather than research for its own sake is needed and pastoralists should have the opportunity of an education in their own language. In Redd Barna's view, governments should constitutionally recognize the right of pastoralists to their own territory, and should protect that territory from

outsiders. NGOs should invite human rights institutions to examine the dispossession of pastoralists from their land.

OXFAM'S PASTORAL PROGRAM IN KENYA

Peter Kisopia, of Oxfam/Kenya, described Oxfam's involvement in Kenya's pastoral sector. Oxfam has project partnership in five of the major pastoral districts in Kenya. These are Turkana, Samburu, Wajir, Narok, and Kajiado. Oxfam is operational in the first three districts but is closely working with the local people to strengthen their traditional institutions in preparation for them to take up the management of ongoing projects in the near future.

Besides direct project support, Oxfam is supporting the Pastoral Steering Committee (PSC), which brings together pastoralists and development workers from pastoral areas in a forum at National level, to share information and discuss pastoral issues.

Status of Pastoral Production Systems in Kenya

Land in the pastoral areas in Kenya is exclusively arid and semi-arid. Pastoralists therefore depend on livestock for their livelihood, there being hardly any possibility of viable agriculture in these areas. Pastoralists are principal meat producers for national consumption and for export. Hides and skins is the fourth foreign exchange earner in the country, and most of this product comes from the pastoral areas.

Pastoral production systems are highly affected by national policies on sedentarization and land privatization. Encroachment by agriculturalists into the pastoral areas and formation of game reserves (and consequent expansion of national parks) is highly threatening to pastoral production systems.

Pastoralists are now occupying more and more marginal lands in Kenya. Their traditional grazing systems have been interfered with. The once wet season grazing areas are now agricultural lands, and this has disrupted pastoralists' traditional grazing systems. Cattle rustling, loss of important watering points without compensation, constant droughts and state livestock development plans based on commercial ranching systems all contribute to the threat to pastoral production systems.

Pastoral Program in Kenya

Pastoralism is one of the major themes of Oxfam's country programs. As detailed in its Strategic Plan, Oxfam aims at:

Promoting and protecting the interests and resource base of pastoralists so as to strengthen the viability of pastoralists' production systems.

To meet this broad aim, Oxfam has the following objectives:

1. To strengthen pastoralists' food security through improved animal health care. In cooperation with ITDG, Oxfam is carrying out a decentralized animal health program for both men and women, while supporting establishment of mobile drug stores by providing revolving funds. Traditional ethno-veterinary knowledge and treatment are also being investigated.
2. To strengthen and diversify the pastoral economy through improved marketing of pastoral products and renewable natural resources. This activity is aimed at working with pastoral women in increasing the value of livestock products like hides and skins through education on drying, storing and marketing of these products.
3. To strengthen pastoralist organizations by encouraging mutual learning, networking and solidarity among different pastoral groups. The Pastoral Steering Committee was started to share information among different pastoral groups and form a lobby group on policies affecting pastoralists. A pastoral newsletter is seen as instrumental in advancing this initiative.
4. To protect pastoralists' ownership and or access to land and other key resources. Oxfam is supporting land education programs in which education for awareness raising on pastoral land protection (by pastoralists themselves) is carried out. In this endeavor, maintaining close links with other NGOs, government and other agencies in pastoral development is a high priority.
5. To improve pastoralists' food security. In collaboration with the government's Department of Agriculture and other NGOs, Oxfam aims at helping pastoralists acquire improved crop protection methods. It also establishes food stores and, eventually, cereal banks to ensure food availability within the community at all times.
6. To improve the socio-economic and political status of women in pastoral areas. Oxfam is actively encouraging its partners to increase the involvement of women in decision making at all levels of the development process in the pastoral areas. It also has a high priority in supporting activities which reduce women's workload, like improving access to water, fuel and food.

Areas of intervention

NGO collaboration in the pastoral areas is very important. NGOs should collaborate in lobbying for formulation of pastoral land use policy to protect it from further destruction through activities which render the land more and more marginal. NGOs should lobby international agencies to lend support to governments for the new policy formulation in a participative process involving pastoralists, researchers and NGOs. NGOs should start looking at simple technologies which are sustainable to support pastoral production systems, while helping pastoralists in the diversification of the pastoral economy without jeopardizing pastoralism.

Conclusion

NGOs are playing a major role in the pastoral areas all over Africa. In most places in some countries, if not all, NGOs are the only ones promoting development in the pastoral areas. I feel very hopeful about NGOs' role in the pastoral areas. This role is continuous given the plight of pastoralists in their struggle for survival in the harsh environments in which pastoralists live. This role can only be strengthened if NGOs work closely together in the field and ensure continuous information sharing on their experiences. If NGOs work in isolation, that weakness can be exploited to enhance policies which will affect their work negatively.

THE KENYAN EXPERIENCE IN ARID AND SEMI-ARID LAND DEVELOPMENT

J.M. Ndirangu, of Kenya's Ministry of Arid Lands, explained that the Arid and Semi-Arid Lands (ASAL) carry just about 20% of Kenya's total population and about 60% of its livestock. A large part of this land is on open range under nomadic pastoralism. Scattered patches of semi-pastoralists with few farming communities can be observed. These areas are not only poorly utilized but also their productivity is seriously declining owing to inappropriate technologies which result in degradation and destruction of the natural environment that sustain them. There is urgent need for reclamation, restoration, and protection of most of this land.

Development Initiative in ASAL

In the early years of Kenyan development, ASAL areas had received low priority in allocation of development resources. This was for long justified on economic grounds as the need to maximize the productivity of the areas with known and proven potential.

This trend was reversed in the early 1980s, when the government published a policy document entitled "Framework for Arid and Semi-Arid Land development in Kenya." This document outlined a number of options for development of ASAL. A number of programs were started with support donor agencies throughout the country as a result of this initiative. The experience of "First generation ASAL programs" indicated a need for more deliberate policy decisions to address the development needs of the communities of those ASAL regions of Kenya. This was given an added impetus by the growing population that was increasingly becoming sedentarized against rangeland that was fast reducing.

ASAL Program Development Approaches and Strategies

ASAL development today is an important aspect of national development. The strategy would focus on providing guidance to all government implementing agencies, non-governmental and donor agencies. It would consider the following: coordination, decentralization and integrated approach.

Coordination

The task of ASAL development is so daunting that no one organization can hope to succeed alone. Indeed no one organization has the breadth of expertise and management capacity to cover all the intersectoral requirements of an ASAL program.

What is required is an interagency collaboration which combines the resources and expertise of all involved agencies seeking to capitalize on each other's comparative strengths and minimizing the weakness. This may require clear definition of "role," and hence the need for effective coordination.

Decentralized Planning

Centralized planning may not satisfactorily address local community problems. The local level planning will encourage and strengthen priority setting. This may allow for greater involvement of the communities and therefore more involvement in the management of their natural resources.

However, local communities need to respond effectively for them to benefit from decentralized planning. Usually this is not forthcoming, and hence the need for preparing the local community to respond effectively to the planning needs.

Kenya has experience in this. The District focus strategy has its fabrics in decentralized planning. The only problem with this strategy is the complication arising from necessity of aligning the planning processes of the individual sectoral Ministries and the District focus initiative. Occasionally it is not easy to have compatible priorities from the sectoral ministries with those of nomadic groups.

Integrated Approach

The ASAL development poses a particular need for holistic approach. There are many issues that are crucial to ASAL development. These included social and human resources development, infrastructure development, manufacturing and trade, natural resources development, drought management and to some extent solving conflicts that arise as a result of natural resources exploitation.

WORKING WITH BARA HERDERS AND MERINA FARMERS ON THE THE MANAGEMENT OF NATURAL RESOURCES: THE CASE OF TSARAMODY IN MID-WEST MADAGASCAR.

Jean Olivier Ravelomanantsoa, representing the NGO IREDEC, explained how the Bara herders of Madagascar have a long history of migration into the central upland areas of the island from the southern provinces. This migration was provoked by their wish to avoid taxes and other administrative exactions in colonial times, and in order to escape the ravages of bovine tuberculosis that decimated their herds. To this day, the Bara herders have the reputation of being cattle rustlers and thieves, and live on the margins of Malagasy society: it is notable, for instance that they choose to exploit areas that are remote from roads. In recent years cattle raiding and smuggling have significantly reduced the animals they own, and the southern part of the island, from which they come, remains one of the least developed parts of the country.

IREDEC works principally with Merina farmers at Tsaramody, who have also recently moved into the upland zones. It became apparent to the NGO at an early stage in their reforestation and natural resource management work that the semi-nomadic Bara herders would have to be integrated into their activities if they were to be successful. Of particular importance to the NGO has been the study of conflict between the two production systems using the area. These studies allowed IREDEC to design a project and find donors to finance the Government's Land Board to survey the upland areas, attribute land rights to recently arrived farmers, and define pasturing rights in the area.

The principal constraints IREDEC faces in carrying out its programme are the poverty of the inhabitants of Tsaramody, the suspicion of the herders and the low levels of education among rural producers. For the herders, there are two initiatives that need to be taken: the clear definition of their pasturing rights in the area; and the lowering of calf mortality rates through the introduction of simple and appropriate veterinary techniques. These initiatives will build confidence between the NGO and the herders, and allow training programmes to be carried out with them in the future.

CARE/MALI'S EXPERIENCE IN MALI'S LIVESTOCK SECTOR

Douglas Steinberg, in an un-commissioned case study distributed to workshop participants, explained that Mali's pastoral sector has been thrown into great upheaval over the past twenty-five years. This has occurred mostly because of drought and population growth which have led to both deterioration of the natural resource base, and increased pressure thereupon. A decline in local capacity to define and enforce resource tenure rules has further aggravated the sector's organization and development. Producers now support themselves through a diversity of resources which escape the control of the traditional management structures. In addition, the state continues to resist the empowerment of local elites. These two factors have contributed greatly to the deterioration in local capacity to enforce production and tenure rules.

Livestock systems in Mali can be characterized by three terms: diversity, interdependence, and fragile resource tenure. Livestock raising in Mali is diverse because it ranges across four climatic zones and stretches across economic levels, i.e., from resource scarce, extensive nomadic systems in the North to modern, capital intensive dairies around Bamako. Livestock systems are categorized by "interdependence" because Malians are able to integrate the practice of livestock raising with other modes of making a living. Resource tenure is "fragile" because livestock systems in Mali "balance precariously on the systems of access and control over local resources that strongly determine their nature."

In the rainy season, several factors limit access to rangeland: classifications of land as national forest and parks, access to the limited permanent water points, and, increasingly, the harvesting of forage for urban livestock. At the end of the dry season, grass cover is depleted and bushes become an important source of feed. This shift is a source of conflict between pastoralists and agriculturalists as forage is often located near

depressions where irrigated or flood recession crops are planted.

CARE has been reluctant to take on projects in the pastoral sector in Mali because of the sector's disequilibrium. CARE has concentrated its projects mostly on farming communities but is now considering small-scale livestock development activities-targeting both pastoral and sedentary communities.

CARE/Mali's limited experience in the pastoral sector involves the regeneration of bourgou (*Echinochloa stagnina*) in the administrative circles of Djenné and Diré. Drought and overgrazing have contributed to the loss of village bourgoutières – floodplains of the Inland Delta of the Niger River which previously harbored bourgou – and much of the land has been transformed into rice fields. Bourgou, which can be an important part of the diet of livestock, has thus become a scarce commodity.

CARE/Mali's attempts at regenerating bourgou have included both direct seeding and the transplanting of stem segments. CARE recognizes that it is crucial to protect fragile roots and young shoots from roving livestock. Success of the project has depended on village organization and good relations with herders to ensure protection of the new bourgou. CARE's experience has shown that it is critical to include pastoralists in the bourgou regeneration planning stages (including vigilance and harvest sharing plans) in order to avoid losses and conflict later.

Bourgou-culture activities have generated considerable income for villagers and village associations. In Awaki, a communal field was divided into two plots. Bourgou from the first plot was partially sold at local markets and the profits were used to start a community fund. The remainder was divided up among villagers. The second plot was opened to free grazing for local livestock.

CARE recognizes that the failure of past attempts at livestock projects does not justify abandoning work with pastoralists. Potential CARE/Mali project activities in the pastoral sector include:

- the creation of livestock pharmaceutical depots;
- domestic livestock fattening (mainly targeting women), including livestock feeding and nutrition education;
- pasture restoration;
- forage production;
- primary animal health care;
- development of pastoral associations; and
- credit activities

CARE sees a necessity to heighten extension agent, government, and donor understanding of pastoralist evolving needs and constraints. It also is aware that it will have to take a long-term perspective and "let solutions evolve, rather than imposing them from the exterior."

**AMRAD (ASSOCIATION MALIENNE DE
RECHERCHE-ACTION POUR LE DÉVELOPPEMENT)
LIVESTOCK GROWTH – SHEEP. NIAFUNKÉ, MALI.
PROJECT FINANCED BY USA FOR AFRICA**

Oumou Deme, in an un-commissioned case study distributed to workshop participants, described AMRAD's main areas of development assistance as: research/development (market studies, project implementation, monitoring and evaluation); training (literacy, language skills, project management); and baseline studies (for project design and implementation, project financing and technical capacity training).

The main goal of the AMRAD project in the pastoral sector was to increase the number of livestock which had been badly depleted after many years of drought. In doing so, it also sought to reintroduce sheep to the area (which had previously been called one of the best sheep raising areas in the country), regenerate bourgou pastures and stem the out-migration of pastoralists from the area.

AMRAD's project was launched after a small group of pastoralists approached the AMRAD with an idea for a revolving fund to reconstitute pastoralist herds depleted from drought. A project was developed whereby AMRAD would provide herders with sheep, which they could keep and breed. The herders would be required to return one third of the animals borrowed from the project each year. In this way, sheep would be re-introduced to the area and, with the appropriate technical expertise, pastoralists would be able to increase herd sizes.

The project began in August of 1988 when AMRAD distributed 342 female sheep and 25 males among the participating herders. In September 1989, one year later, there was a total of 556 sheep, i.e., an increase of 189 sheep in one year. Little value was placed by herders on the skin or meat of the animals and most of the milk was reserved for the young animals, except in wintertime when 50% of the herders took milk for their family's consumption. Wool was the principal commodity from the sheep. Six of the herders produced three shearings each of wool in the first year, and the 19 others produced two shearings. Each herder/family

gathered the wool from their sheep individually and either sold it, stocked it or used it personally. There was no communal stockpiling of wool. Now, however, the herders have proposed to communally stockpile their wool, while still keeping track of each individual's contribution to the stock for appropriate revenue distribution.

AMRAD, while providing technical recommendations and guidance in herding techniques, also supplied animal medication and training for herders in animal health, nutrition and hygiene.

With the help of AMRAD, these pastoralists were able to acquire a motor pump, watering hoses, and sprinklers.

Bourgou regeneration was another successful part of this project. An area along the river was chosen for bourgou and bean cultivation. The bourgou was successful over a 30 hectare area, unlike the beans, which did not take well to the soil.

While twenty-five pastoralists participated in the first phase of the project, over 120 people were touched by it, including many women and children. The project encouraged herders to group together and work together toward a common goal. Project results, especially the substantial increase in the number of livestock, were promising to the herders.

NGOs AND THE MANAGEMENT OF NATURAL RESOURCES: STRATEGIES FOR CONSOLIDATING PERFORMANCE AND IMPACT (SENEGAL)

Thierno K. Ndiaye, President of the Senegalese NGO named the Association for the Development of Namarci and Neighbouring Villages (ADENA), described how in Senegal the pastoral sector has been marginalised by development initiatives that have concentrated on agricultural investments as part Senegal's drive to attain food security. The little investment that has been made in the pastoral sector has not been successful, and has not lived up to the expectations of herders, because of a lack of co-ordination with local producers and local organisations, a hostile environment, and the absence of infrastructure, in particular serviceable water-points. Pastoralism in Senegal is based upon traditional extensive techniques, in large part follows a transhumant regime, and relies on rainfall. Pasture resources are insufficient, and are declining in productivity at the same time as marked changes are occurring in the composition of vegetative cover. In these conditions the pastoral sector is shrink-

ing, pastoral resources are becoming degraded, herder's income is falling, and many of the young from pastoral communities are migrating to large towns.

It is in this context that ADENA is endeavouring to improve the livelihoods of herders in the Regions of Saint-Louis and Louga, which are perennially at risk from drought. ADENA focuses its activities on animal health, functional literacy, water management, support to women's groups, improved livestock management; and the protection and regeneration of the environment. To date ADENA has trained 37 veterinary auxiliaries (of which 5 are women), and 350 functional literacy teachers in the herders language, Foulari (Fulani). ADENA also distributes some foodstuffs for livestock to herders.

In spite of these achievements, ADENA faces a number of constraints which affect the livestock sector as a whole, including:

- herders' lack of technical knowledge of animal production, linked to their weak literacy skills;
- the poverty of pastoralists;
- the absence of facilities for processing livestock products;
- the lack of appropriate institutions to link herders with Government;
- the absence of clear boundaries demarcating herding zones, which are shrinking as a result of environmental degradation; and
- alienation of land to agriculture.

In the future ADENA intends to improve both the quality and quantity of the personnel it employs; train more local pastoralists in improved production and management practices; reinforce its institutional capacity; and work to create better linkages between other NGOs and organisations working in the pastoral sector.

Mr Ndiaye placed particular emphasis on the need to involve the herders themselves in all phases of the project cycle, from its identification through implementation to evaluation, and he stressed the importance of effective planning of project activities on a seasonal basis, given the diverse nature of herders economy at different moments of the year. On behalf of ADENA he appealed for much greater co-ordination between NGOs and other organisations, and recommended the creation of a network to share information and carry out joint work composed of organisations working in the pastoral sector. In conclusion he called for the establishment of a union of pastoral NGOs in Africa to co-ordinate initiatives aimed at improving herders' livelihoods at an international level.

**THE NYABUSHOZI DEVELOPMENT AGENCY
(NYDA), UGANDA**

NYDA was set up in 1989 and registered as an NGO in 1992, in order to work primarily with the Bahima pastoralists of Mbarara District, south western Uganda. In recent times the Bahima have suffered considerable hardship through the nationalisation of the pastoral resources they rely upon. In particular, the creation of the Ankole-Masaka Ranching Scheme in 1963, and the Lake Mburo Game Reserve in 1964 (which became the Lake Mburo National Park in 1984) has:

- denied the Bahima access to water points and dry season grazing grounds;
- taken land away from the Bahima and redistributed it as fenced ranches to government bureaucrats and educated people;
- led to increased levels of conflict as the Bahima have been forced to invade the ranches and the game reserve to get access to water and pasture, particularly in drought years;
- led to increased pressure on resources outside the reserve and ranch land, through increased human and livestock populations on reduced areas of land.

Within this context NYDA has identified its main objectives as to assist in the social, economic, agricultural and industrial development of the area and to initiate and encourage self-help projects. Their main activities to date have been the gathering of some base line data and preliminary ideas for future projects based on the Participatory Rural Appraisal method; the creation of markets for milk, skins, hides and

other animal products together with the government and the resistance councils; campaigns to encourage pastoralists to send their children to school; promoting self-help health centres; training pastoralists in modern skills of animal husbandry, investment and savings schemes and PRA. The impact of their initiatives can be seen in the water points constructed by pastoralists in their rangelands, the increase in the production of milk following the creation of the milk purchasing centres, increased school attendance, and in the influence NYDA has been able to bring to bear on the government to resettle pastoralists made landless by the game reserve (national park) and ranching scheme.

NYDA faces a shortage of funds as one of its principal constraints, in particular to set up credit schemes for herders; to construct further water points; to pay its staff and to undertake research in pastoral systems. Further constraints are the views of the government that pastoralists are backward, the vast size of the area in which the Bahima live and lack of infrastructure, low prices for livestock and drought. As population levels of humans and livestock are rising more conflict over access to resources is breaking out.

For the future NYDA proposes to widen and extend its knowledge of the natural, political and economic conditions under which the Bahima live; have a greater influence on government policy formulation in the pastoral sector; increase initiatives aimed at providing better access to water; improve infrastructure in the area; extend training and education programmes; and enhance regional cooperation in development initiatives aimed at pastoralists.

BIBLIOGRAPHY

- Baier, S. 1980. *An Economic-History of Central Niger*. Oxford: Clarendon Press.
- Baxter, P.T.W. 1954. The Social Organization of the Boran of northern Kenya. Ph.D. thesis, Lincoln College, Oxford University.
- Behnke, R.H. 1984. Fenced and Open Range Ranching: The Commercialization of Pastoral Economy and Livestock in Africa. *Livestock Development in Subsaharan Africa*. Boulder: West View Press.
- Behnke, R.H. and I. Scoones. 1992. *Rethinking Range Ecology: Implications for Rangeland Management in Africa*. Drylands Network Programme Issues Paper No 33, London: IIED.
- Bennett, J.W. 1984. *Political Ecology and Economic Development of Migratory Pastoralist Peoples in East Africa*. Madison, Wisconsin: Land Tenure Center.
- Berger, D. and M. Ole Parkipuny. 1989. Sustainable Utilization and Management of Resources in the Maasai Rangelands: The Links between Social Justice and Wildlife Conservation. Proposal submitted to Osborn Center for Conservation and Development.
- Bonfiglioli, A.M. with C. Watson. 1992. *Pastoralists at a Crossroads: Survival and Development Issues in African Pastoralism*. Nairobi: UNICEF/UNSO NOPA Project.
- Boshe, J. 1993. Letter Re: Loliondo Concession to USAID Attache, ODA. Dar es Salaam.
- Bromley, D.W. and M.M. Cernea. 1989. *The Management of Common Property Natural Resources. Some Conceptual and Operational Fallacies*. World Bank Discussion Papers, no. 57, Washington, D.C.
- Brown, M. 1983. Internal Memorandum. Central Rangelands Development Project. Mogadishu: Louis Berger International.
- Brown, M. 1984. Final Socio-economist's Report. Mogadishu: United States Agency for International Development.
- Brown, M. and B. Wyckoff-Baird. 1992. *Designing Integrated Conservation and Development Projects*. Washington, D.C.: The Biodiversity Support Program, The World Wildlife Fund.
- Comité de Soutien à Khelcom. 1992. *Declaration sur la Destruction de la Forêt de Khelcom*. Translated from French. Mimeo.
- Dahl, G. and A. Hjort. 1976. *Having Herds. Pastoral Growth and Household Economy*. Stockholm: Stockholm Studies in Social Anthropology, University of Stockholm.
- Dakouo, J. 1992. *Etude sur le Secteur Pastoral au Mali: Quelles Approches pour les ONG?* Prepared for PVO-NGO/NRMS Project. Bamako: CCA/ONG.
- Dembele, E. and J. Dakouo. 1992. *Plan d'Operation*. Projet PVO-Pivot-GRN. Bamako: CARE/Mali.

- Dismus, E.K. 1993. Land Distribution and Land Tenure: The Turkana Experience, *The Pastoralist*. Nairobi: Oxfam Inc.
- Dyson-Hudson, N. 1985. Pastoral Production Systems and Livestock Development Projects: An East African Perspective. *Putting People First*, Michael Cernea, ed. Oxford: Oxford University Press.
- Evans-Pritchard, E. 1940. *The Nuer*. Oxford: Oxford University Press.
- Frankenberger, T. 1993. Personal Communication. Tuscon, Arizona.
- Galaty, J., D. Aronson and P.S. Salzman. 1981. *The Future of Pastoral Peoples*. Proceedings of a Conference in Kenya, 1980. Ottawa: International Development Research Center, for the Commission on Nomadic Peoples, International Union of Anthropological and Ethnological Sciences.
- Galaty, J. and D. Johnson. 1990. Introduction: Pastoral Systems in Global Perspective. *The World of Pastoralism*. Galaty and Johnson, eds. New York: The Guilford Press.
- Gulliver, P.H. 1955. *The Family Herds: A Study of Two Pastoral Tribes in East Africa: Jie and Turkana*. London: Routledge and Kegan Paul.
- Hanan, N et al. 1991. Assessment of Desertification around Deep Wells in the Sahel Using Satellite Imagery, *Journal of Applied Ecology* vol 28: 173-186.
- Hardin, G. 1968. The Tragedy of the Commons. *Science*, Volume 162. pp. 1243-1248.
- Herskovits, M. 1926. *The Cattle Complex in East Africa*. *American Anthropologist* 28: 230-272, 361-388, 494-528, 633-644.
- Hjort af Ornas, Anders. 1990. Production versus Environment? Planning Resource Management and Ecological Adaptation in Kenyan Drylands. *Adaptive Strategies in African Arid Lands*. M. Bovin and L. Manger, eds. Uppsala, Sweden: The Scandinavian Institute of African Studies.
- Hogg, R. 1991. *Developing the Commons: A Critique of NGO Approaches to Pastoral Development*. Prepared for PVO-NGO/NRMS Project. London: IIED.
- IUCN (World Conservation Union). 1989. *The IUCN Sahel Studies*. Nairobi: IUCN: World Conservation Union.
- Kasiaro, P. Ole. 1993. Personal communication. Arusha.
- Kisopia, P. 1993. Pastoralism in Kenya and the Oxfam Programme. Paper presented at workshop on "NGOs and NRM in the Pastoral Sector of Africa: Strategies for Enhancing Performance and Impact. Mopti: Oxfam/Kenya.
- Kiss, A. ed. 1990. *Living with Wildlife*. Washington, D.C.: The World Bank.
- Lewis, I.M. 1961. *A Pastoral Democracy*. London: Oxford University Press.
- Little, P. 1985. Absentee Herd Owners and Part Time Pastoralists: The Political Economy of Resource Use in Northern Kenya. *Human Ecology* 13; 131-151.
- _____. 1993. Personal Communication. Binghamton, NY.
- _____. (forthcoming). The Social Context of Land Degradation ("Desertification") in Dry Regions. *Recasting the Population and Environment Debate*. L. Arizpe, A. Palloni, and P. Stone, eds. Boulder: Westview Press.

- McCabe, J.T., S. Perkin and C. Schofield. 1992. Can Conservation and Development be Coupled among Pastoral People? An Examination of the Maasai of the Ngorongoro Conservation Area, Tanzania. *Human Organization*, Vol. 51, No. 4.
- McCabe, JT. 1990. Turkana Pastoralism: A Case against the Tragedy of the Commons. *Human Ecology*, 18:81-103.
- Moehlmann, P. 1990. *Ngorongoro Conservation Area Authority*. Report from Buffer Zone Management Workshop, Uganda, October 1990.
- Monod, T., ed. 1975. *Pastoralism in Tropical Africa*. London: Oxford University Press.
- Mortimore, M. 1989. *Adapting to Drought: Farmers, Famines and Desertification in West Africa*. Cambridge, UK: Cambridge University Press.
- Salih, M.A. 1989. Ecological Degradation, Political Coercion and the Limits of the State Intervention. *Ecological Degradation and Political Conflicts in Africa*. A. Hjort af Ornas and M.A. Mohamed Salih eds. Uppsala: Scandinavian Institute of African Studies.
- Sandford, S. 1983. *Management of Pastoral Development in the Third World*. London: John Wiley & Sons and Overseas Development Institute.
- Scudder, T. 1993. Environmental Politics: Botswana's Southern Okavango Integrated Water Development Project. *Development Anthropology Network*. vol. 10, no. 2:17-22. Binghamton: Institute for Development Anthropology.
- Schoonmaker Freudenberger, K.S. 1991. *Mbeque: The Disingenuous Destruction of a Sahelian Forest*. London: Drylands Programme, IIED.
- Shanmugaratnam, N et al. 1992. *Resource Management and Pastoral Institution Building in the West African Sahel*. Washington, D.C.: World Bank Discussion Paper 175, Africa Technical Department Series.
- Snelson, D. (forthcoming). Neighbors as Partners of Protected Areas. In *Expanding Partnerships in Conservation*. Gland: World Conservation Union (IUCN).
- Sperling, L. 1987. Wage Employment among Samburu Pastoralists of North Central Kenya. *Research in Economic Anthropology*. 167-190.
- Stenning, D.J. 1971. Household Viability among the Pastoral Fulani. *The Developmental Cycle in Domestic Groups*. J. Goody ed. Cambridge: Cambridge University Press.
- Swift, J. 1988. *Major Issues in African Pastoral Development*. Prepared for the FAO. University of Sussex: Institute of Development Studies.
- Swift, J. and C. Toulmin. 1992. *Lignes Directrices et Stratégies de Développement Pastoral en Afrique*. Nairobi: UNICEF/UNSO NOPA Project.
- Tiffen, M et al. 1992. *Environmental Change in Machakos District, Kenya. 1930-1990*. London: Overseas Development Institute
- Timberlake, L. 1986. *Africa in Crisis*. Washington: Earthscan, IIED.
- Toulmin, C. 1991. Natural Resources Management at the Local Level: Will This Bring Food Security to the Sahel? *IDS Bulletin*, vol. 22, no. 3, Sussex: IDS.

- _____. 1991a. Bridging the Gap Between Top-Down and Bottom-Up in Natural Resources Management. In *When the Grass is Gone, Development Intervention in Africa Arid Lands*. Baxter, P.T., ed. Uppsala: Scandinavian Institute of African Studies.
- Toulmin, C. and R. Moorehead. 1993. *Local Strength and Global Weakness: NGO Experience with Pastoralists in Africa*. London: Drylands Programme, IIED.
- Tucker, C.J., H. Dregne, and W. Newcomb. 1991. Expansion and Contraction of the Sahara Desert from 1908 to 1990. *Science*. 253:299-301.
- Turner, B.L. and S.B. Brush eds. 1987. *Comparative Farming Systems*. New York: The Guilford Press.
- Vedeld, T. 1992. Local Institution Building and Resource Management in the West African Sahel. *Forum for Development Studies* 1: 23-50.
- Veit, P. 1993. *Promising Dryland Management Technologies for Smallholder Farmers in Sub-Saharan Africa: What Makes Technologies Socially Appropriate?* Prepared for preliminary meeting for Intergovernmental Negotiating Committee for a Convention to Combat Desertification (INCD), Nairobi, Kenya.
- Wells, M. and K. Brandon with L. Hannah. 1992. *People and Parks: Linking Protected Area Management with Local Communities*. Washington, D.C.: The World Bank.
- Western, D. 1992. *Conserving Savanna Ecosystems Through Community Participation: The Amboseli Case Study*. Prepared for The Liz Claiborne and Art Ortenberg Foundation Workshop on Community-based Conservation. Nairobi: Wildlife Conservation International.
- White, R. 1993. *Livestock Development and Pastoral Production on Communal Rangeland in Botswana*. Gaborone: The Botswana Society.