# Rhetoric or Reality?

# A Review of Community Conservation Policy and Practice in East Africa

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*Contents*

## Acronyms

| | |
|---|---|
| ACC | Africa Conservation Centre |
| ACTS | African Centre for Technology Studies |
| ADMADE | Administrative Management Design for Game Management Areas |
| AMKO | Association of Mt. Kenya Operators |
| APE | Action Programme for the Environment |
| AWF | African Wildlife Foundation |
| BSP | Biodiversity Support Program |
| C4 | Community Conservation Coordinating Committee |
| CAMPFIRE | Communal Areas Management Program for Indigenous Resources |
| CARE DTC | CARE Development Through Conservation |
| CBC | Community-based Conservation |
| CBD | Convention on Biological Diversity |
| CBO | Community-based Organization |
| CC | Community Conservation |
| CCC | Community Conservation Coordinator |
| CCS | Community Conservation Service |
| CCSC | Community Conservation Service Centre |
| CCUWA | Community Conservation for Uganda Wildlife Authority |
| CCW | Community Conservation Warden |
| CITES | Convention on International Trade in Endangered Species |
| COBRA | Conservation of Biodiverse Resource Areas |
| CWP | Community Wildlife Programme |
| CWS | Community Wildlife Service |
| DFID | Department For International Development |
| DRSRS | Department of Resource Survey and Remote Sensing |
| EU | European Union |
| FAO | Food and Agriculture Organization |
| FD | Forestry Department |
| FFI | Fauna and Flora International |
| FORI | Forestry Research Institute of Uganda |
| GDP | Gross Domestic Product |
| GMU | Grant Management Unit |
| GNP | Gross National Product |
| GOK | Government of Kenya |
| GTZ | German Technical Assistance Cooperation |
| ICRAF | International Council for Research in Agroforestry |
| IGCP | International Gorilla Conservation Programme |
| IIED | International Institute for Environment and Development |
| ITFC | Institute for Tropical Forest Conservation |
| IUCN | World Conservation Union |
| KEFRI | Kenya Forestry Research Institute |
| KEMFRI | Kenya Marine Fisheries Research Institute |
| KIFCON | Kenya Indigenous Forest Conservation |
| KNWA | Kenya National Wildlife Association |
| KSCDP | Kibale Semliki Conservation and Development Project |
| KWS | Kenya Wildlife Service |
| LC | Local Council |
| LMNP | Lake Mburo National Park |
| MBOA | Mombasa Boat Operators Association |

| | |
|---|---|
| MISR | Makerere Institute for Social Research |
| MOU | Memorandum of Understanding |
| MUIENR | Makerere University Institute for Environment and Natural Resources |
| MUST | Mbarara University of Science and Technology |
| NCA | Ngorongoro Conservation Area |
| NCAA | Ngorongoro Conservation Area Authority |
| NEAP | National Environment Action Plan |
| NEIC | National Environment Information Centre |
| NEMA | National Environment Management Authority |
| NGO | Non Governmental Organization |
| NORAD | Norwegian Agency for International Development |
| NRM | National Resistance Movement |
| ODA | Overseas Development Administration |
| PAMSU | Protected Area Management and Sustainable Use |
| PARCS | Protected Areas Conservation Strategy |
| PAWM | Planning and Assessment for Wildlife Management |
| PAWS | Protected Areas Wildlife Services |
| PLA | Participatory Learning and Appraisal |
| PMAC | Park Management Advisory Committee |
| PRA | Participatory Rural Appraisal |
| PRMC | Parish Resource Management Committees |
| RC | Resistance Council |
| RSCU | Regional Soil Conservation Unit (now renamed RELMA) |
| SCIP | Support for Community Initiated Projects |
| SCP | Selous Conservation Project |
| SIDA | Swedish International Development Agency |
| SRCS | Serengeti Regional Conservation Strategy |
| STEEP | Serengeti Training and Environmental Education Project |
| TANAPA | Tanzania National Parks |
| TCCP | Tsavo Community Conservation Project |
| UNEP | United Nations Environment Programme |
| UNP | Uganda National Parks |
| USAID | United States Agency for International Development |
| UWA | Uganda Wildlife Authority |
| VSO | Voluntary Service Overseas |
| WCMD | Wildlife Conservation and Management Department |
| WD | Wildlife Department |
| WDF | Wildlife for Development Fund |
| WEP | Wildlife Extension Project |
| WMA | Wildlife Management Area |
| WMP | Wildlife Management Project |
| WTO | World Trade Organization |
| WWF | World Wildlife Fund |

## Preface and Acknowledgements

While most of the substantive work was carried out through two grants from the International Institute for Environment and Development (IIED) as part of their global Community Wildlife project *Evaluating Eden*, the original idea and funding for this review of community conservation in East Africa was a joint research activity between IDPM, University of Manchester, African Wildlife Foundation (Nairobi), Centre for Applied Social Sciences, University of Zimbabwe and the Department of Geography, University of Cambridge, and with the IUCN Eastern African Regional office since late 1997. This project research was funded by the Global Environmental Change Programme, Phase IV (Grant No. L320 25 3211) of the Economic and Social Research Council, United Kingdom. The authors are very grateful to these funding sources, and in particular to IIED, to enable this review to be completed.

A chapter summarising this more substantive review appears in Hulme, D. and Murphree, M. (eds), 1999 (in press): *African Wildlife and African Livelihoods, the Promise and Performance of Community Conservation.* James Currey, Oxford.

When we started working on this review we naively thought it would be a relatively simple affair! Little did we know the depth, scale, range and variety of community conservation initiatives there are in the region, ranging from small individual and community group efforts to large bi- and multi-laterally funded programmes (the list of over 170 'projects' mentioned in Annex 2 is indicative of this diversity). The smaller, and often more interesting individual and community initiated efforts (with little or no external funding) are difficult to find out about, and only usually through word of mouth as their experiences are often not documented. Given the limitations of time and resources we have tried to demonstrate some of this richness of experience, though inevitably the review has been based more on published and grey literature, together with our experience in the region.

A second area concerned the boundaries of what we meant by 'community' and 'conservation'. Both terms have been widely used and abused. Much of the focus of community conservation has been on wildlife (fauna, and then mainly large terrestrial mammals). Yet there is a vast array of community conservation activities taking place with other forms of wildlife, both aquatic and marine, and with forestry. While we have tried to be as inclusive as we can, the focus of this review has been more on the wildlife (fauna), than the other forms wildlife. Clearly in a review of this nature there are many gaps. We are sure many very interesting projects and activities have not been mentioned, and apologise in advance for such omissions, though the 15-page reference list is testament to that richness of experience in the region.

A review of this nature has had to concentrate on information available through reports, published papers, and through our contacts with field based projects. In this we recognise that much may have been left out, and it is hoped that this review will stimulate such projects to write about and share their experiences. More description and analysis is needed on:

- Community conservation and marine and coastal ecosystems, and wetlands;
- Changes in knowledge, attitudes and practices with respect to community conservation;
- Hunting in Tanzania and the relative importance of subsistence hunting; and
- Customary or traditional forms of community conservation.

Having said that, this review probably represents the first concerted and detailed attempt to document and analyse community conservation activities in East Africa. This should assist practitioners and policy makers alike in learning lessons from past experiences as the region more actively integrates community conservation both as a tool for conservation and for meeting livelihood objectives.

We are grateful to all those who have shared their materials, experiences and time. A range of people made substantial contributions to the text. Sections 3.1 and 3.2 are largely based on a paper by E. Barrow and M. Murphree titled *Community Conservation from Concept to Practice: A Practical Framework*, in Hulme D., Murphree M. (eds), 1999 (in press): *African Wildlife and African Livelihoods, the Promise and Performance of Community Conservation.* James Currey, Oxford. The authors are grateful for permission to use that material here. Deborah Snelson (WWF), made a substantial contribution to Section 7.7 on training for community conservation based on an article for the Rural Extension Bulletin of Reading University. Lucy Emerton (IUCN) made substantial input into the sections on economics (equity and economic benefit accrual in Sections 8.1 and 8.2., and the role of incentives in Section 9.9). Patrick Bergin (AWF) made some early comment on the Tanzania material. David Hulme (IDPM, University of Manchester) provided a lot of useful guidance and comment on the overall content of the work. A more final draft of this review then went out to peer review. Kathy Homewood, Nigel Leader Williams, Charles Lane, Dilys Roe (IIED) and Ross Hughes (IIED) reviewed the draft document, and provided useful comments and advice, much of which have been incorporated in the text. Dilys Roe (IIED) and Fiona Hinchcliffe provided much needed editorial assistance. We are very grateful to all these people for the time and effort they have spent on this work. However the views expressed in this review are those of the authors and should not be attributed to any of the collaborating organisations or donors. We apologise for the many omissions there are, but hope that this will be a useful contribution as community conservation becomes more firmly entrenched in East Africa.

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[1]African Wildlife Foundation from 1991 to September 1997, presently with IUCN - Eastern Africa Regional Office, Nairobi, Kenya where much of this work was done.

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# 1. Kenya, Tanzania and Uganda: A region of social and biological richness

## 1.1 Introduction

This comparative review describes the history and practice of community conservation in Kenya, Tanzania and Uganda. It identifies the different circumstances in which community conservation programmes have developed and been implemented, and examines how responses to them have led to the evolution of alternative approaches. The analysis centres around a number of key themes and questions:

- Early lessons - what has been learned?
- Policy and law - are they keeping pace with practice?
- Politics, governance, equity, and decentralisation - how have they influenced and been influenced by community conservation?
- Tenure of land and resources - who owns and who should own?
- Conservation institutions - how have their character and capacity effected community conservation?
- Individuals, donors and external influences - what role have they played in community conservation?
- Stability and disruption - what has been their effect on community conservation?
- Forms and levels of participation - what is the ideal and what is realistic?
- Types of community conservation arrangements - what is the philosophical basis behind decisions taken?
- Benefits, incentives and disincentives - what has community conservation contributed towards meeting livelihood objectives?
- Conservation of biodiversity - what has community conservation contributed?

The focus of this review is on more 'formal' community conservation activities. Though customary or traditional mechanisms for conservation are also discussed, the authors realise that not enough attention has been devoted to them. Constraints of time and funding made it difficult to do justice to this area. However, the importance of understanding customary and traditional approaches to conservation and integrating such approaches into more formal conservation is clear. The review focuses on 'wildlife', and in particular large terrestrial fauna. Experience from forest conservation and fishery management is included, but in less detail.

The review concludes by identifying key factors in successful community conservation programmes. Analysis in terms of approaches, adoption, integration, and achieving conservation goals is made in relation to constraints on community conservation programmes. Issues which need to be addressed by conservation authorities, local and international NGOs and, most importantly, rural people are discussed.

## 1.2 Background Data

The three East African countries, Kenya, Tanzania and Uganda, straddle the equator on the east of the African continent (see Map 1). Kenya and Tanzania border the Indian Ocean, while

Uganda is landlocked. Most of Uganda (241,038 sq. km) lies between 1,000 and 1,500 metres above sea level, except the Virunga Volcanoes and the Rwenzori Mountains in the west and Mt. Elgon in the east which rise to over 5000 m. Kenya covers an area of 580,367 sq. km with altitudes ranging from sea level to over 5,000 metres (Mt. Kenya). It is distinguished by the Great Rift Valley which crosses the country from Lake Turkana in the north to Lake Natron in the south. Tanzania, the largest of the three East African countries (883,749 sq. km) is mostly located in the Central African Plateau, at an altitude of 1,000-1,500m above sea level which rises by slopes and scarps from a narrow coastal strip (IUCN 1992). South of the Rufiji valley there is a lower plateau, 500-700m above sea level, while Mt. Kilimanjaro, which borders Kenya, is the highest peak in Africa (5,895 m).

[INSERT MAP 1 - SEPERATE FILE - REGION MAP.DOC]

Kenya and Tanzania are dominated by semi-arid land which comprises about 75% of Kenya and about 50% of Tanzania. By contrast, Uganda has large amounts of available freshwater with a total of 13% of its land surface considered as wetland.

The three countries became independent between 1961-1963, but each has evolved along different paths. However, the economies of all three are based on subsistence and cash-based agriculture on which over 75% of the economically active population depend (Table 1.1). Since independence Kenya has remained relatively stable and has developed a market-based economy which has tried to diversify away from an agricultural base to include an increasing emphasis on small and medium scale, urban and rural enterprise development. Tanzania became a socialist state under the principles of *Ujamaa* (or villagisation), based on the Arusha Declaration of 1968 (Nyerere 1973). This has changed since the political and economic upheavals of the late 1980s and is now becoming more market driven. Uganda, on the other hand, degenerated from relative prosperity in the mid-1960s to a state of almost total social and economic collapse by the mid 1980s. Since 1986, with the change of government and leadership, the economy has strengthened considerably, and national institutions are being rebuilt, though still remain weak.

The most powerful threat to the region's biodiversity is the requirement to satisfy the growing needs of rural communities, communities that are themselves growing. Land has been cleared and forests cut down to satisfy food security needs. The frontiers of cultivation have been pushed into drier and drier lands to satisfy the demand for food. This striving for food security comes at a high risk. Biodiversity is being lost, and environmental resilience reduced. The effects of drought have been exacerbated by reduced environmental resilience, and now increasingly result in famine conditions. It is in this context of competing demands for both regional food security and conservation that community conservation operates, attempting to contribute to rural livelihood needs as well as support conservation objectives.

***Table 1.1: Some Demographic and Economic Statistics for East Africa***

| | **Kenya** | **Tanzania** | **Uganda** |
|---|---|---|---|
| Land area (sq. km) | 580,367 | 883,749 | 241,038 |
| Population (1996) | 27,799,000 | 30,799,000 | 21,300,000 |
| Density (per sq. km) | 48 | 35 | 88 |
| Population increase (% per annum) | 3.2 | 2.4 | 2.8 |
| Popn. deriving livelihood from land (%) | 78% | 82% | 85% |
| GNP (1988 - US $s) | 270 | 100 | 190 |
| GNP (1996 - US $s) | 320 | 170 | 300 |
| Annual growth of GNP 1986-1996 | 0.2% | 1.2% | 3.0% |
| Multilateral debt 1994 ($s) | 2.75 billion | 2.64 billion | 2.0 billion |
| Bilateral debt 1994 ($s) | 3.15 billion | 3.2 billion | 831 million |
| External debt per capita ($) | 248 | 241 | 181 |
| Per capita contribution to food supply from fish and sea food (1994-95) | 7.3 kg | 15.2kg | N/A. |
| Population estimate 2025 | 79,000,000 | 84,000,000 | 53,000,000 |
| Life expectancy at birth (1995) | 58 | 51 | 42 |
| Literacy (1995) | 78% | 68% | 62% |
| Agriculture as % of GNP | 29% | 57% | 49% |
| % High potential agricultural land | 7.94% | 3.96% | 19.05% |
| Food Production Index * | 102.8 | 99.9 | 114.9 |
| Per Capita Food index * | 85.9 | 86.1 | 96.8 |
| Gov. revenue as % GDP 1997/98 | 25.5% | 13% | 11.3% |
| Gov. expenditure as % GDP 1997/98 | 30.5% | 18% | 18% |
| GINI coefficient for income distribution (0=best, 1= worst) | 0.51 | 0.54 | 0.30 |
| Human Development Index (Rank/Value - 1994)** | 134/0.463 | 149/0.357 | 159/0.328 |
| Forestry as % of GDP (above 10%) | 19% | N/A. | 23% |

*Sources: World Conservation Monitoring Centre 1992; World Bank 1996; FAO 1997; Mwakisyala 1998; Mwale 1998; World Bank 1998*

*Based on 1989-1991 as being an index of 100

**Developed by UNDP in 1990 to capture as many aspects of human development as possible in one sample composite index. It is an index of achievements in basic human potential, where 0 is worst and 1 is best, and the rank refers to position in world (UNDP 1997).

## 1.3 Biodiversity Resources

The East African Region contains great biological richness. A range of climatic and geographical characteristics give rise to habitats ranging from coral reefs to miombo woodlands, and from afro-montane forests to deserts. Among its neighbours, Uganda is exceeded in species richness only by the Demographic Republic of Congo, and has more bird species for its size than any other country in Africa (Pomeroy and Lewis 1987). Table 1.2 illustrates the richness of this biodiversity. Tanzania has the highest degree of plant endemism (11.2 %); Uganda has the lowest (0.6 %) because it shares its vegetation types with other countries particularly to the west, especially the Democratic Republic of Congo.

There are a number of reasons for this floristic and faunal richness. The region is influenced by the vegetation systems from the north (Ethiopia and Somalia), by those of West Africa and those of southern Africa. The three countries span several biogeographical regions and fall into

a number of different areas of endemism (IUCN and UNEP 1986), including the important Guineo-Congolian and Afromontane regional centres of endemism for plants (Bentje et. al. 1994), and the East Africa (Somalia-Maasai), West Africa, Lake Victoria, Zambezi, and Zanzibar-Inhambane regions of endemism (IUCN and UNEP 1986). Uganda sits at the interface between the forest communities of West Africa and the savannah communities of Eastern and Southern Africa. Tanzania shares the Zambezi region with Southern Africa, and Kenya shares the Somali-Maasai with the Horn of Africa. This has fostered the development of a rich array of specialist and endemic species in a remarkably small area. However, this diversity is threatened. Tanzania has 217 threatened species, Kenya 181, and Uganda 40 species, including the mountain gorilla (Groombridge 1992).

***Table 1.2 Species Diversity and Endemism in East Africa***

| | **Kenya** | **Tanzania** | **Uganda** |
|---|---|---|---|
| Total no. plant species | 6506 | >10,000 | 5406 |
| No. of endemic plants | 265 | 1122 | 30 |
| % Plant sp. endemism | 4.1 | 11.2 | 0.6 |
| Original extent of closed canopy forest (sq. km) | 81,200 | 37,576 | 103,400 |
| Remaining area of moist tropical forest (sq. km) | 6,900 | 8,500 to 16,185* | 7,400 |
| % remaining | 8.5 | 22.6 to 43.1 | 7.2 |
| Average annual loss 1981-1985 (%) | 1.7 | 0.7 | 1.3 |
| Threatened plant species | 144 | 158 | 11 |
| Threatened mammal species | 17 | 30 | 16 |
| Threatened bird species | 18 | 26 | 12 |
| Threatened reptile species | 2 | 3 | 1 |
| | | | |
| Total area of all forests (Ha) | 1,292,000 | 32,510,000 | 6,104,000 |
| Forests as % of country | 2% | 36.8% | 27% |
| Natural forest 1995 (Ha) | 1,174,000 | 32,356,000 | 6,084,000 |
| Hectares forest per capita | 0.045 | 1.1 | 0.3 |
| Average annual forest loss 1990-1995 (Ha) | 3,000 | 323,000 | 59,000 |
| Total loss 1990-1995 (Ha) | 17,000 | 1,613,000 | 296,000 |
| % annual rate of change | -0.03% | -1.0% | -0.9% |
| % mangrove forest lost | 70% | 60% | - |

Sources: FAO 1988 and 1997; IUCN 1990; Stuart and Adams 1990; Harcourt and Collins 1992; World Conservation Monitoring Centre 1992; World Conservation Union 1996
*Difference is related to whether miombo woodland is included or not

The major areas of conservation interest can be broadly divided into five zones, each related to one or more centres of endemism, and each with its own set of conservation concerns.

1. The Zambezian regional centre of endemism has probably the richest and most diverse flora in Africa and covers a significant area of Tanzania. Woodland is the most dominant vegetation type, where miombo woodlands cover about 11.7 million ha. and represent over 90% of the total forest reserves in Tanzania (Temu 1976; Government of Tanzania 1990). However, this miombo woodland is being degraded at a rate of between 300-400,000 ha per year for agriculture, grazing and industrial wood harvesting. Most of the land is used as rangeland, with large areas under conservation management. There is significant land use pressure to cater for increasing human populations.

2. The Sudanian regional centre stretches across Africa, but in East Africa is only found in Uganda and is characterised by dry forest. Very little of this remains as it has been modified by cultivation in the wetter areas, and by pastoralism in the more northerly drier lands. Biologically this unit is impoverished, though rich in mammals.

3. The dominant biogeographic unit in East Africa is the Somali-Maasai region which covers most of Kenya, the north east corner of Uganda and the northern plains of Tanzania. This region is poorly represented in Uganda where it is dominated by deciduous bush land and thickets (*Acacia-Commiphora*). Botanically the unit is moderately rich with a high rate of endemism (about 50%, White 1983). It is rich in fauna, with many of the world's spectacular wildlife herds common in this area. The rainfall is low and erratic, with resultant low agricultural potential and human population densities. It is dominated by pastoralism and a significant portion of this region is under some form of conservation status.

4. Although most African mountains are small and widely separated, floristically they share many common characteristics, and are biologically very rich. They support at least 4000 plant species, of which about 3000 are endemic. The Afromontane region of endemism covers the main mountain areas of East Africa above 2000m including Mt. Kilimanjaro, the Usambaras, Mt. Kenya, Mt. Elgon, the Ruwenzoris and parts of Bwindi forest. In terms of species richness, however, the Eastern Arc Mountain system of Tanzania is richer than the volcanic highlands. The afromontane forests of the Albertine Rift in western Uganda support the richest montane fauna on the continent, including many endemics. Bwindi Impenetrable National Park, for example, is an important centre of biodiversity, and supports almost 1000 taxa of plant (World Conservation Monitoring Centre 1992). During the last 130 years or so, these forests have been largely destroyed and fragmented by farmers (Butynski 1984). The lands around the afromontane forests are very fertile with high rainfall, and support some of the highest human population densities in Africa (100-450 people per sq. km). Despite the classification of the majority of these remnant forests as national parks or forest reserves, and their critical importance for water catchment, their piecemeal conversion to agriculture continues. This represents a great threat to conservation (see for example Aldrich, Billington et al. 1997; Messerli and Ives 1997; Mountain Agenda 1997).

5. The Lake Victoria regional mosaic is based on Lake Victoria and surrounding swamps and wetlands, and is particularly important in Uganda. The land is rich and is intensively used for farming, while Lake Victoria is a major fishery.

   The other major wetland region is the Zanzibar-Inhambane region which consists of the coastal region of Kenya and Tanzania with its important coral reefs and mangrove forests, and associated fisheries and tourism industries. Since the region is relatively rich, much of the coastal forest lands have been modified by agricultural use. Biologically the region is rich, particularly the coral reefs.

Kenya has the most detailed data set for wildlife (and domestic stock) in the region, due to the long term survey work of the Department of Resource Surveys and Remote Sensing (DRSRS) from 1977 to 1997 (Department of Resource Surveys and Remote Sensing 1996, Table 1.3). This period was characterised by increasing population pressures combined with rampant poaching, followed by a period of decreased poaching (1990 to present). Table 1.3 presents

the extent of change since 1997 in wildlife numbers in 18 rangeland districts of Kenya. These show an overall loss of 44% between 1977-1994, an average loss of 3.24% per annum (Department of Resource Surveys and Remote Sensing 1996; Norton-Griffiths 1997; Rainy and Worden 1997). Livestock numbers in the same rangeland districts increased at a rate of 0.6% per annum over the same period. Wildlife losses were lower inside protected areas (-36%) as compared to outside protected areas (-48%). Losses were also much lower in districts where land had been adjudicated (-30%), than those with land under the Trust Land Act (-50%; Department of Resource Surveys and Remote Sensing 1996; Norton-Griffiths 1997; Rainy and Worden 1997).

***Table 1.3: Analysis of Wildlife Loss in 18 Rangeland Districts of Kenya, 1977-1994***

| | **Rate of Change Per Annum (%)** | **Total Change 1977-1994 (%)** |
|---|---|---|
| All wildlife | -3.24% | -44% |
| Wildlife inside protected areas | -2.08% | -35% |
| Wildlife outside protected areas | -3.69% | -48% |
| Adjudicated lands - 4 districts | -2.04% | -30% |
| Trust lands - 14 districts | -3.96% | -50% |
| | 1977 | 1994 |
| Wildlife numbers in 12 of the 18 rangeland districts | 1,191,617 | 764,789 |

Sources: Department of Resource Surveys and Remote Sensing 1996; Norton-Griffiths 1997; Rainy and Worden 1997

Although there are similarities in land use, population pressures and rural livelihood development trends, Tanzania has a different tenurial regime to Kenya. While it is likely that wildlife numbers have changed by similar orders of magnitude in Tanzania, for similar reasons as Kenya, differences in land tenure arrangements between Kenya and Tanzania do not allow for direct comparisons of these trends.

Despite the importance of the forests and dryland areas of East Africa, and their considerable wildlife populations, it is estimated that only about 5% of the per capita animal protein supply comes from game meat in Uganda (Groombridge 1992). This is low compared to Zaire (26.8%), though significantly higher than Kenya (2.6%) and Tanzania (1.6%). This suggests that wildlife is not viewed as an important economic resource for rural people, possibly for cultural or historic reasons.

Unlike Kenya and Tanzania, protection and management of Uganda's conservation estate and biological diversity outside of protected areas suffered considerably during the 14 years of political and economic turmoil in Uganda between the early 1970s and the mid 1980s (Table 1.4; Lamprey and Mitchelmore 1996; IUCN and UNEP 1986). Many forest reserves were badly encroached and converted to farm land, while extensive and largely unregulated charcoal burning and pit sawing damaged much that remained. Game reserves and some national parks suffered similar problems of encroachment by pastoralists and farmers.). The plains game, on which Uganda's formerly important tourist industry was based, was especially affected. Despite the considerable damage, however, many protected areas remained viable. Strong action by government in several protected areas has led to a strengthening of their conservation status and to the recovery of some wildlife populations. Action to regain

encroached areas of forest reserves such as Mount Elgon Forest Reserve and the Kibale Forest Corridor (now both national parks) led to recovery of forest vegetation, while improved protection of large mammal populations in certain national parks and game reserves led to increases in populations of some species (Lamprey and Mitchelmore 1996; Table 1.4).

***Table 1.4: Population Dynamics of Selected Species in Uganda***

| Species | Protected Area | | 1980 | 1988/89 | 1995 |
|---|---|---|---|---|---|
| Elephant | Queen Elizabeth National Park | | 150 | 400 | 1,100 |
| Buffalo | Queen Elizabeth National Park | 18,000 - 1969 | 4,200 | 5,000 | 17,000 |
| Uganda Kob | Queen Elizabeth National Park | | 20,000 | 18,000 | 31,000 |
| Hippo | Queen Elizabeth National Park | 9,000 - 1977 | 3,200 | | |
| Buffalo | Kyambura Wildlife Reserve | | - | 20 | 1,400 |
| Uganda Kob | Kyambura Wildlife Reserve | | 1,800 | 2,100 | 5,700 |
| Waterbuck | Kyambura Wildlife Reserve | | 160 | 70 | 300 |
| Buffalo | Murchison Falls National Park | | 15,250 | 1,610 | 2,477 |
| Giraffe | Murchison Falls National Park | | - | 78 | 153 |
| Elephant | Murchison Falls National Park | | 1,420 | 308 | 336 |

Source: Lamprey and Mitchelmore 1996

The story of forest cover is similar (Table 1.2). Kenya has 8.5% of its original forest cover, Tanzania between 22-43% (depending on whether miombo woodland is included), and Uganda 7.2%. The countries continue to lose their forest cover at a rate of 1.7% per annum (Kenya), 1.3% for Uganda, and 0.3% for Tanzania (FAO 1997).

As human populations in high potential agriculture areas grow, the frontiers of cultivation have been pushed into forests, river valleys, and semi-arid areas Arid and semi-arid lands, predominantly in the Somali-Maasai region of endemism, make up 75% of Kenya's land surface, supporting approximately 25% of the human population and over half of the country's livestock production. The same areas also support the spectacular wildlife populations for which Kenya is famous. The spread of agriculture into these areas has reduced wildlife habitat and truncated important ecosystems. Large areas of dry forests have also been cleared. Settlement of wildlife areas has exacerbated conflict between people and wild animals. Kenya and Tanzania are famous for large scale migrations of plains game, especially wildebeest. Migration routes, which may be used for only short periods during these movements, are being closed off by settlement, threatening the well-being of these spectacular populations and the ecosystems themselves.

These losses of wildlife and forest cover present a pessimistic perspective for the future of conservation in the region. However this data and the trends revealed have to be analysed in the context of historical policy and political climates for conservation. The policies under which conservation was pursued excluded and alienated rural people from their natural resources, undermining local level responsibility. Customary arrangements for ownership and use of wildlife were destroyed and responsibility placed in the hands of distant national governments. With the loss of local rights, local responsibility to conserve declined. With reduced government budgets for conservation coinciding with increasing population pressure, it is no wonder that severe losses have occurred. It also, perhaps, explains why community conservation has

come to the fore in efforts to stem the loss of biodiversity.

## 1.4 Conservation and the Region's Economies

Economically the region has low levels of GNP (Table 1.1), though Kenya's is significantly higher than either Tanzania or Uganda. Wealth is unevenly divided, particularly in Kenya and Tanzania where the majority of the population live at or below the poverty line.

Uganda remains a poor country despite the dramatic improvement of the economy since the establishment of the National Resistance Movement (NRM) government in 1986. The NRM took over an economy shattered by years of civil war, mismanagement and corruption. With the assistance of the International Monetary Fund and the World Bank the country has liberalised its economy, brought inflation under control, and achieved impressive rates of economic growth. Infrastructure has been rebuilt and extended, investment and the establishment of industries have been encouraged, and the government civil service has been rationalised and reduced. Uganda is seen by many as a model of sound economic management. Despite this, rural poverty remains high, and public services in health, education and agricultural extension remain poor. Ongoing conflict with rebel groups in the north and west of the country has hindered development, especially in the north, while military spending to retain security has starved the essential services on which the average Ugandan depends.

During the early years of independence, Kenya achieved commendable economic growth compared to other developing countries. From 1964 to 1974, Gross Domestic Product (GDP) grew by an average of 6.6%. This rapid growth resulted from a combination of factors including successful rural development policies that led to increased agriculture and introduction of modern farming methods. Growth in the manufacturing sector was fuelled by expanding domestic demand for consumer goods supported by rising agricultural incomes. High levels of protection and an active government role in industrial promotion and development encouraged investment. Since the late 1970s, however, the performance of the Kenyan economy has been poor. Between 1990 and 1995 the average growth rates for GDP declined to 2.5%. The stagnation of real per capita income over the last 15 years has been due to limited economic growth and rapid population growth, and changes in the world markets of important commodities such as coffee. Corruption over this same period has had an impact on the economic management of the country. This has led to increased unemployment and poverty, putting additional pressure on natural resources and increasing the dependence of rural populations on these resources. In all three countries, thousands of school leavers join the job market every year. In Tanzania alone the number is estimated at 700,000 (East African 1995), and governments are increasingly looking to high growth sectors like tourism to provide employment.

Tourism in the region expanded greatly during the post-independence years (Table 1.5). In 1960 the number of visitors to Kenya was 35,000. By 1978 the number had grown to 334,000, and by 1990 to 743,000 (WTO 1992) and tourism became the second highest earner of foreign exchange (tea was the most important). However, 1997-1998 saw a dramatic decline due to civil strife and the weather. In Tanzania, tourism is now the second largest earner of foreign exchange after agricultural crops like coffee. Tanzania has a large photographic tourism industry, similar to, and increasingly competitive with Kenya's; as well as a large sport hunting industry. Tourism has been identified by the government as critical for Tanzania’s economic

development, and is one of the sectors prioritised for investment by the Investment Promotion Centre. Tourism has great potential to support conservation. This is being realised in Kenya and Tanzania to a large degree. However it is also fickle, as demonstrated by the crash in Kenya's tourist arrivals during 1997-1998 due to insecurity and tribal clashes. While tourism is increasing in Tanzania, the rate of increase has been much lower in Uganda. The region still has massive unrealised tourism potential, particularly in the ecotourism field.

***Table 1.5: Importance of Tourism in East Africa***

| | **Kenya** | **Tanzania** | **Uganda** |
|---|---|---|---|
| Tourist arrivals 1985 | 783,000 | 78,000 | N/A |
| Tourist arrivals 1993 | 541,000 | 230,000 | 74,000 |
| Average annual growth rate (%) | 4.7 | 14.5 | N/A |
| Market share in Africa 1985 (%) | 5.6 | 0.8 | N/A |
| Market share in Africa 1993 (%) | 4.4 | 1.3 | 0.4 |
| Receipts US $m 1985 | 249 | 20 | N/A |
| Receipts US $m 1993 | 500 | 147 | 40 |

Source: WTO 1996

Despite the importance to the region of the tourism industry, very little tourism revenue reaches local communities. The distribution of benefits remains a difficult issue. For example, in Tanzania's renowned Ngorongoro Conservation Area, most lodge staff and tour guides are from cities or neighbouring agricultural districts, rather than from the Maasai tribes of the area. Likewise revenue earned by safari hunting on community lands is not shared directly with those communities. Wildlife continues to decline over much of Kenya, with the exception of Kajiado and Laikipia (Department of Resource Surveys and Remote Sensing 1996; Rainy and Worden 1997; Barrow 1996b), with profound implications for the tourism industry, conservation and rural livelihoods.

The inclusion of communities and resource users in the management of conservation areas can help prevent further loss and decline. Such involvement must include land use planning to balance the agro-ecological production potential with conservation, biodiversity and livelihood objectives. Wildlife cannot continue to be conserved entirely for its own sake. The challenge lies in finding ways to conserve wildlife, and to provide economic and non-economic values to the region, and especially to the people who live with wildlife.

# 2. The Evolution of Community Conservation in East Africa

## 2.1. Institutional and Policy Backgrounds

Conservation can contribute to a range of national objectives. Recognising this, each of the three countries' conservation estate has been divided up and responsibility allocated to different institutions, each of which is regulated by a wide variety of enabling and restrictive policies and legislations (Table 2.1). This has created a complex institutional and policy environment where mandates over land and resources are often unclear. The lack of clarity has been a contributory factor in the decline of the region's conservation estate. Annex 1 demonstrates further the array of different authorities and institutions.

***Table 2.1: Some Conservation Related Statutes and Policies***

| Type | Kenya | Uganda | Tanzania |
|---|---|---|---|
| Wildlife | Wildlife Act 1977; Sessional Paper No. 3 1975; Wildlife Conservation and Management Act 1976 | Wildlife Statute 1996; Uganda Game Act 1964; National Parks Act 1952 | National Parks Ordinance Cap 412 1959; Ngorongoro Conservation Area Act 1959; Wildlife Conservation Act 1974; Wildlife Conservation Act No. 12 of 1974 (amended 1978); National Parks Ordinance (1959); Ngorongoro Conservation Area Ordinance CAP 413 of 1959 (amended 1975); Tanzania Wildlife Corporation Establishment Order (1974) |
| Forestry | Forest Act 1942; Forest Policy Sessional Paper No. 1 1968 | Forest Act 1964; Forest Policy 1988 | Forest Ordinance Cap 389 1982; Forest Ordinance CAP 389 (1957); Natural Resources Ordinance CAP 259 (1951) |

The three countries have a range of mechanisms for conferring different forms of protection to land of conservation importance, based on the IUCN categories (IUCN and UNEP 1986). The management and control of the various protected areas falls under the authority of two main institutions, namely the wildlife and forestry authorities. Fisheries fall under a separate fisheries authority. This can result in confusion; for example, if a lake or wetland, an important fish resource, falls within a protected area, there may be competition for control between overlapping mandates, as in Queen Elizabeth National Park in Uganda. Local government may control local, or indeed village level conservation areas, which may also have national protection. For example Maasai Mara and Samburu Game Reserves are administered by local county councils but have national protection. Certain village forest reserves in Uganda fall under both local and national level protection. In Tanzania some conservation areas were gazetted as national, for instance the Tanzanian national parks and national game reserves, while others were gazetted as regional or district.

All three East African countries are signatories to CITES, the World Heritage Convention, and the African Convention on conservation of Nature and Natural Resources. Kenya and Uganda are signatories to the Ramsar Convention (Table 2.2). All three countries contain biosphere reserves.

***Table 2.2: Signatories to Conservation Conventions***

| Convention | Kenya | Uganda | Tanzania |
|---|---|---|---|
| CITES | Yes | Yes | Yes |
| Ramsar | Yes: Lake Nakuru National Park | Yes: Lake George | No |
| World Heritage | Yes | Yes: 2 sites | Yes: Ngorongoro, Serengeti, Selous, Mt. Kilimanjaro |
| Biosphere Reserve | Yes: Mt. Kulal, Mt. Kenya, Amboseli, Kiunga, Malindi-Watamu | Yes: Queen Elizabeth | Yes: Lake Manyara, Serengeti, Ngorongoro |
| African Convention on Conservation of Nature and Natural Resources | Yes | Yes | Yes |
| Convention on Biodiversity (CBD) | Yes | Yes | Yes |
| London Convention for the Protection of Nature and Natural Resources | | | Yes |

Policy and legislation in East Africa has generally favoured production above conservation, and in the rural landscape this has meant an emphasis on cultivation-based agriculture. Agriculture competed with rather than complemented other land uses, such as conservation. There is a tendency to view land not 'under the plough' as unproductive and not contributing to national development. Similar perceptions tend to be held of extensive pastoral production systems. This type of zonation shows how national land use planning does not integrate the potentials which conservation has to offer. Policy and legislative change in East Africa is starting to acknowledge this and more horizontally integrated land use planning is now being striven for, which recognises conservation as a viable component of land use.

The complexity of environmental issues demands comprehensive and coordinated environmental management policy and legislation. Such coordination has not been adequate and the various environmental issues are divided into different vertically defined government bodies which often show little horizontal integration. This is now changing with the focus on decentralisation and localisation of development and service provision. Governments are not only privatising industries and services that they owned and managed, but, more significantly for the environment, they are decentralising responsibility for the management of natural resources. Though certain and significant exceptions have been made to this general rule, notably the retention of central control over national parks, wildlife reserves and many forest reserves, local government responsibility for natural resource management is increasingly becoming an important feature of government policy.

Broadly in each country a wildlife authority (parastatal in Kenya and Uganda, and a government department in Tanzania) have prime responsibility for managing the nation's wildlife estate. Each of these authorities may manage all the wildlife estate on their own, or there may be a number of separate institutions responsible for different parts of the estate. In each country the forestry department has prime responsibility for the forests, both plantation and natural, except for those which are gazetted national parks. Many other institutions are involved including local government, the production ministries, universities, and a wide range of different NGOs who are working at different levels with different client groups. Each country also has a range of training institutions to provide qualified personnel. Mweka in Tanzania is home to the College of

African Wildlife Management. This has been an important middle level training institution for anglophone Africa (see Section 7.7).

While this localisation and decentralisation is positive, the environment is still a low priority for most local authorities and districts compared to health, education and rural livelihoods. The link between the environment and the well being of rural people is still not clear, as it is not directly related to rural livelihoods. Such short term perspectives have led to potentially unwise decisions on the use of natural resources, for instance with respect to forest settlement, construction of dams and large irrigation schemes. Each country's attempts to evolve some form of environmental overview through a specific agency will assist in the formulation of policy and legislation to create an enabling environment for increased community responsibility for resource management.

### *2.1.1 Kenya: Legislation and early community conservation experiences*

#### *Wildlife*

Wildlife conservation has a long history in Kenya. The earliest legislation was enacted in 1898, establishing game reserves and introducing controls on hunting. A Game Department was established in 1907 to manage wildlife and hunting throughout the country. Ordinance 9 of 1945 established a Board of Trustees to administer land set aside as national parks. In 1945 the first park in the country was established, the Nairobi National Park. The only evidence within the policies of the time that human use could form part of a wildlife and conservation landscape was the creation of game reserves (Kangwana 1993). A game reserve was meant to afford wildlife protection in areas that could not be constituted as national parks, being already allocated to other interests (Cowie 1952). Essentially game reserves were meant to be used by people and wild animals, but destruction of wildlife was prohibited.

As early as the 1950s protected area authorities in Kenya were confronted with problems of conflict between people and wildlife. The beginnings of community conservation initiatives, in Amboseli Game Reserve, can be traced to this time (Box 2.1).

***Box 2.1: Early Community Conservation Work Around Amboseli Game Reserve***

Tourism in Amboseli grew in value as the numbers of visitors increased in the early 1950s. With it also grew concern for the future of wildlife in the central part of the reserve where the presence of the Maasai and their livestock had begun to be perceived as a problem (Lovatt-Smith 1986). It was against this background that negotiations and steps towards co-operation between the Maasai and the reserve administration took shape (Kangwana 1993). The reserve administrators at the time showed much foresight in recognising that the future of wildlife depended on the Maasai seeing it as a resource (Lovatt-Smith 1986). They initiated a scheme for sharing benefits with the Maasai, made arrangements to compensate them for loss of access to water resources in the central swamps of the Amboseli basin by trying to provide alternative water sources, and began negotiations with elders in the community. In undertaking these actions in the 1950s the protected area authorities in Amboseli were addressing three of the key components of community conservation, namely sharing of benefits, compensation and dialogue with communities.

The reserve authorities at the time were also quick to recognise that relations with the local people would be improved if there was no conflict over a resource as crucial as water (Kangwana 1993). They thought that if alternative sources of water were available in the dry season, livestock would not concentrate in the central swamps of the reserve. Ideas for developing water sources were soon followed with the digging of bore holes and the deepening of a channel to redirect water out into the lake bed (Lovatt-Smith 1986). These water projects are reported to have been well received by the Maasai, and wardens at the time prided themselves on the co-operation they had enlisted amongst the local Maasai (Lovatt-Smith 1986).

A series of management and planning initiatives were taken for the Amboseli area, which included components of community conservation. The first, and probably the one that has had the most profound effects in the Amboseli region, was the 1973 Development Plan (Western and Thresher 1973). An economic analysis suggested that the best use of the Amboseli area would be a combination of tourism and commercial livestock ranching (Western 1982). The 1973 development plan included proposals to compensate the Maasai for excluding them from the park. The Group Ranches were to receive water supplies outside the park, for it was recognised that the Maasai could not be displaced from the basin without alternative water and forage for their cattle (Western and Thresher 1973). The responsibility of operating the water pipeline and bore holes was to fall to the park authorities (Lindsay 1987). A grazing compensation fee was paid to the Maasai. Direct economic benefits were also to be received by the Maasai Group Ranches through the development of wildlife viewing circuits, and tourist campsites. Additional benefits were to be received in the form of services such as schools, a dispensary and a community centre which was to be included in the new park headquarters (Western 1982).

Negotiations took place between Group Ranch representatives, the county council and the central government and an agreement was reached in 1977, when the Maasai agreed to vacate the park. The plan had only limited success for a short period of time as the water system was not properly operated, and the grazing compensation fee stopped being paid in 1981, while income from tourists was limited to small amounts from the sale of firewood, and from campsite fees (Lindsay 1987). The government had broken its promises, resulting in a loss of trust by the Maasai. The plan appears to have failed due to lack of a clear definition of responsibility and commitment to see it through.

*Source: Barrow, Kangwana et al. 1995*

Partly as a result of the development plan for Amboseli, as well as other early developments in community conservation (Western and Thresher 1973; Western 1982; Berger 1988 and 1993), a new policy was developed which emphasised the principle of wildlife *"paying its way"* outside parks and called for direct negotiations between the Ministry of Tourism and Wildlife and landowners (Western and Wright 1994). This new policy, Sessional Paper No. 3 (Republic of Kenya 1975), provided policy guidance for the new Wildlife Conservation and Management Department (WCMD) which was created in 1976 by the merger of the two wildlife authorities - the Game Department and National Parks.

Unfortunately the 1975 policy statement was not articulated in the 1977 *Wildlife Act* (Republic of Kenya 1976). However, NGOs implementing community conservation projects in the 1970s used this policy as a guiding principle (Barrow, Kangwana et al. 1995). During the early 1980s, as in the 1970s, there was little institutional commitment for community conservation within the government conservation authority (Barrow, Kangwana et al. 1995). While there were several individuals within WCMD who supported community conservation, and became involved with the early community work in Amboseli, the Wildlife Extension Project, and later on with AWF's Tsavo Community Conservation Project (see below), this did not have a significant influence on WCMD practice and policy at the time (Berger 1977, 1988, 1993; AWF 1990; Barrow, Kangwana et al. 1995).

A bill was tabled and passed in 1989 to amend the *1977 Wildlife Conservation and Management Act* to establish the Kenya Wildlife Service (Republic of Kenya 1989), the legal successor to the Wildlife Conservation and Management Department (WCMD). The functions of KWS relating to community conservation included providing wildlife conservation education and extension services to create public awareness and support for wildlife policies; sustaining wildlife to meet conservation and management goals; providing advice to the government, local authorities and landowners on the best methods of wildlife conservation and management; and rendering services to the farming and ranching communities in Kenya, necessary for the protection of agriculture and animal husbandry against destruction by wildlife (Republic of Kenya 1989). These changes came at a time when tourism was Kenya's main foreign exchange earner, and towards the end of a period of extensive loss of wildlife, particularly through poaching.

The next influences came from the experiences of the Wildlife Extension Project (WEP) and AWF's Tsavo Community Conservation Project (TCCP). The TCCP, which was funded by USAID, helped establish an extension programme to encourage local communities to participate in conservation; identify environmental needs and problems perceived by communities living adjacent to wildlife areas and seek methods to help people solve these problems; help local communities become aware of direct benefits from wildlife so that conservation is seen to be worthwhile; and promote sustainable development through activities which involve local people (AWF 1990, 1994b).

TCCP worked directly with WCMD staff in the Tsavo area, and with the approval and support of WCMD headquarters. The project showed that community conservation could achieve positive results, but that such gains are fragile, and can be affected by external factors such as climate, politics and changing land use (Box 2.2). This emphasised some of the complexities of community conservation and demonstrated the need for long term commitment and investment (Barrow, Kangwana et al. 1995). Without clear and agreed rights and responsibilities, the sustainability of such efforts is questionable. Adequate policy support is needed to allow for a long term focus, and more formal contractual arrangements between parties.

***Box 2.2: Livestock Incursion into Tsavo West National Park***

Resolving the problem of livestock incursions into Tsavo West National Park illustrates the difficulties of developing community conservation practice and policy. The project addressed the problem of illegal grazing of livestock in the park by Maasai pastoralists from Kuku and Rombo Group Ranches through an extensive process of dialogue and consultation. Portions of the high potential dry season reserve lands were leased to outsiders for cultivation. The Maasai accommodated this loss of grazing by moving their cattle into the national park to graze. This resulted in serious over-grazing within the park and competition for available grazing between wildlife and livestock and consequently in environmental degradation and loss of habitat.

Between 1990 and 1992 there was dialogue between project staff, KWS and communities in the Group Ranches, with over 700 meetings with livestock owners; 200 meetings with men and women who herded livestock in the park; 105 meetings with local chiefs, their assistants and councillors; and 18 meetings with senior district level officials (Barrow, Bergin et al. 1995). This process was used to establish a 5 km wide buffer zone along a 60km edge of the park which would be used for dry season grazing only.

Creating functional wildlife committees in the group ranches to enforce and patrol the buffer zone was also difficult. Meetings to create these committees were held between 1991 and 1993; 45 meetings with Group Ranch management committees; seven Group Ranch annual general meetings; and 14 meetings with the newly formed wildlife committees. The creation of wildlife committees provided an important mechanism for improving park-people relations, resolving conflict and sharing benefits. This built on the committees proposed in 1980 (Parsunkul 1980).

The importance of partnership and dialogue in reaching the buffer zone agreement with the Maasai cannot be underestimated. However this agreement was rescinded during the 1991 drought, on the understanding that the Group Ranches would move their livestock out of the park as soon as rains started. With the re-introduction of livestock in the park, the use of the buffer zone as a dry season grazing area for livestock, which had been agreed to earlier, was violated.

*Source: Barrow, Bergin et al. 1995b*

The Tsavo Community Conservation Project exposed USAID to the rationale for community conservation and the need for it to be institutionalised within the wildlife authority. Thus USAID began to work with KWS to establish and develop the Community Wildlife Programme in 1990 (Barrow, Kangwana et al. 1995).

This was also influential on the development of the Kenya Wildlife Service Policy Framework and Development Programme for 1991 to 1996 which provided for the first time (in Annex 6) a comprehensive and detailed analysis for community conservation and wildlife management outside parks and reserves (KWS 1990b). The Annex 6 report provided the framework for the formulation of the Community Wildlife Service (CWS) and the implementation of its Community Wildlife Programme (CWP). Strategies to achieve KWS's community conservation objectives included enabling local people to benefit from wildlife; minimising conflicts between conservation and legitimate human settlement; educating people about Kenya's wildlife; promoting better land use; and increasing co-operation with other sectors.

The Conservation of Biodiverse Resource Areas (COBRA) project began in 1992 to promote socio-economic development through conservation and sustainable management of Kenya's natural resources, and increase the socio-economic benefits from conservation and sustainable management of wildlife and natural resources to communities living adjacent to Kenya's parks and reserves as well as other areas of conservation value (COBRA Contract Team 1994). The COBRA Project was designed to test certain approaches to community conservation, initially in the focal areas of Tsavo and Amboseli, Laikipia, the Coast, and Samburu, and to build the institutional capacity within KWS to deal with Kenya's varied historical, ethnic and ecological contexts (COBRA Contract Team 1994).

Thus a number of factors coalesced to provide community conservation with a more definitive footing in Kenya, including:

- the formulation of KWS as a parastatal (Republic of Kenya 1989)
- lessons learnt from TCCP (1988-94) and the integration of its activities into KWS (AWF 1994b)
- strong institutional support provided by the KWS policy and implementation framework, and the developing CWS (KWS 1990b)
- TCCP staff working with COBRA, strengthening an institutional partnership between KWS/CWS and AWF as part of the COBRA project (African Wildlife Foundation 1994a; COBRA Contract Team 1994)
- cumulative lessons from WEP and other initiatives prior to that (Berger 1993; Western and Wright 1994); and
- community conservation approaches and lessons from other countries, for example Tanzania, and Zimbabwe (Bergin and Dembe 1995; Murphree 1995; Bergin 1996; Barrow 1997; Murombedzi 1997, 1998).

***Forests***

Kenyan forestry policy has evolved from the earliest history of the country when communities were totally dependent on the forest for food, clothing and shelter. The protection of sacred forests such as the Kayas in the coastal region and many other ceremonial patches of forests all over the country goes back to 'time immemorial', long before colonisation and other outside influences (WWF 1997).

Today the management of forest resources in Kenya is governed by the national forest policy implemented mainly by the Forest Department. The Forest Department was created in 1902, but the origins of a formally declared forest policy can be traced to the Sixth Commonwealth Forestry Conference in Ottawa in 1952, which recommended that each country should formulate and implement a forest policy. Kenya followed the recommendations, and the resulting policy was published as White Paper No. 1 of 1957. It was restated after independence, with a few modifications, in Sessional Paper No. 1 of 1968 (Government of Kenya 1968). This policy emphasised catchment protection and timber production, with strong government control.

Significant changes have taken place since then. Population has grown, agriculture expanded and the demand for wood products has increased. These have put pressure on the forest resources and many have been lost. The policy of 1968 assumed that government would gain control of all nationally important forests and therefore emphasised gazetted forests, with inadequate provisions for other forest areas. Many of these forests that were not gazetted have been cleared in the last 25 years (IUCN 1996). To respond to these changes new strategies have to be adopted. There has been the recognition that forestry can no longer be left entirely to the Forest Department, and that other partners must participate in their development, including agriculture, environment, wildlife, water and energy. As a result a new policy was drafted in 1994. Some of the additional policy objectives are to:

- Increase forest and tree cover of the country in order to ensure an increasing supply of forest products and services for meeting the basic needs of present and future generations and for enhancing the role of forestry in socio-economic development.

- Conserve the remaining natural habitats and the wildlife therein, rehabilitate them and conserve their biodiversity.
- Support the government policy of alleviating poverty and promoting rural development, by income based on forest and tree resources, providing employment, and promoting equity and participation by local communities.

Unlike the wildlife policy, the forestry policy does not articulate the extent of community participation. It states that it will enhance social and farm forestry. It also includes diversification of farming systems by tree planting to ensure improved water catchment management, higher land productivity and increased rural incomes, and to reduce pressure on indigenous forests. The policy states that the Department will concentrate on policy matters such as regulation and monitoring, while the management of the forest estate both for production and conservation will increasingly be entrusted to private and public enterprises, tree farmers and communities.

The legislation concerning forests and trees, though fairly comprehensive, is spread over a number of acts and policies, which are administered without coordination by a wide range of public bodies ( Government of Kenya 1994). This leads to confusion and potential misunderstanding and conflict in the policies. Current forestry related policies include the National Energy, Economic Management for Renewed Growth, Sessional Paper No.1 of 1986 (Republic of Kenya 1986), the Environment, National Livestock Development, Kenya Wildlife Service and the Fisheries policies. Each of these policies is concerned with various aspects of forestry and tree management, for example production of fuelwood, conservation, agroforestry, and plantations. There are potential conflicts over management, eg. of forest reserves which are also national parks. To harmonise management and reduce potential conflicts Joint Memoranda of Understanding between the relevant agencies are being used (see Section 5.3 and Box 5.16).

***Fisheries***

The Fisheries Department is in charge of fisheries resources country-wide. The objective of this policy is to maximise production and utilisation of the fishery on a sustainable basis. The fisheries industry affects forestry because large quantities of fuelwood are needed for smoking fish. The *Fisheries Act* contains two provisions that are relevant to forestry; it regulates trout-fishing in forests and protects fish breeding areas. The latter provision is important for mangrove ecosystems. The role of the Fisheries Department has, more recently, had to relate to conservation, for example the gazetting of marine parks on Kenya's coast, the Lake Naivasha (a RAMSAR site) fishery, and that of Lake Victoria. KWS and the Fisheries Department have entered into an MOU to facilitate the conservation of these important fish resources, yet ensure that they contribute to rural livelihoods.

### *2.1.2 Uganda: Legislation and early community conservation experiences*

Most of Uganda's protected areas were established during colonial times. They were identified without regard to contemporary understanding of biodiversity conservation, focusing on the conservation of 'big game', water catchment functions, and the control of commercially valuable timber resources. Despite the extent of the protected area system, it is not sufficiently representative of Uganda's biodiversity. Several vegetation types and some rare species are not well represented and, in some cases not included at all. Considerable analysis and

modification will be required before Uganda's protected area system can meet the needs of conservation, production, and economic and social development.

***Wildlife***

The first comprehensive legislation for wildlife was the 1899 Game Regulations No 20 which established the first game reserves and specified licensing procedures for hunting. These included a 'native's licence' authorising the indigenous population to hunt (Kamugisha 1993). Between 1890 and the 1950s a series of legal Ordinances was published. Though they continued to emphasise the protection and hunting of large mammals, they became more specific and detailed in their separation of conservation of wildlife and local people. In 1952, the National Parks Ordinance No. 2 was enacted. This provided for *"the establishment of National Parks for the purpose of preserving wild animal life, wild vegetation and providing for other matters incidental thereto"* (Kamugisha 1993a). In 1959, residence in game reserves was specifically prohibited, though the rights of prior residents in game reserves were recognised. This allowed human populations to grow within game reserves, as the legislation was unclear about the rights of residents. Legislation also provided for the establishment of 'local game committees' which were to advise the governor or minister on game conservation and hunting (Kamugisha 1993a). This allowed local leaders to become directly involved in the management of wildlife and protected areas. For example, in Ankole District, from as early as the 1960s when formal conservation areas where first gazetted, local community members were formally involved in management through the creation of Ankole Honorary Wardens, and the establishment of the Ankole Game Committee (Doornbos 1978). National parks contributed a portion of their earnings to district authorities, and culling exercises in Queen Elizabeth and Murchison Falls National Parks were carried out in such a way that meat was marketed locally. Education programmes were also an important part of protected area management, and the two national parks formed in the 1950s were equipped with residential education centres.

Despite these iniatives, the separation of conservation and human use was as marked in Uganda as elsewhere and the American model of 'fortress conservation' was implemented wherever the opportunity presented itself. The clearing of human settlements from areas threatened by sleeping sickness (carried by tsetse flies and therefore common in wildlife areas) presented an opportunity to create protected areas; the creation of Queen Elizabeth National Park in 1952 is a good example of this (Box 6.1), although despite the threat of sleeping sickness, and against the orders of the colonial government, many people returned to the area to continue fishing on Lakes Edward and George inside the park. To this day, these villages are seen as a management problem for the park (Olivier 1990), and periodic efforts have been made to remove or relocate villages (Infield 1989a). The expulsion of the Ik people from their hunting grounds with the creation of the Kidepo Valley National Park 1962, and the disastrous consequences this had for them, is also well documented (Turnbull 1972).

Most sectors of Uganda's economy suffered during the country's turbulent history of the 1970s to mid 1980s, and institutions responsible for the conservation of Uganda's natural resources did not escape, eg. the problems experienced by the Forest Department (Howard 1991). The decline of conservation and protected area management in this period swept away most conservation programmes. While the years of turmoil caused massive hardship and national regression, the peace created since the late 1980s has allowed for a 'new look' at all policy and legal instruments to ensure they fit Uganda's aspirations of the 1990s and beyond, rather than be tied to dated and outmoded instruments. This has enabled the development of legal

and policy instruments which focuses on Ugandans, decentralisation and empowerment, although the challenge now is to translate this into practice.

Community conservation, as it is recognised in Uganda today, has not been developed in an integrated manner, rather through a combination of park specific activities, supported by donor and NGO funded projects, and the attempts, sometimes ill judged, of the conservation authorities to respond to political pressure to meet legitimate needs of rural communities.

Many donor funded projects tended to take the integrity of protected areas as their starting point, often focusing on the rehabilitation of infrastructure, training of staff and provision of equipment. This led to a strong emphasis on traditional protected area management strategies, and in particular on law enforcement. The strong verbal support of the current government for the integrity of protected areas resulted in support by donors for eviction of 'illegal' residents from some protected areas and the development of plans to relocate others. This approach was seen as necessary to counteract the messages sent to communities during the years of corruption and civil strife, which enabled both use of resources and settlement to go on almost unchecked.

However, the reality of the increasing pressures on protected areas from local communities, and the apparent impossibility of fending them off using traditional law enforcement practices, were recognised. Furthermore, the government's support for both human rights and the decentralisation of power to the grass roots, weakened the ability of protected area managers to ignore the demands of local communities. The internal situation was therefore ripe for the acceptance and development of community conservation. Concepts being developed and implemented elsewhere were adopted by some of the more forward thinking Wardens who initiated contacts between communities and conservation authorities. Donor funded projects reduced their emphasis on support to park infrastructure and began providing technical and financial support for community approaches to conservation, though retaining their focus on protected areas.

Strong pressure from donors and international NGOs has been an important factor in the development of community conservation. These agencies and projects have brought about change, including support for resource access, development of community institutions, training of staff in community conservation skills, and community development activities around the national parks. Donor pressure was placed on Uganda National Parks to develop and implement policies that would entrench a community conservation approach within the institution. The first of these initiatives was a precondition on funding for Uganda National Parks put forward by USAID that all parks should be required to have a Park Management Committee comprising park management, local authorities and representatives of local communities (Ogwang and DeGeorge 1992). UNP established Park Management Advisory Committees in response to these demands. These committees were to meet on a regular basis and provide a means of communication between the park management, local authorities, and the local community.

Of greater significance was the funding support provided by the European Union to facilitate the merger of Uganda National Parks and the Game Department into the Uganda Wildlife Authority (UWA). Previously the UNP was responsible for managing the national parks, while the Game Department had responsibility for game reserves, controlled hunting areas and animal sanctuaries, and for wildlife existing in areas without formal protection.

The UWA was set up through the Uganda Wildlife Statute (Government of Uganda 1996b). While the previous acts were highly centralised and based on paramilitary policing of wildlife resources, the new UWA statute and policy is significantly different in emphasis and tone, including:

- the obligation of UWA to involve local communities and to ensure that conservation contributes towards rural economies
- the obligation to consult through public meetings on the development of management plans for protected areas
- the obligation for UWA to share 20% of its entry fees with local government for the development of communities living around the protected areas.This clause was inserted into the statute by parliament itself during the debating of the bill. Though the wisdom of including a fixed percentage in the legislation may be debated, its inclusion underlines the strong populist emphasis of the policy and legislation.
- the granting of use rights to community groups and individuals to make use of wildlife on their land.

The combination of the use rights clauses and the new category of Community Management Areas creates the potential for a wildlife industry in Uganda based on both consumptive and non-consumptive uses of wildlife. Though the development of regulations and institutions to permit the development of such activities is required, including the repeal of the hunting ban, the intention of the legislation is clear; to engage the people of Uganda in the conservation and management of wildlife, and to alter the role of government from that of a policeman to a regulator and facilitator.

However, the legislation does not go as far as many would have wished. Strong emphasis remains on punitive policing. Wildlife remains the property of the state, held in trust for the people of Uganda, although the inclusion of the principle of use rights is significant, as earlier legislation made legal access to wildlife resources by the majority of Ugandan people almost impossible.

Furthermore, the highly progressive nature of the policy and legislation is not necessarily a reflection of the thinking of UWA itself, at either senior or junior levels; or of government, and progress towards implementation is slow. Traditional views of park management and law enforcement continue to dominate protected area management, and poor relations with local communities persist. The respective expenditure on law enforcement compared to community programs, and the respective staffing levels indicate this. Out of a total of 1,113 staff, only 46 (4%) are specified as community conservation staff, compared to 765 (69%) who are indicated as security staff or undesignated junior staff (Uganda National Parks Restructuring Committee 1997).

***Forests***

Formal initiatives to manage Uganda's forests started in the 1900s with the development and enforcement of the 1900 Forest Protection Regulations. Policy development was not achieved until 30 years later, when it emphasised the link between forests and *"climatic or other indirect grounds"* and *"the best financial returns on the capital invested"* (1929 Forest Department Policy Statement quoted in Kamugisha, 1993a). The 1938 policy revision re-emphasised the role that forests played in the environment, both directly in relation to climate, and

economically. By the 1940s a programme of gazettment had created the forest estate largely as it remains today. The *Forest Act of 1964* specifies three categories of gazetted forests: central forest reserves which are managed by the Forest Department, local forest reserves which are managed by local government with advice from the Forest Department, and village forests which are managed by local authorities for the benefit of local communities.

In 1970 a new policy statement emphasised the economic aspects of timber production while introducing the idea of *"protecting wildlife and creating amenity forests"* (Kamugisha 1993a). Thus, economic and development issues have dominated forest policy, though the link with local needs was not stressed. Under the Forest Policy of 1988, 50% of Central Forest Reserves are zoned for production, 30% for mixed use and 20% as strict nature reserves. A provision for the establishment of forest parks was also included.

### *2.1.3 Tanzania: Legislation and early community conservation experiences*

Historically, as in many countries, conservation played a vital role in people's livelihoods in Tanzania, though this varied with land use and custom, and was managed through a range of customary rules and regulations. With its diversity of peoples and land uses, Tanzania displays an equally wide range of traditional conservation practices. Some communities were noted hunters, others had taboos against eating hunted meat (Wildlife Sector Review Task Force 1995). Tanzania was particularly affected by the slave trade, more so than either Kenya or Uganda, and this affected the wildlife as well.

#### *Wildlife*

The early German authorities formulated laws to protect wildlife as early as 1910 around Kilimanjaro and the Selous, as well as Ruaha (Wildlife Sector Review Task Force 1995). They also began reserving certain forest areas for water catchment as early as the 1890s.

Under the British Territory the Game Department was created in 1921 to protect people and crops from marauding game animals, enforce hunting regulations, and preserve wildlife values. The department divided Tanzania's wildlife estate into national parks where no hunting or settlement was allowed, and game reserves where hunting was allowed at the discretion of the governor. Though little acknowledgement or recognition of their rights and roles was afforded to local people, this process did lay the foundations for the extent and quality of Tanzania's conservation estate today.

Tanzania can be distinguished from Kenya and Uganda by a broader range of categories of protected estate with different management emphases (Table 2.3) ranging from those with the highest protection (TANAPA National Parks) to game controlled areas and, more recently, wildlife management areas (discussed below), which are community managed systems where wildlife can play an important role in rural livelihoods. The Serengeti (including Ngorongoro) was gazetted as Tanzania's first national park in 1951 and Tanzania's wildlife estate now covers up to 25% of the country's surface and comprises 12 national parks, one conservation area (Ngorongoro), 18 game reserves and a number of forest reserves. Not included in the 25% are 41 game controlled areas, one marine park, and seven marine reserves. A network of forest reserves provides for similar management objectives with an emphasis on forest products and water catchment.

***Table 2.3: Tanzanian Categories of Protected Area Devoted to Wildlife***

| Protected Area | No. | Area Sq. Km. | % Land Area | Human Settlement | Administrative Authority | Legal Uses of Wildlife |
|---|---|---|---|---|---|---|
| National Parks | 12 | 38,428 | 4% | No | TANAPA | Game viewing |
| Game Reserves | 23 | 104,013 | 11% | No | WD, Regions | Game viewing, traditional hunting and resource use |
| Game Controlled Areas | 45 | 96,865 | 10% | Yes | Regions | Traditional hunting and resource use, game viewing, resident hunting, cropping, problem animal control, live capture |
| Ngorongoro Conservation Area | 1 | 8,300 | 0.5% | Yes | NCAA | Game viewing, livestock |
| Forest Reserves | 570 | 136,653 | 15% | No | Forestry Div. | Forest produce |
| Total | 652 | 384,259 | 40.5% | | | |

Source: adapted from Wildlife Sector Review Task Force 1995

In 1961, the Ngorongoro Conservation Area was excised from the Serengeti National Park to become an early experiment in multiple land use combining wildlife conservation and pastoralism, arguably the earliest community conservation activity in Tanzania. Far ahead of similar efforts, the NCA was created in order to promote and balance both conservation and the needs of the Maasai pastoral community living in Ngorongoro (Thompson 1997a; Box 6.3).

In the late 1980s the Wildlife Division, with assistance from GTZ, initiated the Selous Conservation Programme (Baldus 1991; Krishke, Lyamuya et al. 1995). This project combined assistance for the management of the core area of the Selous Game Reserve with support for community-based conservation in villages around the reserve following a model similar to what was happening in Zimbabwe and Zambia (Mwenya 1990; Murphree 1995).

***Institutional set-up***

Unlike Kenya and Uganda, Tanzania has a range of institutions responsible for wildlife conservation. The Wildlife Division of the Ministry of Natural Resources and Tourism is the central body responsible for the country's overall wildlife policy (Boshe 1996), and is directly responsible for the Tanzania Wildlife Clubs, Wildlife Protection Fund and Pasiansi Wildlife Training College, as well as having direct management responsibilities for the country's 18 game reserves, the wildlife found in the 41 game controlled areas, and wildlife found on other open lands (Boshe 1996). Tanzania National Parks (TANAPA) has responsibility for the country's 12 national parks which confer the highest protection, while the Ngorongoro Conservation Area Authority is responsible for the management of the Ngorongoro Crater and its surrounds (Box 6.3).

Wildlife management is at three levels. Certain aspects are centrally managed and executed by the Wildlife Division of the Ministry of Natural Resources and Tourism. This includes

planning, policy and legislation formulation, training, licensing, law enforcement and coordination with other authorities responsible for wildlife management. In addition the Division also manages a number of game reserves as 'National Projects' and these include Selous, Rungwa, Moyowosi, Kizigo, Burigi, Maswa, Mkomazi and Ibanda Game Reserves. At the regional level other game reserves and all game controlled areas are managed by the local government authorities, but are responsible to the parent ministry through the Wildlife Division.

More recent community conservation activities in Tanzania reflect the institutional diversity of the country's wildlife sector. For example, the Serengeti Regional Conservation Strategy (SRCS) was initiated to promote a coordinated approach to conservation management and development between the Serengeti NP, Ngorongoro and the game reserves and districts which surround them. The design for the SRCS suggested that it would not create a new institution or duplicate the roles of the existing institutions, but rather coordinate and support those institutions so as to achieve an effect on the entire region.

TANAPA has evolved the strongest community conservation capacity which is now well institutionalised both at headquarter and park levels (TANAPA 1994; Bergin 1995; Bergin and Dembe 1995). In 1988, AWF began working with TANAPA on a pilot programme for park outreach around Serengeti, Tarangire and Arusha National Parks. Lessons from this park-based experience resulted in TANAPA constituting the Community Conservation Service to become an integrated part of park management and to operate within the context of TANAPA's mandate. Unlike many pilot community conservation programmes which have stayed 'pilot', the CCS has grown into a national programme operating in all 12 of Tanzania's parks. Community Conservation Wardens (CCWs) operate in all 12 parks, implementing extension and benefit sharing activities based on national and park strategic plans. The programme is supported by national TANAPA policy and budgetary mechanisms (Bergin 1996; Bergin 1998).

Although Tanzania's wildlife policy and legislation have not been formally amended since 1974, a number of planned amendments are already being implemented on a pilot basis.

***Forests***

Tanzania has approved a new forestry policy (United Republic of Tanzania 1997), and is in the process of codifying this in a revised statute. The changes recommended in this policy are in the context of the changing focus from one of more centralised government management and control to a more integrated approach which recognises the rights and responsibilities of communities and rural people. Perhaps more than either Kenya or Uganda, Tanzania has, in the context of policy, gone furthest with respect to collaborative and joint management of forests. *"To enable participation of all stakeholders in forest management and conservation, joint management agreements, with appropriate use rights and benefits will be established. These agreements will be between relevant government authorities, at local or national levels, and organised local communities or other organisations of people living adjacent to the forest. Local communities will be encouraged to participate in forestry activities. Clearly defined forest land and tree tenure rights will be instituted for local communities, including both men and women"* (United Republic of Tanzania 1997). This unequivocal support for community forestry conservation is already starting to show benefits (see Wily 1995 and 1997b; Wily and Haule 1995; Nurse and Kabamba 1998).

***Fisheries***

The fisheries division, working with WWF, has established Tanzania's first marine park at Mafia Island, under the new *Marine Parks Act*, which has a strong community focus (United Republic of Tanzania 1994a). Attempts are being made to include community members in the planning and management of the park and to protect the livelihood of fishermen in the area.

### *2.1.4 Comment*

The links between flexibility in policy, legislation and practice are difficult to analyse. Change in practice often relates to the willingness and motivation of individuals to innovate. Uganda's flexible legislation has enabled the development of a diverse set of approaches. Consumptive use in protected areas is allowed, but not required. Local solutions to local problems can be developed. Tanzania's rather rigid law allows certain options but constrains others, and narrows thinking. Kenya's 1989 Wildlife Statute revision has a strong community conservation focus, and community conservation provisions of the 1975 Sessional paper were finally reflected in the KWS Policy Framework and Development Programme 1991-1996. The region is now poised for progress. A number of significant policies have either been revised or are in the process of revision (see Table 2.4).

***Table 2.4: Status of Revision of Conservation Related Policies in East Africa***

| Policy/Act | Revised | Under Revision | Comment |
|---|---|---|---|
| Uganda Wildlife Statute | 1996 | | Supportive of community conservation |
| Uganda Environmental Statute | 1996 | | Supportive of community conservation of natural resources |
| Uganda Wildlife Policy | 1995 | | |
| Uganda Forest Policy | | Yes | Supportive of collaborative forest management |
| Uganda Land Bill | 1998 | | Much debate; some parts contentious |
| Uganda Local Government Act | 1998 | | Supportive of collaborative management of natural resources |
| Kenya Wildlife Statute | | Yes | Draft made in 1996, not yet approved |
| Kenya Forestry Policy | | Yes | Draft made in 1994 not yet approved |
| Kenya Land Bill | | Yes | As part of Constitutional reform |
| Tanzania Forestry Policy | 1998 | | Very supportive of collaborative management |
| Tanzania Wildlife Policy | 1998 | | Supportive of Wildlife Management Areas |
| Tanzania Land Bill | | Yes | Characterised by extensive public consultation |

Early efforts in the implementation of community conservation programmes were characterised by:

- Varying degrees of trial and error
- Important roles for NGOs in the process
- Recognition by protected area authorities of the need for responsible community involvement
- Wide range of lessons from evolving practice.

Through the various initiatives, sharing of regional experience took place. This early experience set the scene for community conservation to be institutionalised and adapted for wider implementation both in scale and scope in Kenya, Tanzania and Uganda.

## 2.2 External Support

Much of the early community conservation work described above was instigated and implemented by NGOs, both local and international. Some of these worked on their own, others worked in partnership with a conservation authority, but they often had a role to play in bringing about change in attitudes towards more participatory approaches.

For example, the New York Zoological Society worked extensively in Amboseli in the 1970s (Western 1982). These efforts were based on the premise that people were an integral part of the ecology of Amboseli and therefore their participation, and being able to benefit from wildlife, were keys to its long term survival. This recognised that law enforcement alone was not enough to solve conservation problems. The African Wildlife Foundation built on this early work and has implemented community conservation programmes with TANAPA, KWS and the Uganda Wildlife Authority (AWF 1990a and b, 1994b and 1995a and b; Bergin 1996; Namara and Infield 1998).

This re-orientation took place in a climate of decentralisation and community enablement in rural and agricultural development, health and education. Pressures were put on conservation authorities to embrace this more enabling approach.

Partnerships between conservation authorities and NGOs seemed to provide the right mix of conservation, flexibility and community experience. As community conservation started to achieve some success, bilateral and multilateral donors, particularly USAID, started to fund activities and the larger bilateral and multilateral donors are providing increasing support as community conservation is seen as one of the main hopes for the better integration of conservation with rural livelihood objectives.

### *2.2.1 NGOs and CBOs*

A wide range of local and international non-governmental organisations (NGOs) and community-based organisations (CBOs) exist in East Africa. A growing number of them focus on natural resource issues (Table 2.5, 2.6). For example in Uganda there is a range of grassroots, national and international NGOs, and the number is increasing. The initial focus was on social and economic rehabilitation, in line with the government's National Rehabilitation and Development Plan. Since then the emphasis has shifted to longer term development focusing on rural livelihoods. It is in this context that many NGOs have become involved with conservation activities. Much of the focus of these activities has been on community conservation as a mechanism for enhancing the rehabilitation programme, and for improving the integrity of the conservation estate

***Table 2.5: Examples of Community Institutions Participating in Natural Resource Management***

| Institution | Location | Origins |
|---|---|---|
| Stretcher Group | Bwindi, Uganda | Traditional |
| Forest Society | Bwindi, Uganda | Formed by project |

| | | |
|---|---|---|
| Ridge Group | Rwenzori, Uganda | Traditional |
| Parish Resource Management Committee | Lake Mburo, Uganda | Formed by park |
| Park Management Advisory Committee | National in Uganda | Formed by UNP |
| Illngwesi Bandas | Lewa Conservancy, Kenya | KWS, Lewa Downs Ranch |
| Mombassa Boat Owners Association | North Mombasa Coast, Kenya | KWS |
| Kimana Sanctuary | Kajiado District, Kenya | KWS, community |
| Mt. Kenya Porters and Guides Association | Mt. Kenya, Kenya | KWS |
| Rwenzori Mountaineering Service | Uganda | Local NGO, business |
| Wildlife Club of Katerere | Uganda | National NGO |
| Bukanga and Isingiro Environment Protection Organisation | Uganda | Local NGO |

***Table 2.6: Local Institutional Types, Roles and Examples***

| Type of group | Main purpose | Examples |
|---|---|---|
| Dance societies | Entertainment, mutual work, medicine collection and use | Bagiba and Bagalu in Sukumaland, Tanzania |
| Voluntary associations | Voluntary work, organised Activities | Many societies, often organised on an 'as the need arises' basis |
| Mutual aid and work groups | Cultivation among a group of neighbours | Mwethya groups among the Kamba of Kenya. Similar groups in Sukumaland |
| Protection and security groups | Against cattle rustling | Sungusungu (or Wasalama) in Sukuma-land, Tanzania. Warrior age set in many pastoral societies |
| Elders | Livestock and range management organisation, natural resource management. Traditional authority and legal base | Most pastoral societies; Dagashida of Sukumaland |
| Women's groups | Collection of water, house building | Most pastoral societies where women will help one another or carry out work together |
| Savings Groups | Accumulation of capital lump sums for investment | Numerous throughout the region |
| Age-set groups | Different for different groups according to age | Pastoralist warrior groups for livestock herding, for example, Maasai, Turkana |

Source: Barrow 1996c; Metcalfe 1996; Jones 1997; Barrow, Gichohi et al. 1998

Uganda has also been characterised by a wide range of international NGOs involved in community conservation. They have tended to take an area or park-specific approach, and evolve practices which are specific to an area or project theme. This is gradually changing as UWA takes a more programmatic and directional role with community conservation by establishing a headquarters capacity for community conservation.

The situation in both Kenya and Tanzania has been somewhat different, due to their longer term stability. Over the past 10 years NGOs have tried to work within a conservation area institutional context. The Wildlife Clubs of Kenya, Uganda and Tanzania are important national NGOs, and are usually closely associated with government conservation authorities. Their main area of responsibility is environmental education in primary and secondary schools, and the establishment of wildlife clubs. As the main focus of the wildlife clubs is on conservation

education, they are an important target group for awareness raising of community conservation. Regionally the East African Wildlife Society is important with a number of field projects, particularly in Kenya, some of which are directly related to community conservation.

### *2.2.2 Multilateral and Bilateral Donors*

USAID is one of the main supporters of community conservation projects in the region, and indeed the continent (USAID 1996; USAID 1997). USAID funded the Tsavo Community Conservation Project (see Section 2.1.1), as well as the Conservation of Biodiverse Resource Areas Project (COBRA) in Kenya from 1992 to 1998 (AWF 1990a and b, and 1994a; COBRA Contract Team 1994).

A similar programme of support exists in Uganda through the Action Plan for the Environment (APE) Programme (1994-1998), which has provided approximately $40 million over five years towards the strengthening of Uganda's environmental and conservation institutions and to support directly conservation initiatives being carried out in the field. This support is continuing with a further five-year, $40 million programme. APE is providing financial and technical support to the National Environment Action Plan (NEAP) process, and assisted the Government of Uganda in the development of the Environment Statute. Under the same component, support was provided for the development of policies and programmes for the decentralised control of natural resource management by local authorities. The programme has provided technical and financial support to Uganda National Parks and now UWA, comprising significant financial support for the purchase of equipment and the rehabilitation or construction of infrastructure, and support to local and international NGOs for the implementation of natural resource management and conservation projects. The second phase targets support for biodiversity conservation outside of protected areas, as well as activities to strengthen local government capacity to manage natural resources.

The European Union (EU) began providing financial and technical assistance to the conservation sector in 1983 in Uganda, and has focused on Uganda National Parks, concentrating on the rehabilitation and construction of infrastructure, development of capacity within the Uganda Institute of Ecology, and the purchase of equipment, funding of research, and, with the support of technical assistance, the production of three park management plans. Currently, under the Support to Wildlife Project, the EU is funding a Technical Advisor to the Ministry of Tourism, Wildlife and Antiquities who has been a central player in the process of institutional development of the Uganda Wildlife Authority and the development of new policies and legislation. Under the same project, UWA's Monitoring Unit is being supported to provide UWA with the capacity to review protected areas, and follows on from its support to the Ecological Monitoring Unit which carried out preliminary surveys.

More recently the EU has become involved with community conservation projects in the region, funding the Serengeti Tourism, Extension and Education project (IUCN 1986), a Tarangire Conservation Project to research community land use around Tarangire National Park, and the Community Conservation Service Centre (AWF 1997). As part of the Protected Areas Wildlife Services (PAWS) programme with KWS, the EU has funded a fencing programme which has endeavoured to involve communities in the design and maintenance of electric fences around various national parks with a particular focus on elephant control. More recently, through the Forestry Department the EU has funded the COMIFOR project around Mt. Kenya National

Park and Forest Reserve (Emerton 1997).[4] The EU is now starting to fund a number of smaller NGO activities (AWF 1997), for example a community programme through the African Conservation Centre (ACC) in Kenya. This three-year programme will, in its focal areas, strengthen the capacity of local institutions and assist in the process of defining goals and objectives, provide basic training on project administration and management, and help facilitate success in conservation and enterprise development. The programme will also work with communities seeking funding from other donors, and will link ACC's ecology and resource economics work to explore how to integrate these disciplines for effective conservation.

The German development agency, GTZ, is implementing a programme in Murchison Falls National Park in Uganda for the development of infrastructure, with a strong emphasis on road rehabilitation. This project is assisting in the management and development of Murchison Falls National Park, and includes an important community component. GTZ is also implementing and funding the Integrated Pastoral Development Project which is designed to improve the management of rangelands around Lake Mburo National Park and prevent further degradation of the rainy season dispersal area for the park's large mammals. However GTZ is more well known for its long term support to the Selous Game Reserve and the community conservation work around that reserve (Baldus 1991). The Selous conservation programme has supported the establishment of village WMAs which have provided income and meat in a tsetse infested area. However a thesis on the impacts of Selous Conservation Project on reserve adjacent communities raises doubts as to both the efficacy and the extent of community conservation benefits stemming from this project (Gillingham 1998).

The Royal Netherlands Embassy has focused on district based rural development programmes in East Africa. Increasingly conservation activities are being integrated into these programmes where appropriate, eg. in Monduli district in Tanzania. In Uganda the Royal Netherlands Embassy has supported two important projects which involve community conservation - the Kibale-Semuliki Conservation and Development Project (KSCDP since 1988) and the Uganda Wetlands Programme. KSCDP has a sister project in the Mt. Elgon Conservation and Development Project, funded by NORAD, and both have similar objectives of conservation area integrity, and linking conservation benefits directly to rural people, for example through collaborative management arrangements. More recently the Royal Netherlands Embassy has started to fund a similar initiative in Mt. Elgon in Kenya (IUCN, KWS et al. 1997).

The UK Department for International Development (DFID) has supported a range of activities in the region relating to community conservation, and has also supported the land tenure reform processes in Uganda and Tanzania. Within the forestry sector DFID is best known for its support to the Kenya Indigenous Forestry Conservation Project (KIFCON, Wass 1995), though this project stopped in 1994. Currently DFID is supporting institutional strengthening and capacity building activities with the Forest Department of Uganda where collaborative management is an important future component. Within the wildlife sector DFID was part of the KWS PAWS programme of support. However little of this work focused on community conservation, though some activities have been sponsored through NGOs in Kenya, for instance the African Conservation Centre. In Tanzania DFID supported the Ruaha Ecosystem Wildlife Management Project which had a strong and focused community conservation programme (Hartley 1995 and 1997). In 1996 DFID's predecessor, the Overseas Development Administration (ODA), sponsored the African Wildlife Policy Consultation which brought

[4] However following an external evaluation the project has now been suspended.

together many wildlife experts from the continent (Overseas Development Administration 1996). In addition DFID has also sponsored research into the realities of conservation with development around Mkomazi.

The World Bank has been the most significant multilateral donor for conservation in East Africa. It helped broker and coordinate the multi-donor Protected Areas Wildlife Services (PAWS) project of KWS from 1991 to the present, and is in the process of establishing a similar programme with UWA through the Protected Area Management Support Unit (PAMSU) project. PAMSU is at the project feasibility phase, and has run into difficulties resulting from the institutional problems of UWA. In both Kenya and Uganda, while the development of KWS's and UWA's institutional and infrastructural capacity are the main objectives, community conservation, while not directly being funded by the World Bank, is seen as an important and integral component of this.

# 3. Community Conservation: A Practical Framework[5]

## 3.1 Introduction

'Community conservation' is a term of questionable definitional rigour or analytic utility. 'Community' is a noun that has consistently defied precise definition, and 'conservation' a word frequently given meaning at odds with the cultural perspectives of the 'communities' that are expected to practise it. In spite of this ambiguity the term has in the last two decades gained a prominent place in the international lexicon of environmental policy and practice, embracing a broad spectrum of approaches and programmes, often with their corresponding acronyms[6]. These various approaches exhibit differences of intent, emphasis and substance, but equally there is a broad focus which places them under the rubric of community conservation. In its most generic and embracing sense the term represents a broad spectrum of new management arrangements and benefit sharing partnerships for the involvement in natural resource management of people who are not agents of the state, but who, by virtue of their collective location and activities, are critically placed to shape the present and future status of these resources, so as to enhance the conservation of natural resources and the well being of local people and communities.[7]

Community conservation as an approach to conservation stems from the recognition that conservation areas and values in many countries will survive only if they address human concerns (Halffter 1981; McNeely 1984; Mishra 1984; Brownrigg 1985; McNeely and Pitt 1985; Mackinnon, Mackinnon et al. 1986; Anderson and Grove 1987; McNeely 1989; Lamprey 1990; Mwenya 1990; Adams and McShane 1992). If they do not have the support of local people, the future of such areas is insecure, for, in the search for means of survival, the temptation to exploit protected resources may be irresistible (Dasmann 1985; Martin 1986). This is related to poverty which is the single most important cause of both food and environmental insecurity in the East African Region (Mwale 1998). Increasing human population and land use pressures in and around many protected areas makes community conservation perhaps the most acceptable means of conserving resources (Snelson 1995a), but is also very complex.

## 3.2 Community Conservation - Developing A Practical Framework

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[5]This section is extracted and summarised from a paper by E. Barrow and M. Murphree, titled *"Community Conservation from Concept to Practice: A Practical Framework"* In Hulme D., Murphree M. (eds), 1999 (in press): *African Wildlife and African Livelihoods, the Promise and Performance of Community Conservation.* James Currey, Oxford. The authors are grateful for permission to be able to use that material here.

[6]For example Integrated Conservation and Development (ICDP), Community-Based Conservation (CBC), Community-based Natural Resource Management (CBNRM), Community Wildlife Management (CWM), Collaborative (or Co-) Management (CM), and Protected Area Outreach

[7] Barrow and Murphree (1998) provide a detailed analysis of the terms 'community' and 'conservation' in the context of community conservation, and take a more actor oriented and functional approach to the topic.

Because of the complex nature of community conservation, for this study and on a wider basis, it is important to create an appropriate, functional framework; one primarily based on ownership, as well as the conceptual and definitional perspectives, in line with current trends of natural resource management.

Many authors have attempted to create a variety of frameworks. A number have placed community conservation as the major component of co-management, with the notion of collaboration being dominant (Fisher 1995; Borrini-Feyerabend 1996; Metcalfe 1996). However, these frameworks do not always include local participation or enablement. They also do not recognise that rights to the resource and/or land should be expressed in some form of collaborative arrangement. In this sense all community conservation can be termed co-management of one form or other.

Metcalfe (1996) bases his co-management continuum on the notion that a number of institutions, be they local, national or international, need to collaborate if co-management is to be successful. The focus of co-management is at the community level where communities are supposed to have primacy with respect to natural resource management, but will often collaborate with others to make that a reality and to accrue optimal benefits from the resource. This is what much good rural development and community conservation is about, bringing together coalitions centred around an issue or a set of resources, but with the focus, in this case, on the communities and resource users. A good example is the Zimbabwe CAMPFIRE programme (Metcalfe 1994).

IUCN (Fisher 1995; Borrini-Feyerabend 1996) has developed the notion a step further; here collaboration between a community and a conservation authority becomes a joint agreement governing resource use of an area, despite the area often being under the jurisdiction of a state authority. This is an approach which has evolved out of joint forest management, particularly in India (Sarkar, Suri et al. 1995; Kothari, Singh et al. 1996 , Kothari et al 1999). Collaborative management has mainly been related to forest resources based on customary access rights which were abrogated when the conservation areas were gazetted. This is evolving and, while access to plant resources may still be dominant, agreements concerning fishing, water, and honey are also becoming important (see for example Van Ingen and Makoloweka 1998).

IIED (1994) addresses community conservation from the perspective of participation, which then forms the basis for analysing community conservation activities. These were summarised into four types of participation for this study: (1) top-down; (2) passive participation; (3) towards active participation; and (4) community-led (IIED 1994). However the levels of participation can vary within and between each of the different frameworks being used. This approach does not adequately explain or put in context resource and land ownership; fundamental to any form of functional community conservation activity. Community conservation cannot be simply analysed in the context of levels of participation. Participation has to be related to resource ownership and access, and is thus a tool and not a panacea, albeit a vital one, for responsible conservation. For example a community may not participate in the management of their own resources despite the fact that they own them, they may simply use the resources as individuals; or there may be quite significant participation in problem and needs identification, and the means to mitigate such problems in protected area outreach where ownership of the resource is firmly with the state.

Murphree (1996) proposes that community-based conservation relates to contributing to rural livelihood and development objectives. Conservation objectives in such areas are of secondary importance. While this is both important, in terms of rural resource economics and livelihoods, and useful, in the context of integrating conservation into rural land use, the analysis is limited by failing to address community conservation by other land owners, especially the state through its conservation estate.

None of these analyses explicitly address ownership issues directly as the basis for community conservation; rather these are implicitly acknowledged. The focus is more on levels of involvement in conservation and of participation. Ultimately land and resource ownership determines use, who benefits, and who has rights and responsibilities for that land and its resources. Basing a framework for community conservation on ownership allows for exploration and analysis of the different types of participation, different forms of resource use and access arrangements, the different forms of benefit flows and the different objectives.

### *3.2.1 Tenure of Land and Resources - The Dominant Variable*

Tenure is a critical factor for conservation, since it determines the linkages between responsibility and authority over land and natural resources, and also determines the incentive structures for sustainable use (Murphree 1996b). It can take a variety of forms ranging from rigid statutory defined individual title, to *de facto* customary rights of access and use, to one where resource users are granted rights of access to, or authority over natural resources owned by another, usually higher body. Ultimately all lands and natural resources belong to the state, and the state through these various instruments have granted a range of tenurial and access rights to land and resources (see Section 9.4 for a more detailed discussion on this important subject).

Frameworks for community conservation will differ depending on the ownership of an important conservation area or resource; the country's policy and legal frameworks and institutions; and the objectives of land users. Use is the real determinant of ownership, at least *de facto*, if not *de jure*. If linked to responsible authority that use may be sustainable, but if the authority is vested in the distant state, and there are no perceived local benefits, then the use may not be sustainable. Distant state ownership is no longer a valid form of local management, and has been shown to be unsuccessful, though the state does have an important role in regulation, arbitration and overall enforcement. However the state needs to retain control of its core conservation and biodiversity estate, as well as ownership of last resort.

Ownership linked to the rights to benefit, and to the notion of sustainable use, recognises that conservation may suffer if not seen as an important economic and/or cultural component of land use. If it is not considered important it will give way to more economically productive forms of land use (Norton-Griffiths 1996, 1997; Emerton 1998c). In other areas conservation may become increasingly significant, as its benefits outweigh other forms of land use. This may depend on a range of issues; subsistence-based (use, meat, fuel, cultural), and increasingly market-based benefits (ecotourism, non and consumptive use, sale of primary and secondary products etc.).

While ownership may change, it represents a given point in time as to who owns the land, and who owns the natural resources. This is a fundamental and important reference point (Table 3.1). Establishing a framework for community conservation based on resource and land ownership allows for:

- Clarity over who owns what land and resources
- Communities and conservation authorities to work towards more secure rights and responsibilities for that land and the natural resources;
- Setting a legal framework for negotiating rights and responsibilities for different interest groups;
- Changes in ownership of land or resources;
- Redressing past inequities, land expropriation etc.;
- Greater participation, collaboration between conservation authorities and local people; and
- A firm *de facto* or *de jure* basis for participation in conservation.

***Table 3.1: Links Between Different Tenurial Arrangements and Potential for Community Conservation***

<table>
<tr><th colspan="2">Tenure: State</th><th>Tenure: de facto people</th><th>Tenure: de jure people</th></tr>
<tr><td colspan="2">National Park, Game Reserve, Forest Reserve</td><td>Customary, trust, mailo (in Uganda)</td><td>Titled group or individual, company, freehold/lease</td></tr>
<tr><td colspan="2">Conservation main objective either national or global, rarely local</td><td colspan="2">Conservation seen as component of rural livelihoods, and rural economics - often negative</td></tr>
<tr><td>Protected Area Outreach</td><td>Collaborative management arrangement</td><td colspan="2">Community-based conservation</td></tr>
<tr><td>Revenue and benefit sharing, conflict resolution, problem animal control</td><td>Agreement on resource use by type, amount, whom and over what time frame; conflict resolution, problem animal management</td><td colspan="2">Conservation as part of land use - may be a major component - and so more likely to be used sustainably; or may be minor, and, unless critical to people, will probably not last. Basis on cultural and economic benefits which accrue</td></tr>
<tr><td colspan="2">Wildlife part of 'controlled', 'pristine' landscapes. Control vested in state</td><td colspan="2">Wildlife as part of 'managed' landscape. If wildlife is not a significant economic component, it will probably tend to disappear, and be substitute by 'more economic forms' of land use. If wildlife is a significant economic component to users, then population pressures, and issues of inclusion and exclusion will be important so that wildlife can continue to be economically important</td></tr>
</table>

### *3.2.2 Community Conservation Arrangements Based on Ownership*

Based on the above discussion, three categories of community conservation can be identified in Africa:

1. **Protected Area Outreach** seeks to enhance the biological integrity of parks by working to educate and benefit local communities and enhance the role of a protected area in local planning. Examples of protected area outreach include the work of Tanzania National Parks (TANAPA), Kenya Wildlife Service (KWS), Uganda Wildlife Authority (UWA), and Kruger National Park in South Africa (Barrow 1996d; Venter and Breen 1996).

2. **Collaborative Management** seeks to create agreements between local communities or groups of resource users, and conservation authorities for negotiated access to natural resources which are usually under some form of statutory authority. Examples of collaborative management include what is starting to happen with the forestry departments in Tanzania and Uganda, in UWA, and in a number of French West African Forestry

Departments (see for example Wily 1995; Wily and Haule 1995; Fotso 1996; Ibo and Leonard 1996).

3. **Community-based Natural Resource Management** schemes seek to promote the sustainable management of natural resources by turning over control or responsible authority for these resources to the community - for example CAMPFIRE, the ADMADE (Administrative Management Design) programme in Zambia, Conservancies, and Integrated Conservation and Development Projects (see for example Metcalfe 1994; Jones 1997; Murombedzi 1997).

Table 3.2 summarises these different types of community conservation in terms of land and resource ownership. This in turn determines the rights and responsibilities which can accrue to the different institutions involved to make such community conservation a success. Resources can refer to an area of land and all the resources therein, eg. community forest, or a national park; or it can refer to a bundle of resources - access to papyrus, fuelwood, water, certain wild animals; or it can relate to one resource, eg. a tree species.

***Table 3.2: Ownership as the Main Determinant of Rights and Responsibilities***

| | **Total state ownership of area or/and resources** | **Collaborative management arrangements** | **Community or land user based ownership** |
|---|---|---|---|
| **Ownership of resource or land (*de jure* or *de facto*)** | State owned land, e.g. national parks, forest and game reserves. | Communities may have specified rights to certain resources (e.g. grazing in game reserves, forest products in forest reserves etc.), though land is state owned. | Private land - individual or group ownership through customary or modern law. State may have some control of last resort, and may have some rights over resources |
| **Some components of management** | State agencies determine type and level of use, by whom and under what circumstances, given through legislation | Agreement between state and user groups or individuals for management of area or/and resource(s) which are state owned | Conservation as part of land use, rural economies |
| **Type of community conservation** | Protected area outreach | Collaborative management | Community–based conservation |

Community conservation initiatives in East Africa appear in a wide variety of forms. In combination these fundamental differences constitute contrasting models of community conservation and it is tempting to analytically leap immediately into categorisations and typologies. This would, however, mask the fact that these differences, although fundamental, usually manifest themselves in community conservation approaches as degrees of emphasis. Analytically these differences are variables, and each is regarded as a spectrum of potential emphases.

The dominant variable for this framework, ownership in its different forms, has been discussed. The other variables are values and goals; policy and devolution; benefits and incentives; institutions and local organisations; and process and implementation. Table 3.3 summarises

some of these values for the three different approaches of community conservation. These have been discussed elsewhere in more detail (see Barrow and Murphree, 1999 and other chapters in that volume).

There can be no one common framework for community conservation, but different arrays of arrangements to suit different tenurial and institutional mechanisms. The three forms of community conservation described above, though based on ownership as the dominant variable, need to be cognisant of, and influenced by, the other variables discussed. These three broad frameworks allude to these variables to different extents, and at different scales of importance. Different objectives influence the tenurial arrangements possible. Different tenure regimes determine the nature, scale of, and scope for community conservation, and the role conservation plays in the landscape, and to land users. Recognising ranges of stakeholders with tenure interests in the land and natural resources, including global interests, can influence the form of conservation management. Community conservation activities will not necessarily address all variables. However, the wide range of examples from practice allows for analysis against this framework and across the variables discussed. This framework:

- Is functional - it is based on land ownership, resource, or resources, or a combination;
- Recognises that the state, through its conservation area system, has rights and obligations to strategically conserve nationally important biodiversity;
- Recognises that the state can and should enter into a range of viable and affordable benefit sharing arrangements through its protected area system;
- Allows for, where policies and mechanisms exist or are being put in place, collaborative management arrangements for the more sustainable and equitable use of resources within conservation areas;
- Assumes that where land is held, either *de jure* or *de facto*, by rural resource users or communities, either individually or communally, that the people have prime rights to, and responsibility for, conservation as part of economic livelihood based land use;
- Allows for flexibility, in that arrangements can change with changes in tenure or resource status, and there can be changes within categories; and
- Allows for a wide range of participatory arrangements from essentially top down mechanisms, for example park authorities allow people to collect thatching grass once a year; to arrangements based on partnership; to ones where rural people are empowered to use their resources as they see fit.

Placing this analysis on a conservation livelihood matrix allows for a comparative analysis of which major conservation or livelihood objectives are being achieved and to what degree. This in part relates to a changing emphasis in conservation from one of 'hands off' to sustainable use. Conservation objectives are still important, but are increasingly embedded in, related and contributing to livelihood objectives. It also relates to government decentralisation and retrenchment, necessitating increased resource user responsibility for, and rights to, the natural resources and management thereof. Murphree (1996) has argued strongly for this shift in objectives. It recognises the continued importance of a nation's conservation estate, though even this is coming into question as Dudley and Stolton question the implications of IUCN's protected area categories for, in particular, forest conservation (Dudley and Stolton 1998).

***Table 3.3: Location of Different Components of Community Conservation***

| Component | Protect Area Outreach | Collaborative Management | Community-based Conservation |
|---|---|---|---|
| Whose agenda? | Protected area management | Protected area and community management | Community |
| Who owns process? | Protected area management | Legally the state, but towards joint management and use | Community |
| Who plans? | Protected area management. For outreach activities many have joint planning | Protected area management and community | Community, often with technical assistance |
| Who controls? | Protected area management | Protected area management as land is state land | Community, may be under some forms of national legislation |
| Ownership of resources/ area | Protected area management | Protected area management | *De facto* community, or individual |
| Dominant objective | Conservation: enhanced integrity of protected area | Enhanced conservation and rural livelihoods through increased access and use of resources | Development: rural livelihoods enhanced and needs met. Conservation values usually incidental |
| Fate of conservation resource | Maintained, as part of state's national conservation heritage | Maintained, as part of state's national conservation heritage; however may reduce conservation values | Maintained: if culturally and economically valuable. Otherwise lost or severely modified or reduced. |
| Role of local rules and regulations for resource management | Low: may be incorporated as part of strategy to build positive community relations | Low to high: depending on how local and government rules of access are integrated Protected area rules and enforcement | High: will govern access and use of resources; generally under some form of state regulation |
| Effect of population pressure | Reduced value of outreach, as benefits shared more thinly. Increased protected area protection | Negotiations over pressure for increased production; some stakeholders may be excluded; joint management may collapse | Benefits value per person may reduce. Some stakeholders may be excluded; switch to more productive land use. |
| Murphree (1996b) analysis | Conservation for or with the people | Conservation with or by the people | Conservation by the people |
| Land Category | National park, strict nature reserve, forest reserve | Forest reserve, game reserve, communal wildlife management areas | Private and communal lands; communal wildlife management areas |

An important tenet of community conservation approaches is that conservation and development are not contradictory, and indeed that they are mutually dependent. At a fundamental level, and in the long term this is true. At a practical level, conservation may require that certain forms of development are halted or are channelled in certain restricted directions to prevent the destruction of or serious impacts on wildlife. Ultimately a nation wants to conserve its biodiversity for its present and future generations to enjoy. However this is often affected by a nation's overriding need to provide for its citizens. The different frameworks for community conservation allow for this by recognising that, under certain conditions, national concerns and conservation objectives are more important even though they may contribute to rural livelihoods, while in other areas conservation is part of rural land use and livelihoods.

In the following chapters we describe the three different approaches to community conservation in more detail.

# 4. Protected Area Outreach

Protected area outreach, in the context of 'neighbours as partners' has been the basis on which community conservation has been built, established and developed in East Africa, although this is now evolving into the other community conservation arrangements.

Most early community conservation initiatives in East Africa were based on protected areas and adopted a range of strategies including outreach, collaborative management, creating alternatives and substitutes for protected area resources for local people, and assisting in improving rural livelihoods for those living close to protected areas. These initiatives attempted to improve the integrity and conservation status of protected areas. Conservation of biological diversity and natural habitat was the main driving force. Community needs and aspirations were secondary. Providing assistance to them was seen primarily as a mechanism for promoting conservation. The interaction with communities to implement various forms of benefit and revenue sharing arrangements in East Africa has led to a stronger understanding of community needs and aspirations, and a greater emphasis on their involvement. Of particular importance has been the recognition by conservation authorities of an obligation to contribute to the development of communities living adjacent to protected areas (Barrow and Murphree 1998). This new emphasis is resulting in a gradual reappraisal of the role conservation plays in East Africa, demonstrated by the increasing emphasis being placed by conservation authorities on community conservation. Community conservation can not be a mechanism solely to support the status of a conservation area, but is a political and social obligation in its own right. While a sense of obligation to reserve-adjacent communities is strong in a number of protected areas, it has not been so apparent around, for example, Mkomazi Game Reserve in Tanzania, or Queen Elizabeth National Park in Uganda.

Table 4.1 shows, in general terms, the steps being taken by conservation authorities to try to create partnerships and mechanisms for dialogue, conflict resolution, benefit flows, and enterprise development (Barrow, Bergin et al. 1995b).

***Table 4.1: Evolving Process of Community Conservation Dialogue in East Africa***

| Mechanism | Some Components of Community Conservation Dialogue | Results |
|---|---|---|
| Local approval to initiate activities | • Discussion with authorities on aims & objectives<br>• Gathering of available baseline district data and to ensure no duplication | • Approval to initiate activities at local level<br>• Summary of existing available data and literature |
| Village profiles | • Introductions to village leaders, stakeholders<br>• General discussions related to conservation, problems, opportunities<br>• Establishment of village profile on which future dialogue and activities may be based, development of plans in partnership | • Acceptance at village level<br>• Village profile<br>• Initial problem and opportunity analysis |
| Knowledge, attitudes and practises survey; Some form of socio- | • A simple easy to administer and analyse survey to obtain quantifiable assessment relating to conservation issues<br>• Other PRA type tools can be used. Forms basis for further | • Survey analysis and results for use by local resource |

| | | |
|---|---|---|
| economic baseline | discussion, visit and revisit, plans | users<br>• PRA results |
| Visit and revisit | • Importance of continuous dialogue to create trust, discuss problems and opportunities to come up with agreed solutions, ideas for actions<br>• Use of PRA to ensure stakeholders and interested parties involved<br>• Local workshops on issues and problems which are listed, prioritised and then proposed solutions sought in a continuing process<br>• Importance of follow-up, monitoring of agreed actions<br>• Input into conservation authority planning for the village, conservation area for realistic community plans<br>• Negotiations undertaken on major issues, areas of mutual concern | • Trust built, mutually agreed solutions planned and basis for implementation<br>• PRA plans<br>• incorporation in conservation action planning. |
| Actions undertaken | • Benefit sharing - community and enterprise development projects mutually identified, planned, agreed and implemented<br>• People most likely to act on problem they themselves recognise<br>• Conflict resolution through negotiation<br>• A basis for collaborative management and community-based conservation | • Projects implemented<br>• Rules and regulations related to conservation locally agreed |

*Source: Barrow 1996*

Many of the initial steps were tentative as conservation authorities, more used to protectionist polices, start to engage in partnerships with rural people and communities. Community projects and simple conflict resolution activities have been easier to rationalise than, for instance, initiation of enterprise related projects which might compete with the conservation authority for clients and revenue, even though such enterprises may help achieve a nation's overall conservation objectives (Barrow, Bergin et al. 1995b). Participatory park planning around Lake Manyara National Park, Tanzania illustrates this process (see Box 4.1).

***Box 4.1: Participatory Park Planning Around Lake Manyara National Park***

It was recognised that most serious threats to Lake Manyara National Park originated from out-of-park sources, for instance population and land pressure, irrigated farming and reduced river flow to the park. The Tanzania National Parks (TANAPA) Planning Unit and Community Conservation Service met to look for the best strategy for community input into the park management plan that was being developed. It was important that this was done as part of a participatory approach involving an interdisciplinary team, as well as input and participation by a number of stakeholders. TANAPA had three objectives in seeking the participation of local communities in park planning: (i) to get good information, much of which only local people have; (ii) to enhance the likelihood of local co-operation, for instance through mutual benefits from tourism; and (iii) the educational goal of exposing people to the many types of issues and concerns the park management faces.

TANAPA agreed on a two-fold approach using surveys and workshops. A survey was carried out, and followed up by a series of Community Leaders' Workshops. These served as a means of 'ground truthing' the information collected in the survey and gained participation, not only of local people, but also of local leaders and government officials. These also provided a dynamic setting for a consultation where problems and issues could be expressed and solutions proposed. Participants generated lists of problems and issues, discussed them at length, prioritised them by voting, and proposed solutions for their top problems. Priority problems included problem animal control, unethical park staff behaviour, park expansion, shortage of water and inaccessibility of ranger posts for villagers. Some proposed solutions included ranger re-training, park authority involvement in land use planning, and water catchment protection.

*Source: Barrow, Bergin et al. 1995b; Barrow 1996d*

A similar process was used around Lake Mburo National Park in Uganda to develop a community conservation programme and develop a park management plan based on the active participation of all the stakeholders (Mugisha and Infield 1995; Turyaho and Infield 1996; Namara and Infield 1997, Box 4.2). Kenya Wildlife Service (KWS) has used a combination of knowledge, attitudes and practices surveys, and baseline data gathering to form the basis for Participatory Rural Appraisal (PRA) in, for example, Kajiado, Laikipia, Samburu and parts of the coast (Masika 1995). The PRAs help generate community action plans which guide the practical planning and implementation of agreed community conservation activities.

Unfortunately reports of participatory planning can give an unrepresentative view of the actual process. They have often been carried out by people and organisations with a vested interest in a participation outcome, and so cannot be treated as an objective source. For example, in Mkomazi such participatory processes were dominated by government officials, while residents were poorly represented with arbitrary rather than proportional representation of different groups (Homewood, Kiwasila et al. 1997). All the issues initially tabled by residents were progressively laundered out until only the enforcement measures remained. Similarly a study of the Selous Conservation Project shows how limited participation may actually be, in a project hailed as community-based (Gillingham 1998). Such situations are likely where staff do not believe in the fundamental principles of PRA, but rather use the practice to perpetuate existing approaches. In Kenya a cursory review of three community action plans for different areas and ecosystems revealed similarities and generalities that support this view.

TANAPA's approach is somewhat different, as they recognise the value of neighbours as partners. They are also aware that such community conservation approaches are primarily a conservation tool for them. At a park level, TANAPA may run the following types of community conservation programmes related to protected area outreach:

1. Extension, including visiting communities, encouraging the formation of community groups, developing community profiles, conducting community surveys, holding seminars, etc., and assisting in the formation of conservation oriented local associations and clubs
2. Environmental education which is usually related to schools and more formal education
3. Planning input by communities into the park strategic action plan, management zone planning and the general management plan of the park
4. Collaboration with others involved in development activities with the communities around the park, be they private sector, NGO etc.
5. Benefit sharing, as part of TANAPA's National Benefit Sharing Programme (Chengullah 1998).

Each country is integrating protected area outreach in slightly different ways, and at different speeds. TANAPA has used both headquarters and park based strategic planning for community conservation. It has been used as a major tool to obtain a broader understanding and acceptance of the importance of community conservation within the institution, and creating norms and policy guidelines for the implementation of various community conservation activities (see Bergin 1995, 1998). In both Kenya and Uganda workshops have been used as the basis for formulating guidelines, sharing experiences of benefit and revenue sharing, and community conservation training. These have resulted in guidelines and policies for revenue sharing in Uganda, the Wildlife for Development Fund in Kenya, and Support for Community Initiated Projects in Tanzania (Bensted-Smith 1992; Government of Kenya 1992; KWS 1992, 1994, 1996; TANAPA 1994; Uganda National Parks 1994).

Protected area outreach work has to be seen in the context of other development interventions in the area, which have frequently engendered their own problems. For example, the Mkomazi Reserve Outreach Programme has not generally given villagers either information or opportunities for input into planning and decision making. This may be attributed to lack of an integrated plan and poor commitment by the reserve management. Further there has been no platform for face to face dialogue between villagers and reserve officers for identifying problems and potential solutions. This resulted in complaints about the outreach projects in terms of poor completion rates and lack of transparency. This outreach programme stopped in 1997. However, the reserve management has created high profile projects to meet local needs funded through the Tanzanian Wildlife Protection Fund (Homewood, Kiwasila et al. 1997).

In Uganda, protected area outreach was initiated on a trial basis at Lake Mburo National Park. This park was selected for the experiment as the lack of local community and political support was endangering its very existence. It was recognised that the strong negative attitudes towards the park were the result of the process of park formation in 1982/83 (Namara and Infield 1997). This process included the forced removal of residents and caused great suffering, loss of possessions, and even loss of life (Box 4.2). A forceful approach could not be used to regain some form of management control over the area in the face of stiff opposition. Consequently a new approach had to be used, and the authorities were required to adopt community conservation (Mugisha and Infield 1995; Turyaho and Infield 1996).

***Box 4.2: Development of Community Conservation Around Lake Mburo National Park, Uganda***

The way community conservation developed at Lake Mburo National Park demonstrates how a particular set of circumstances affecting a park influences the process and the programme developed there. The formation of Lake Mburo National Park (LMNP) in 1983 demonstrated the damage that can be done to conservation interests by insensitive and inhumane dealings with local communities. The gazetting of the park led to the summary eviction of hundreds of families, with significant attendant loss of properties and even lives. This led to persistent local hostility towards the park, concerted efforts to destroy it and the wild animals it contained, and the degazetting of 60% of the area. An important result of this history was that the park was selected for the establishment of Uganda's first Community Conservation Unit whose initial activities focused simply on attempting to establish a dialogue with the hostile communities. It also accounts for the strong interest shown by the management of the park in the establishment of a Park Management Advisory Committee, and efforts to ensure that the Committee contributed towards the development of more positive relations with communities. Another reason for the concentration on the development of community institutions was the weakness of existing community institutions, attributed to the fact that the population around the park was heterogeneous, and was composed to a significant extent of recent immigrants to the area. In 1992, 10% of the population were found to have lived in the area for less than a year, while a full 50% had been resident for less than 10 years (Infield, Marquardt et al. 1994).

The Lake Mburo Community Conservation Project was established in 1991 to improve the relationship between people and the park authorities by instituting a process of dialogue, problem-solving, partnership and mutual respect. The process of building a partnership with communities has been difficult, but the Project has helped to establish a Community Conservation Unit comprised of a Warden Extension and three Community Extension Rangers in the park. This Unit has undertaken an extensive programme of dialogue with local communities, ranging from formal environmental education, to capacity building, and support for community development. A socio-economic survey was undertaken to learn about community perceptions of the park, the problems it caused them, their relationship with natural resources in general and their attitudes towards the park in particular.

Two villages in Kamuli parish to the south of the park illustrate the process. Parish and sub-county contact and approval for community conservation work had been obtained. Of particular concern to the park was the level of poaching in the area. During early 1993 nine meetings, attended by over 180 people, were held. Initially, general discussions were held before focusing on topics such as how to limit conflicts (for instance over poaching and damage to crops by wildlife), foster cooperation, and the role of the community in conservation. This led to further discussions about community problems which centred on how each partner could help support the other. Between April and July 1993 a further eight meetings attended by 234 people were held, and a study tour to visit a traditional hospital organised. The meetings centred around what constituted a good environment, and what causes diseases. This evolved into negotiations about a possible benefit sharing project to construct a traditional healers clinic. During this eight month period, over 17 meetings, attended by a total of 414 people, were held resulting in an apparent decline in poaching and much improved park-people relations. The stage had been set for the community to have a 'voice' in the process of natural resource management.

Source: (Barrow, Bergin et al. 1995b)

# 5. Collaborative Management

Collaborative management seeks to create agreements between local communities or groups of resource users and conservation authorities for negotiated access to natural resources which are usually under some form of statutory authority. It is a relatively new 'formal' phenomenon in East Africa, and.. collaborative management arrangements are being tried in Uganda by UWA,[8] and the Forestry Departments in Uganda and Tanzania are initiating collaborative forest management arrangements with communities at national and district levels on a trial basis. In neither the national parks of Kenya nor those in Tanzania is any form of collaborative management arrangement allowed.

Collaborative management arrangements are an attempt to redress the balance between negotiated rights of access and agreed responsibilities for the conservation of the resources on which those rights are based. Forestry policy in the region is evolving, particularly in Uganda and Tanzania, to cater for these sorts of changes, and learn lessons from practice. It is also based on the recognition that the permit system has not effectively replaced the customary institutions which previously governed rights of access through responsible use, governed by locally based community sanction.

The notion of collaborative management evolved from the use rural people made of timber and non-timber forest products in particular. This was usually carried out under customary arrangements. When many of these natural forests were gazetted under different forestry statutes, provisions for access to certain resources by customary users were generally made through systems of permits (Government of Tanzania 1957; Government of Uganda 1964; Government of Kenya 1992). Unfortunately few or no responsibilities were attached to these permit based rights of access, and so the system became open to abuse, both by the authorities and rural communities.

## 5.1 Uganda

Collaborative management became an important issue in Uganda with the conversion of forest reserves into national parks. In 1991 three new national parks were created in this way, and a further three created in 1994. Bwindi Impenetrable National Park and Mgahinga Gorilla National Park are home to Mountain Gorillas. Rwenzori Mountains National Park and Mount Elgon National Park are important water catchments and have potential for trekking. Kibale and Semiliki National Parks have Chimpanzee populations. Despite strong resistance by the Forest Department, which was on the point of classifying them as Forest Parks, their importance as conservation areas and potentially for tourism, combined with very strong pressure from USAID, led to their gazettment as national parks. As part of the statutory process of consulting with communities prior to national park declaration, Uganda National Parks (UNP) was forced to accept that it would continue to allow access to resources by local communities. As a

[8] The evolution of negotiated arrangements for access to, and use of, certain defined resources within protected areas in Uganda has been documented elsewhere (Scott 1996a, 1996b; Hoefsloot 1997; Hinchley and Turyomurugyendo 1998)

consequence, UNP responded by developing an informal policy that 'up to' 20% of national parks could be subject to extractive resource use. This amounted to a radical departure from national policy, and put Uganda at the most extreme edge of national park management in Africa, where strict, exclusionary management is still generally the order of the day.

Whilst the new wildlife statute (Table 2.1) states that extraction of resources from national parks is illegal, a clause was added allowing UWA to permit *"otherwise illegal activities"* if they were demonstrated to be beneficial to conservation (Government of Uganda 1996). This 'back door' thus allows for collaborative management of resources in protected areas, but does not make it either explicit, or required, and gives UWA every opportunity to leave its 'informal policy' on resource access un-implemented.

Building on the experience of Joint Forest Management in India (Poffenberger 1990; Kothari, Singh et al. 1996; Borrini-Feyerabend 1997), Forest User Groups in Nepal (Collet, Chetri et al. 1996), and from West Africa (CIRAD 1996), the notion of collaborative management has begun to evolve in Uganda. Agreements between UWA and community user groups have been made to provide for access to certain resources within national parks, for example Bwindi (Box 5.1), Mt. Elgon (Box 5.2), Rwenzori (Box 5.3), and Lake Mburo (Box 5.4). Though the agreements developed with communities around other parks do not, perhaps, fully represent the ideals of collaborative management except, possibly for Rwenzori National Park, they do represent a significant departure from traditional exclusionary policies.

Though an economic analysis of the value of such collaborative management contributions made to communities by protected areas would almost certainly reveal that they are insignificant in economic terms, they are locally important in many other ways. Access to specific resources may have great social and cultural significance. For example, bamboo plays a critical ritual and nutritional role for the Bagisu people of Mount Elgon National Park, for which there is no substitute (Scott 1994b). The negotiation of access to water through Lake Mburo National Park for the livestock of certain communities living around the park has been of critical economic importance to these people, and the general understanding that the park forms the water resource of last resort during severe drought is also important (Namara and Infield 1998). Provision of access to valued plant resources in Bwindi Impenetrable National Park for use in both handicrafts and medicine has helped to support and strengthen traditional institutions as well as stimulate the development of new ones (Wild and Mutebi 1996).

A Collaborative Management Task Force was established by UWA, with support from IUCN, to examine a viable programme for the implementation of collaborative management in Uganda's national parks (Uganda, Forest Research Institute et al. 1996). The Collaborative Management Task Force has assisted in a process to support not just collaborative management in its strictest sense, but UWA's wider community conservation programme. The consultative process should support the formation of a national community conservation strategy capable of being flexible, responsive to changing community needs and perspectives, and based on adaptive management principles (Uganda Forest Research Institute et al. 1996). Development of this strategy will place UWA in clear control of its own community conservation programme, strengthening its internal commitment and capacity. It will enable it to set mechanisms and put procedures in place for working with communities, local governments, donors and NGOs, much in the same way as Tanzania National Parks have done with the Community Conservation Service (Bergin 1996, 1998). However, despite the positive scenarios for community conservation in UWA, UWA is fraught with institutional, structural, organisational and financial problems and constraints which

have made this a difficult goal to achieve. The Board of Trustees has yet to approve the findings of the task force, despite the extensive and wide ranging consultations which took place.

***Box 5.1: Evolving MOUs for Bwindi Impenetrable Forest National Park***

The first initiative in Uganda to formalise resource use was undertaken in Bwindi Impenetrable National Park in 1992 (Wild and Mutebi 1996). The initiative was supported by the CARE Development Through Conservation (DTC) project. High levels of financial and skilled human resources were committed to the negotiation of access to park resources. UWA itself would be unable to match these levels and the thoroughness of the process undertaken by DTC.

The process of developing MOUs first required the selection of pilot parishes (Scott 1992). Community resource user groups were formed and helped to identify key resources and nominate specific users. The user group then helped assess the availability of identified resources within the area allocated by park authorities for resource use. Levels of use were negotiated and agreed. Details of the resources, quantities and users formed part of the agreement signed by the user groups and UWA. User groups are responsible for ensuring that the conditions of the agreement are met, and for collection of data on the quantities of resources harvested. It is unclear, however, if the user groups have actually accepted responsibility for the implementation of agreements, and it is clear that monitoring of resource use has not been effective. This process is described in two detailed studies on collaborative management in this area (Cunningham 1996; Wild and Mutebi 1996).

***Box 5.2: Evolving MOUs for Mt. Elgon National Park***

In Mount Elgon National Park an IUCN project has assisted park management in the development of agreements with two parishes for the use of forest resources (Hoefsloot 1997; Hinchley and Turyomurugyendo 1998). The most important resource included in the agreements is bamboo shoots, which have great cultural significance. Despite the process undertaken to develop the MOUs, there remains considerable dissatisfaction with them amongst communities, who apparently agreed to sign the agreements, not because they thought they were fair or reasonable, but because they believed that they were the best they would get (UWA 1997). The process of MOU development seems to have been insufficiently participatory, and the community saw it simply as UWA informing the communities of what they would and would not allow, and what was expected of the communities in return.

A number of factors have weakened the expected positive effect of the signing of the MOUs. The park and the parish communities were still in dispute over the park boundary. This dispute became so charged that it overshadowed the positive aspects of the MOU. UWA also included a clause which, as far as the communities were concerned, nullified any positive aspects of the agreement. Traditional harvesting of bamboo shoots entailed their being smoked in order to reduce their weight to about one tenth before being carried out of the forest. The MOU banned the smoking of the shoots in the forest. This placed an impossible condition on the harvesting, as the dramatic increase in labour required to get the shoots out of the forest was too high for communities to meet. The MOUs were further weakened by the fact that communities who had no agreement were harvesting bamboo anyway. Finally, the close involvement of an expatriate advisor was viewed with great distrust by the communities, who indicated that many of the problems arose from his failure to understand and appreciate the situation (Hinchley and Turyomurugyendo 1998).

***Box 5.3: Evolving MOUs for Rwenzori Mountains National Park***

One of the most detailed pieces of work on resource access was carried out in the Rwenzori Mountains National Park with the assistance of a World Wide Fund for Nature (WWF) project. An intensive process was carried out to develop agreements for resource use with two pilot parishes (Scott 1996a, 1996b). One of the first things discovered was that parishes were not the appropriate social grouping with which to work. Communities who had an interest in forest resources where organised in relation to the mountain spur or ridge on which they lived, although they were part of a larger parish which extended down to the low lands. The majority of the people living in the parish were lowlanders from a different tribal group, and had no interest in accessing forest resources. Parish level structures almost exclusively comprised of representatives of low land communities. Thus, the process of development of MOUs for forest resource access was carried out with groups representing resource users resident in communities defined by 'spurs'. The agreements were negotiated in a participatory manner, and gave management responsibility to the communities. As such they were closer to the Joint Forest Management models of India (Kothari, Singh et al. 1996), and represented more fully what is generally defined as 'Collaborative Management'. Unfortunately the agreements have yet to be officially sanctioned by UWA more than two years later, which has severely undermined community confidence in the process.

***Box 5.4: Evolving MOUs for Lake Mburo National Park***

Lake Mburo National Park is the only non-forest park to make use of MOUs in working with communities. In a process undertaken by the Community Conservation Warden with minimal external assistance, an MOU was negotiated with two community groups to provide their livestock seasonal access to permanent water sources through the park. The Parish Resource Management Committees (PRMCs) played an important role in negotiating the agreement, and were signatories of the MOU. The MOU specified who was allowed access, the number of cattle, and what the responsibilities of the community members were for the implementation of the agreement. Though the process was interesting, and important for UWA in that it extended the principle of resource access from forest to savannah parks for the first time, it has not been a great success. Both community members and park staff have allowed large numbers of users who were not part of the agreement and did not require access to water, to illegally use the corridor for accessing grazing. This led to two problems: households moved into the communities so that they can be included in the access agreement; and households listed in the agreement brought in cattle belonging to people from other communities. It would appear that the motivation for these distortions in the agreement was for community members to gain access to an additional resource not covered by the agreement, in this case grazing. In the case of this agreement, it seems clear that communities have not accepted the responsibility given to them under the agreement. This may be because they perceived the park authorities as being weak, or because they accepted the agreement under duress. High levels of corruption amongst park staff also undermined the agreements. Whatever the case, the process undertaken may have been inadequate.

### *Collaborative Management in Wetlands*

Some natural resources outside protected areas in Uganda are subject to national regulations. Wetlands are a particular case in point, with 13% of Uganda designated as wetland. In the past, national development planning saw wetlands as under-developed land and sought means to convert them. It is increasingly recognised that wetlands are complex systems which supply goods and services at local, district and national levels. Wetlands are interconnected, and change in one part of a wetland may have deleterious effects on another part. This presents an especially complex set of challenges for community conservation. In addition, wetland stakeholders are diverse in terms of resource use and access. Some may be relatively transient fisher folk who depend on the quality of the fishing and have no direct link with the sustainable use of the resource, while others have more complex customary processes of managing their wetlands.

Uganda has the most advanced and coherent wetlands programme in the region. The policy actively acknowledges the important role of rural people and communities in wetland management (Government of Uganda 1994; Bakema and Iyango 1999). Box 5.5 outlines some of the community conservation issues with respect to wetlands in Uganda. Various forms of collaborative management are being suggested and tested as the optimal means for community conservation which integrates the complexity of the wetland systems with community resource needs (Government of Uganda 1996). Box 5.6 discusses some wetland management options.

***Box 5.5: Wetlands, a Challenge for Community Conservation***

1. **Resources: Which? What is sustainable use? How to manage?** There is a wide range of resources being used in various ways, at various times by local people and communities. The range, scale and scope of resource use varies with different wetland types, population and use pressures and the degrees of commercialisation of wetland products. The understanding of resource use needs to be site specific, take into account the variety of wetland types and species, the resource use pressures and the potential demands.
2. **Who is the user, the user group, the community?** For all those resource users and communities there is need for an understanding of:

- Which resources they use, and why.
- How much they use over what period of time.
- The area they harvest, and whether the harvested area remains the same for a particular user, or user group.
- Whether the users organised in any way, especially under customary arrangements.
- Whether there any local rules and regulations governing who can have access and use certain types of resources and under what conditions.
- To what extent resource users are manipulating and managing the wetlands, or even farming those areas, including such issues as, for example the scale of paddy rice, tree planting etc.

3. **Valuation, and where the benefits flow:** There are going to be increasing pressures on wetlands to show they make a significant economic contribution if they are not to be converted to perceived more productive forms of land use. There is a clear need to value the wetlands, or representative samples of them at the individual land user, or family level; the community level; and the district/national level.
4. **Ownership - Whose wetlands?** The status of ownership will determine what form of community conservation arrangement can take place, and the types of collaborative agreements put in place. It is important to define what types and areas of wetlands can be individually, community or government owned and managed. It appears that rural people see three (or even four) different forms of customary ownership of wetlands:

- Individual ownership of wetland areas adjoining individual farmers' lands, which seems to be more prevalent in swamp forest areas
- Communal ownership where a community adjoining a wetland area claims that wetland as belonging to them. This seems to apply more for the papyrus swamp-type wetlands
- Government ownership where people and communities state that the wetlands belong to the government
- *Kabaka* ownership where, in Buganda, such wetlands would be under the *Kabaka*.

5. **Land use**: Most wetland conservation resources are not integrated into formal land use planning, which is dominated by so called 'productive' land uses. This needs to be addressed in terms of potentially competing forms of land use, for example paddy rice and wetland conservation. Here trade-offs may need to be made. For example it may be necessary to trade-off the 'pristiness' of wetlands (if such exists) with, for instance limited wetland farming of rice or other crops and enrichment tree planting, so as to show a greater return on land use. These trade-offs will need to be balanced with present and future increases in land use pressures.
6. **Customary rules and regulations, the use of bye-laws:** In the wetland areas of Uganda, people have been using wetland resources for a long time, and it is probable that a range of customary rules and regulations have evolved concerning who can use these, when, where, and under what conditions. Such rules can form an important link between customary knowledge and present day management requirements, and an important bridge between customary and statutory sanction.
7. **Problem animal management:** The wetlands represent important sanctuaries for a range of wildlife, many of which cause problems to neighbouring farmers, representing a significant conservation cost for rural people with no, or minimal compensation. This can create a negative perception of wetlands, which would, on a political basis, support arguments for the conversion of wetlands to other forms of land use. A priority need is to mitigate the negative impacts of wetlands, of which problem animals are the most visible expression.

***Box 5.6: Some Lessons From Engaging Local Users in the Management of Ugandan Wetland Resources***

Wetlands in Uganda are not perceived as a key resource by the majority of Ugandans, even by those who live right on their edge. For some groups a certain product from a wetland may be essential for their income, and such groups may have an immediate interest in wetland resource management. For other wetland adjacent communities, they may not be willing to invest in wetland management unless value can be added to existing products, new valuable wetland products identified, or profitable wetland modifications allowed. These will be key tasks for the future of sustainable wetland management, which can go hand in hand with the development of local level management systems.

This raises the question of the viability of the 'wise use 'concept, which in Ramsar terms means the sustainable utilisation of wetlands for the benefit of mankind in a way compatible with the maintenance of the natural properties of the ecosystem (Barbier 1997). This definition leaves ample room for interpretation. In its strictest form, a modification of any wetland that impacts on the ecological integrity is not allowed.

The first option is to widen the interpretation of the definition of wise use by defining a *minimal sustainable wetland integrity*, which allows wetland modifications to a certain threshold level, provided that such modifications increase the overall socio-economic benefits of the wetland for the local managers. The threshold level can be defined on the basis of certain criteria, a key one being that the overall hydrology of the wetland system is not disturbed significantly. Such an approach would open up possibilities for integrated wetland management, whereby for instance part of the wetland vegetation is replaced by rice or trees, certain areas are mined for clay, and the core of the wetland remains intact to perform its ecological or hydrological functions.

The second option is to have off-site beneficiaries pay for the benefits accruing from use of wetlands to the local managers and communities. This option could be considered, for instance, for water companies that extract water, and in return would pay for social infrastructure in the adjacent villages.

Whichever choice is made, both communities and government need to agree on the objectives of collaboration for wetland management before the onset of the activity. In the case of the National Wetlands Programme some differing perceptions about the objectives may have resulted in different expectations of the collaborating partners. Whilst the Programme has been exploring the benefits which can be derived from as little interference with the natural system as possible, project site reviews indicated that some community members were disappointed with the activities, with the negligible monetary gains, insufficient financial or material project inputs, too high labour inputs and logistical problems (Luwum and Ucuba 1998). Programme staff felt a limited commitment of communities to the site activities. It appears that community members were hoping for quick monetary benefits that the programme was not able to guarantee.

These experiences highlight a dilemma for any environment management programme with a community management component: what to do when the ecologically optimal management regime does not meet the 'management costs' of the community. A wider exploration of acceptable wetland modifications that incur direct benefits to community members, and other sources of income from commercial and non-commercial offside beneficiaries, may be necessary to make community management a more viable option.

*Source: Bakema and Iyango 1999*

## 5.2 Tanzania

Currently collaborative management is not allowed within Tanzanian national parks, nor does the Wildlife Division allow access to resources within the game reserves, with the exception of hunting through hunting quotas and permits. As such, collaborative management arrangements are excluded from the main conservation areas of the Wildlife Division and TANAPA.

Despite this, much practical experience is emerging from collaborative forest management. Vast tracts of miombo woodland come under Tanzania's forest policies, and many have been gazetted as district or national forests. As a result local conservation measures were replaced by distant government sanction, with no local level responsibility. In the absence of the necessary resources, the districts and central government were unable to control and regulate the use of these forests and woodlands. Over exploitation and degradation resulted. Over the past few years there have been attempts to change this, by creating a sense of local responsibility and ownership through collaborative management (Boxes 5.7 to 5.12).

***Box 5.7: Evolving MOUs for the Duru-Haitemba and Mgori Forests***

In Babati district the Duru-Haitemba forest had been targeted for gazettment as a government forest reserve with technical support from the Sida Regional Forestry Programme (Wily and Haule 1995). However, eight villages thought that this 90 sq. km forest, comprising a number of interconnected segments, was theirs. Conflict was avoided by abandoning the idea of gazettment in favour of allowing and assisting the eight villages to take on full rights and responsibilities for the conservation of the forest. Now over 108 Village Forest Guardians patrol the forest against any breach of Conservation Use Rules, developed and adopted by each village, and approved by the Local District Council as village by-laws (Wily and Haule 1995; Wily 1997b). As a result damaging forest use has been stopped, and now the Village Forest Committees, which are responsible for management and control, are looking for ways to establish quotas for use, solve boundary disputes, and remunerate their forest guardians.

Mgori, on the other hand, is a much larger single tract of miombo woodland covering an area of 375 sq. km. The five villages who now have responsibility for the forest are found in Hanang and Singida Rural Districts. This forest area was in danger of disappearing due to uncontrolled wood extraction, shifting cultivation and settlement. Through collaborative arrangements with the government, the villages are recognised as the prime users of the forest and the controlling managers. Potentially they will own the forest, as long they can show that they can protect the area from damaging use and degradation. Village forest management plans and detailed rules about forest use have been developed and agreed, and are enforced through village forest watchers.

*Source: Wily 1995.*

A similar situation is evolving with the Sukuma agropastoralists in Shinyanga region of Tanzania through the making of *ngitiri* grazing and tree reserves (Box 5.8). In Lushotho this has been taken a step further, with a collaborative management agreement being negotiated between villages and the Forest Department for an area of plantation forest (Hitchcock 1995; Hitchcock and Shauri 1995). This is closer to the Indian joint forest management approach (Kothari, Singh et al. 1996). These examples provide a practical and low cost natural forest management approach for Tanzania, which can be used both on public lands and reserved forests. It goes beyond the sharing of forest products to devolving authority for management to the villages concerned. Wily demonstrates the scale and importance of collaborative forest management in Tanzania (Box 5.9, and Table 5.1), and there is clear potential for such arrangements in the different conservation sectors of Tanzania (Box 5.10).

Precedents are being set for collaborative forest management through village government on non-reserve forest lands, by gazetting them as local authority forest reserves (eg. in Babati District, see Wily 1995; Wily and Haule 1995). The district governments appear, however, to retain management control. The relationships between the forest users, village and district government under such scenarios remain unclear. Experience from other countries (Hobley 1996) suggests that the creation of local authority forest reserves or village forest reserves, where power is vested in district and village government (respectively), may not lead to sustainable and equitable forest use (Nurse and Kabamba 1998). A functional and responsible link between various form of forest user groups and village and district government may be more sustainable in the long term.

***Box 5.8: Sukuma Agro Pastoralists and their Ngitiri***

The Sukuma agropastoralists in Shinyanga region of Tanzania make *ngitiri* grazing and tree reserves. This practice is known all over the region. Though not practised in all villages it is culturally a well-established concept. Everybody knows what a *ngitiri* is and what it entails (Barrow, Brandstrom et al. 1988; Johansson and Mlenge 1993; Kilahama 1994). In order to have access to pasture during the dry season, areas within village borders are closed at the beginning of the wet season. In the dry season, when pasture is becoming scarce, the *ngitiri* is opened up for grazing.

Both family and communal reserves are made. Family reserves can only be made on arable land lying fallow, since there is communal access to all land not efficiently cultivated. Communal reserves can be made on any village land suitable for dry-season grazing. The *ngitiri* is opened in sections, one being completely grazed and finished before the next is opened (Malcolm 1953). The underlying idea is to maintain an area of standing hay until the next rains, as well as to allow the natural resources to be conserved and managed.

In one village, Isagala, the villagers had made a large stretch of land into a village reserve, divided into two sections. One section was totally closed for any use. From the other section, the villagers were allowed restricted grass and wood cutting based on a letter from the ten-cell leader signed by the village secretary. The reserve was patrolled by *wasalaama,* or local village guards. To ensure that the closed areas were guarded and respected, traditional laws known as *mchenya* were applied by punishing every person who did not abide by the management plan for the village forest. *Mchenya* is supervised by the village security committee. To strengthen the protection of the village forests there is mutual support to make sure the local by-laws are upheld (Barrow 1996c).

***Box 5.9: Some Lessons from Collaborative Forest Management in Tanzania***

Bringing communities into forest and woodland management roles has a short but rapidly evolving history in Tanzania. The first three community-owned and managed forest reserves were established in September 1994. The new National Forest Policy supports this development, with an objective that the 19 million ha of unreserved forest/woodland come under comparable local guardianship, primarily through the establishment of village forest reserves. Inclusion of local people in the management of the 12.5 million hectare reserved estate of central or local government is also provided for.

Today, more than 500 villages directly own and manage forest reserves in five of the country's 20 regions (Table 5.1). Another 500 or so smaller social units, even individuals, have recognised forest reserves. These figures, and the area under direct community management, currently more than 400,000 ha, grows yearly. Meanwhile, state/people co-management through joint management agreements is getting underway in four of the country's 500 government-owned forest reserves. The new forest law, under draft in 1999, will provide legal recognition of a series of forest reserves to cater for emerging and diverse ownership arrangements including reserves which are owned by individuals, groups, villages, local governments and national government.

Several features make this community-based forest management distinctive from that currently evolving elsewhere in Africa. The first is the diversity of frameworks. Second, it is clear that the Tanzanian government is committed not only to helping local people manage unreserved forest resources, but to bringing them directly into the management of its own forest reserves, including those of the highest biodiversity and water catchment values. Third, the fact that one of the cases to date includes substantial plantation resources as well as valuable natural forest, suggests that the Tanzanian government is looking to community involvement over the whole range of forest categories. Finally, the above suggest that the Tanzanian state has taken community forestry on board not for purposes of social justice or compromise but as a resource management strategy in its own right. The main competing strategy as reflected in the new National Forest Policy, is encouragement towards the leasing of commercial forests to the private sector.

*Source: Wily 1999*

***Table 5.1: Status of Community-Based Forest Management in Tanzania, 1999***

| Region | Public village areas<br>Village forest reserves, community forest reserves<br>Individual 'reserves' | Government forest reserves<br>National forest reserves<br>Local authority forest reserves | Total |
|---|---|---|---|
| **Arusha** | • 45 villages manage up to 275,000 ha<br>• All village forest reserves | • 8 villages will co-manage 6,535 ha by end 1999 of Ufiome National Forest Reserve | • 53 communities<br>• 281,000 ha |
| **Singida** | • 5 villages manage five village forest reserves, total 43,000 ha<br>• 15 villages in process of establishing 15 village forest reserves, total est. 50,000 ha | | • 20 communities<br>• est. 93,000 ha |
| **Mwanza** | • 381 villages manage 381 village forest reserves280 sub-villages, clans & other groups manage 280 community forest reserve<br>• 647 individuals manage private 'reserves'<br>• Total: 35,000+ ha | | • 661 communities<br>• 647 individuals<br>• 35,000+ ha |
| **Tabora** | • 76 villages manage 7,660 ha village forest reserves<br>• 31 individuals manage 394 ha private 'reserves' | • 7 local groups co-manage 13,700 ha of Urumwa National Forest Reserve | • 83 communities<br>• 31 individuals<br>• 21,754 ha |
| **Tanga** | • 6 villages manage 675 ha<br>• 1 village manages first gazetted village forest reserve (60ha) | • 1 village co-manages 5,000 ha of Shume-Magamba National Forest Reserve | • 8 communities<br>• 5,735 ha |
| **Total** | • 529 villages<br>• 280 groups<br>• 678 individuals | • 9 villages<br>• 7 groups | • 538 villages<br>• 287 groups<br>• 678 individuals |
| **Total 'reserves'** | 1,487 | 3 | 1,490 |
| **Estimated area** | 411,789 ha | 25,235 ha | 437,024 ha |

*Source (Wily 1999)*

***Box 5.10: Mkomazi Game Reserve in Tanzania –Strong Potential for Collaborative Management***

In Mkomazi Game Reserve resource use and sharing by the different ethnic groups or clan societies was, and still is, negotiated between them by their recognised leaders. Local management regimes for water and land allocation as well as grazing are important in this respect. It is through the system of negotiation between the local communities and reserve authorities that these communities continued to use reserve resources during colonial and post-colonial times before eviction.

A forum and negotiations similar to that used in earlier years should be revived. Representatives of the resource use communities should be reinforced by leaders' support. The forum would be the first step towards achieving a workable plan. Decisions reached at such a forum are more likely to be adhered to, and can be strengthened and monitored for feedback and better results. Conversely denying people their rights has unwanted repercussions.

Compromise between wildlife authorities and the heterogeneous community of resource users adjacent to the reserve has to be reached using community participatory procedures. The heterogeneous nature of the community make it necessary to ensure equitable representation of each group. The reserve-adjacent communities have to be involved at the negotiating table with wildlife authorities to:

- determine how to benefit from resources;
- agree on operational procedures and structures for decision-making;
- develop an administrative, monitoring and evaluation system for the benefits accruing from game reserve area.

It is imperative that these alternative returns to local groups should flow from the basic tenets of community conservation. It is difficult to envisage negotiation and community involvement that does not have some form of zoning allowing access to resources currently within the protected area. This could form the basis for a collaborative agreement between the reserve authorities and the interested rural communities similar to those being signed by the Forestry Department with rural communities under the new Forest Policy.

*Source: Homewood, Kiwasila et al. 1997*

### *Coastal Collaborative Management*

The Tanga Coastal Zone Conservation and Development Programme, in partnership with the Ministry of Natural Resources and Tourism and with IUCN support, have established collaborative management agreements for coastal fisheries and mangrove forests (Boxes 5.11 and 5.12). The two major objectives of this programme are to improve the capacity of government to undertake integrated coastal zone management, and to assist communities in using coastal resources in sustainable ways, including the restoration of degraded environments (Makoloweka, Gorman et al. 1996, 1997). Priority environmental issues have been identified and include declining fish catches, destructive fishing techniques, mangrove cutting and coastal erosion. The project's approach has been one of initial 'listening and testing', followed by training and learning through doing (Makoloweka, Gorman et al. 1996). This is summarised in the approach of *"listening, piloting, demonstrating and then mainstreaming"* (Van Ingen and Makoloweka 1998). Village initiatives have included new by-laws, mangrove and tree planting, reef zoning and closures, and form the basis for collaborative fishery and mangrove management agreements.

The passing of the *Marine Parks and Reserves Act* in 1994 allowed marine parks to be gazetted in a manner that actively involved and integrated customary users into the park management and enabled sustainable use of resources. Using this act as a basis, a general management plan for Mafia Island Marine Park was developed to attempt to integrate the needs of the rural people with those of conservation (Andrews 1996, 1997). However, despite strong policy support for full community participation, the responsible institutions are still reluctant to change (Andrews 1996, 1997)

***Box 5.11: Defining Institutions for Collaborative Mangrove Management - Tanga, Tanzania.***

Kipumbwi is a major fishing village in Pangani District. It consists of four sub-villages with about 130 households and 981 people (Gorman, 1996). A large mangrove forest (422 ha) lies along the coast and the estuary of the Msangazi River, and is the focus of attention for collaborative management. A number of areas of mangrove forest are, or used to be, protected under indigenous management systems, and two areas are traditional sanctuaries, protected for spiritual worship. Elders have traditionally been responsible for the protection of these areas. Nobody may enter the area without the consent of the three elders responsible. When people come to worship and succeed with their prayers, they leave a small offering at the site.

The context for the collaborative management of mangroves at Kipumbwi and Sange villages was investigated by a multi-disciplinary team of government staff. Using a variety of participatory extension techniques, the indigenous systems of management and use of the mangrove forest were analysed. Institutions were identified for the primary role of protection and wise use of the forest. These now have an organisational basis as the Lands and Environment Committees of Sange and Kipumbwi. In particular, equity in decision making and in representation within the new institutions was examined. This initiative has resulted in a draft Collaborative KiSa Management Plan for the mangroves. The management plan details the activities that the villagers will carry out to achieve their management objectives, and contains indicators for monitoring the effectiveness of the committees.

The crucial elements in the negotiated roles are that the:

- Forest users have exclusive rights to forest products made available through the implementation of the management plan.
- Forest users are accountable to village government but retain authority to make management decisions.
- Lands and Environment Committees represent the forest users.
- Forest users can delegate responsibilities and authority to the Lands and Environment Committee and the Coordinating Committee, but they can change the decisions made by those committees or remove any members based on a majority vote in a meeting of a quorum of members.
- Central government provides advice and assistance on demand.

The new institutions are representative of the two communities and the nature of organisations and decision making in the village are evolving rapidly in response to the initiatives of the Tanga Coastal Zones Conservation and Development Programme, and to the national move towards more democratic and decentralised processes in government. Criteria favouring the KiSa management arrangements are:

- a strong desire to maintain the commons as a common pool resource;
- a strong sense of community within and between the villages;
- a substantial need for the resource to satisfy livelihood needs;
- well defined boundaries of access and use;
- a reasonably large resource of approximately 1.3 ha per household;
- a strong desire to manage the resource sustainably to benefit future generations.

Crucial areas of concern include the large size of the user group. This group cannot easily meet to make joint decisions, therefore power is likely to be vested in a few individuals. The legal basis for collaborative management in Tanzania is still unclear which results in high transaction costs and high risk for the participants in the process, particularly for the rural poor.

*Source: Nurse and Kabamba 1998*

***Box 5.12: Collaborative Fisheries Management in Tanga – a Summary of the Process***

The process leading to the formation of a management partnership between local communities and government in the management of common property fisheries in Tanga included:

1. Initial training of staff and rapid appraisal surveys
2. Detailed resource assessment and investigation for management organisation, and additional extension work in the pilot villages. Coral reef information was fed back to all users. This included reef and fish population status, coral diversity, use of the reef by various villages, the importance of reefs for different fisheries etc. Users discussed, modified and agreed to the information and formed management committees to deal with fish scarcity, and to develop management proposals to be discussed with all fishers and fish traders. The revised proposals were then to be passed through the village assemblies.
3. Negotiation and implementation of management agreements involved a range of activities:

- The management committee developing the principles of management, overall management objectives, the purpose of the action plan, and results and indicators
- Users defining the area in which management action would be implemented and who would be involved
- Users identifying, analysing and agreeing to all the actions needed, for example reef closure; special rules to apply to closed areas; general rules to apply to the larger area; and other actions to support management objectives
- Committee defining how rules will be enforced, who will do what, what the penalties are, what training is required, as well as defining a programme for monitoring and review
- In meetings with villagers and village governments of neighbouring villages, the village committees presented their management objectives, results and actions, particularly the closure of reefs. All surrounding villages approved and supported the closure of these reefs
- Draft plans being presented to a meeting of all users and village governments for final approval before submission to the districts.

*Source: Van Ingen and Makoloweka 1998*

## 5.3 Kenya

Like Tanzania, Kenya does not allow rural people to use natural resources in national parks and game reserves, except in exceptional circumstances, such as drought (see Box 2.2 on Tsavo livestock incursions). However many rural people had customary rights to use wildlife and non-timber forest products. With the establishment of the *Forest Act* (Government of Kenya 1948, 1992, 1994), the use of permits was introduced. Customary control and sanction was replaced by central government control. Kenya's 1994 Forest Policy does allow for *"providing products and services mainly locally on a subsistence basis; by community participation as appropriate"* (Republic of Kenya 1996) though this is still seen in the context that *"All gazetted indigenous forests, woodlands, bush lands and mangroves should remain reserved…"*.

Although there are many customary forest dwellers, squatters and traditional hunter gathers (Dorobo) who depend on the forests of Kenya for their livelihoods (Wass 1995), their presence was either overlooked, or where recognised was considered incompatible with 'modern' forest management. Numerous unsuccessful attempts were made to evict them (Jackson and Carter 1994). For instance over 3,000 forest dwelling households live in scattered communities deep inside the South West Mau Forest Reserve, with a further 800 households living in temporary

settlements near forest stations surrounding the forest reserve (Bateson 1994). This represents between 20,000 and 25,000 people who depend directly on that part of the Mau Forest, and yet they have no rights. In addition to traditional forest dwellers it is estimated that there are over 4,000 squatter households living and cultivating within the forest reserves (Emerton 1992). While traditional forest dwellers and squatters account for a significant number of rural people who depend directly on the forests for their livelihoods, it is estimated that there are over 500,000 forest-adjacent households in the country (Wass 1995, Table 5.2).

***Table 5.2: Forest-adjacent Households in Kenya***

| Forest Region | No. Households | % Households |
|---|---|---|
| Montane Forest | 250,000 | 47 |
| Western Rainforest | 200,000 | 38 |
| Coastal Forest | 10,000 | 2 |
| Dry zone Forest | 70,000 | 13 |
| **Total** | **530,000** | **100** |

Source: Emerton 1992

Currently within Kenya there are no collaborative management arrangements similar to those evolving in Uganda or in Tanzania, though the potential exists given the number of people living either in, or adjacent to Kenya's natural forests. The East African Wildlife Society recently initiated a project to pilot such arrangements in Kenya (Box 5.13). This will increase local level responsibility for natural forests and reduce government control costs, which is in line with decentralisation. It could also create a sense of ownership, and perhaps help to enlist the support of neighbouring communities in reducing the widespread destruction and over-exploitation of forests currently evident all over Kenya.

***Box 5.13: Integration of local communities in management and conservation of forests: the case of Taita Hills, Kenya***

This recently-initiated project emerged from concern over the conservation of Taita Hills forests which form the northern most part of the East Arc Mountains. The forests are small in size and scattered. Apart from being important biodiversity areas, they act as a water catchment and provide communities with a number of services and benefits. These include medicinal plants, honey, fruits, fodder and fuel wood. Despite their importance the forests are under threat from encroachment, inappropriate management, unsustainable exploitation, and fires. The project, which targets Chaiwa, Ngangao, Vuria and Mbololo forest patches, has the following objectives:

- to enhance conservation of forests through raising environmental awareness and strengthening capacity of local institutions;
- to document non-timber product activities by local communities and other institutions;
- to gather information which can be used in drawing up an integrated conservation plan that incorporates sustainable pilot collaborative management.

The current activities of the project are targeting the Forestry Department, the county councils, youth polytechnics, women groups, schools, locational and sub-locational development committees.

*Source: East African Wildlife Society 1997*

The high local value of forest resources provides a niche for successful conservation measures which are low in cost and are sustainable. Local communities are important players in this and

will be key determinants of success or failure (Boxes 5.13, 5.14 and 5.15). To be willing and able to support conservation they must be provided with adequate incentives (Emerton and Mogaka 1996). Receiving economic benefits from forest use form a necessary but not sufficient part of these incentives. Formal rights in forest use and conservation systems based on collaborative management are also required.

Collaborative management, as well as being a low cost mechanism which provides incentives for conservation, is also a means of drawing on existing local conservation measures and forestry knowledge to strengthen forest management. In Oldonyo Orok, for example (Box 8.5), livelihood needs and dependencies have been translated into a series of effective strategies designed to conserve highly valued resources, including pasture, water and forests (Emerton 1996a). Unlike forest department policing and protection, these systems are defined and enforced according to local norms and priorities, and hold local authority, operating on the basis of *"consensus, discussion and sanctions"* (Galaty 1992).

In turn, collaborative management must be backed by a legal and policy framework which supports local participation and responsibility, and recognises local values. Current practice, based on the *Forests Act of 1942* and Forestry Policy of 1968, vests monopoly control of forest resources in the government and explicitly denies any role in forest management or use for local communities, stating that *"the existence of private rights in the Forest Estate ... endangers the objectives for which the Government manages the Estate and such rights are therefore objectionable. The Government's policy is first to ... negotiate the final eradication of such rights (and) allow no new rights to arise"* (Government of Kenya 1968). Local institutions and incentives have been eroded by inappropriate national policy and legislation which allows groups like the Oldonyo Orok Maasai no legitimate right to participate in, or benefit from, conservation (Emerton 1996a).

***Box 5.14: The Loita Maasai Forest of the Lost Child "Entim e Naimina Enkiyia"***

Kenya's Loita Maasai have protected and conserved their *Naimina Enkiyo* indigenous forest through their traditions, culture, and customary laws. Decisions concerning land issues, including *Naimina Enkiyo* forest, rest with the whole Loita community. Everything to do with Loita land needs community consensus. The dense forest is intact and has not suffered encroachment or human disturbance. Its flora and fauna are rich and diverse. It is an important watershed for the whole region. The community uses the medicinal herbs, trees and plants in the forest to treat, cure and prevent many diseases. There is no charcoal burning, no logging in the forest and no need for forest guards. This legacy of protecting and conserving the sacred forest has been handed to the chief *laibon* from generation to generation. The practices are not forced on the people. In 1993 the value of these resources to the local community was demonstrated. The year saw the worst drought in living memory, but the Loita survived because they had access to their critical dry-season pastures in the forest.

Despite these obvious values, the Narok County Council, one of the richest local authorities in Kenya, wants to turn the forest into a reserve for the development of mass tourism. If the plan goes ahead local access to the forest will be lost, and the Loita society together with the forest will face inevitable destruction. However, the Loita are resisting this, and have created a trust run by 10 community leaders, including the chief *laibon*, and have challenged the council in court on their interpretation of the *Trust Land Act* to prevent the land being gazetted.

This highlights the issue of the rights of indigenous peoples and local communities to maintain control over their natural resources for their own sake and for posterity. The indigenous local communities have taken care of many existing and undisturbed biodiversity resources. They have done so through their cultural knowledge, conservation practices and skills. The importance of such resources in the lives of these communities cannot be overemphasised. It is vital that they maintain control over their resources and uphold the practices that have traditionally conserved them.

*Source: Loita Naimina Enkiyia Conservation Trust Company 1994a and b*

Recognising that a number of Kenya's indigenous forests are very important in terms of biodiversity, and have the capability to accrue significant visitor based income, KWS and the Forestry Department have entered into a memorandum of understanding for the joint management of these important resources (Kenya Wildlife Service and Forestry Department 1991). Although this is not an MOU with a local community, it represents a first step in acknowledging the importance of joint management. Table 5.3 shows the extent of this MOU in Kenya, which is the first of its kind in East Africa and may represent a responsible mechanism for the better integration of a nation's conservation and biodiversity objectives. Since then KWS has signed an MOU with the Fisheries Department for some of the marine resources, parks and reserves along the Kenya coast, and with some of the county councils for the management of council game reserves (Box 5.16).

***Box 5.15: Pastoralist Management of Loima Mist Forest, Turkana, Kenya***

The Loima hills, found to the west of Turkana District rise to over 7,000ft, representing the most extensive highland area in the district. As most of Turkana is low lying, the importance of these hill areas cannot be overestimated. Broadleaved forests are found in the higher areas which tends to wooded bushland lower down. On the lower slopes and valley bottoms dense bushland is common. The forest is dominated by *Juniperus procera, Olea europaea, Olea capensis, Tecla nobilis* and *Podocarpus falcatus*. Because of their relative isolation, the Loima hills contain a unique and important genetic resource, which is important to conserve (Beentje 1988).

These hills represent one of the most important dry season grazing reserves for Turkana pastoralists. Because of their height they receive higher rainfall (600 mm per annum) than the surrounding lowlands, which receive approximately 200 mm per annum. They have perennial grass cover - a vital grazing resource in the dry season. Thus the surrounding lowland wet season grazing range is one of the least productive in the district while the dry season range on Loima is one of the most productive and important (Ecosystems 1985).

Continued accessibility to dry season grazing ranges constitutes one of the most critical steps in reducing famine susceptibility (Ellis, Galvin et al. 1988). As such these hill areas constitute one of the most important dry season ranges and have an importance out of proportion to their size. The pastoral Turkana people using the area during the dry season have developed sustainable management strategies:

- Only using the Loima Hills during the dry season. This gives the grass and ground cover time to recover and set seed during the wet season
- Only using dead wood for cooking, and using bush species for building temporary structures such as livestock fences
- Not cutting large trees as the people do not use them directly. They do harvest wild fruits and other such products, which does not involve destructive clearing of the trees
- Using the water supply in the hills in a rational manner.

These traditional controls are still in place and help conserve the dry season grazing on a sustainable basis. It is vital that the important tree species be conserved as a genetic resource, while ensuring that the area remains accessible for the pastoral people who depend on it. Any restriction to the access of dry season grazing would expose the pastoralists to a much greater risk from drought and famine than before.

At present there are fears that if this resource was officially protected the pastoralists who depend on the area will no longer have access. Such fears have to be allayed to ensure that traditional pastoral rights to the area are respected and indeed legitimised. This can only be done by participatory dialogue with the these pastoralists, and by jointly developing a collaborative management plan to conserve genetic resources yet allow continued access to and use of the land.

*Source: Barrow 1988*

***Table 5.3: Status and Progress of the MOU Between the Forest Department and KWS***

| Forest | MOU progress |
|---|---|
| Aberdare | Joint management team established, good cooperation over problem animal control |
| Mt. Kenya | Joint management team established. |
| Namanga Hill | Socio-economic survey conducted |
| Loita | Loita Maasai want to manage forest, but need legal support. IUCN-Loita Project planned |
| Ngong hills | Fencing, improved security and ecotourism planned |
| Mau Forest | Joint management team established |
| Kakemega | Joint management unit will developed. Cooperation on law enforcement, rural and tourism development |
| Arabuko-Sokoke | Joint management established. Cooperation on law enforcement, tourism development and problem animal control |
| Shimba hills | Joint management established and plan prepared. Community wildlife programme to |

| | |
|---|---|
| | conserve wildlife in Mwaluganji corridor |
| Mangroves | Mapping and survey completed. Joint FD/KWS management unit to be established. Informal collaboration occurring in many districts. Support from Dutch wetlands programme |
| Mount Elgon | Informal collaboration well established, and collaboration with Uganda side planned. IUCN supported project initiated 1998 |
| Marsabit | Informal collaboration, support from Interaid (an NGO) |
| Bonjoge | No management. FD/KWS collaboration over gazettment |
| Other Forest Reserves to be included: Mathews Range, Mount Kulal, Mount Nyiro, Chyulu, Ngare Ndare, Nyambene, Ngaya, Mukogodo, Cherangani, Tinderet, Leroghi, Lembus | |

Sources: Kenya Wildlife Service and Forestry Department 1991; Wass 1995

Similar arrangements could be used with local communities where such co-management would improve the conservation status of an area and improve benefits to communities.The Kenya Indigenous Forest Conservation (KIFCON) project established a set of guidelines for the management of natural forests (Wass 1995) which have been extensively discussed, but not formally approved by the Forestry Department. They provide for considerably more participation by rural people in forestry management than the 1994 draft policy, but do not go as far as calling for collaborative management arrangements between rural people and the Forest Department, and/or KWS, except by stating that *"agreements about community participation should be of a long term nature in order to obtain genuine commitment of both government and communities"* (Wass 1995).

***Box 5.16 Memorandum of Understanding Between KWS and the Forestry Department in Kenya***

Recognising that Kenya's forests are home to a large proportion of the nation's wildlife, are important in safeguarding water supplies, and that forests occupy only a small area of the country while wildlife is under threat from human activities, the Kenya Wildlife Service and the Forestry Department of the Ministry of Environment and Natural Resources entered into a Memorandum of Understanding (MOU) for the Joint Management of Selected Forests in Kenya in 1991, to provide effective conservation and management of biological resources in Kenya's forests. The duration of the MOU is 25 years, but is subject to joint reviews every five years.

Forests are under the jurisdiction of both the Kenya Wildlife Service and the Forestry department. The Forestry Department is responsible for managing the forest estate to achieve production and/or protection functions in and around forests, including traditional use of forest resources by rural communities. KWS manages wildlife in and around forest areas. The primary objectives for jointly managing these forests is to ensure the conservation of Kenya's biological diversity by preserving:

- Selected examples of the different forest communities including forests, woodlands and mangroves
- Populations of endemic and threatened species of plants and animals, and other species judged to be of special concern
- Areas that are important for maintenance of the genetic diversity of plants and animals, to maintain the functioning of ecological processes eg. regulation of water flow, soil conservation and the nutrient cycle.

The secondary objectives for jointly managed forests include economic exploitation on a sustainable basis for forest products, tourism and recreation.

In order to achieve their objectives detailed management plans are made for the forests selected for joint management. A joint steering committee comprising representatives of each agency oversees the implementation of the plans. The management plans are approved by both the Director of KWS and the Chief Conservator of Forests. Joint patrols and protection include reporting and communication arrangements, training forestry and wildlife staff, protective fencing of areas of human wildlife conflict, extension work to win local cooperation and support in conservation, as well as survey and research work.

Under the MOU the Forestry Department continues to regulate and control exploitation of forest products in consultation with KWS. KWS on the other hand continues to manage wildlife, and develop and maintain facilities and infrastructure.

The MOU also touches on revenue collection from the forests. Revenue from tourism is normally collected by KWS, including visitor entry fees into parks, lodge contracts, all banda and campsites, and franchises and contracts for private sector operation of tourist-oriented facilities, from culling and hunting of animals which may be undertaken in future. The Forest Department collects revenues from existing agreements on tourist facilities in forest reserves, from forest products such as royalties, and fees for timber, poles and fuelwood.

*Source: Kenya Wildlife Service and Forestry Department in the Ministry of Environment and Natural Resources 1991*

### *Coastal Collaborative Management*

The mangrove forests of the Kenya coast are an important conservation resource under great threat from commercial exploitation. It is estimated that mangrove forests cover approximately 54,000 ha (Doute, Epp et al. 1981), and there is close interdependence between the health of the mangrove forests and other marine ecosystems (Wass 1995). People living near the mangroves have been using them for building poles and domestic fuelwood for hundreds of years. But population pressure, combined with the commercialisation of mangrove poles in the construction industry has made this demand excessive. It is estimated that nearly 500,000 people are thought to depend on mangrove for wood (Ferguson 1993). Extraction has now

reached unsustainable levels. There is need for responsible local level management of these mangroves, perhaps following the Tanzanian example (Box 5.11).

Kiunga Marine and Dodori National Reserves are situated in North Eastern Kenya, and were gazetted by the local county council, though are now managed by KWS (Church 1998). Since 1996 KWS and WWF have been working to achieve participation by the local people in the management of the two reserves, and in particular the marine reserve. Prior to this the communities had relatively unrestricted access to the reserve's resources, so a key task was to foster responsibility for conservation and sustainable resource management. One specific objective is to help local community resource user groups secure their place in resource use within the two reserves and attain the capacity to manage the resources sustainably in partnership with others (Church 1998). Participatory tools have been used to help build trust with the local villages so as to overcome suspicions on behalf of some of the stakeholders, some of whom have now formed village-reserve committees. Local committees within the reserve are protecting the nesting sites of sea turtles and baseline work has been implemented as the first step in a consensus-based management plan for the reserves which actively and responsibly integrates the local communities. One key lesson learnt to date is that responsible community-based natural resource management takes time to evolve (Church 1998).

## 5.4 Comment

Collaborative management in Uganda and Tanzania has provided a number of lessons (see Box 5.17). From a policy perspective in Uganda, the most serious shortcoming has been that the initiatives, in almost all cases, has been undertaken by donor funded projects. While UWA expressed support, and the policy strongly encourages initiatives that provide tangible benefits to communities, reservations remain at all levels of the organisation. UWA could respond to this situation by allowing resource access agreements to continue without adequate monitoring and support, or terminate them on the grounds of incapacity to support them. Either of these courses could prove damaging, both to the protected areas, and to the retention of positive relations between park authorities and local communities. UWA has yet to demonstrate that it has either the capacity or the commitment to provide consistent direction and support. A second concern is over UWA's failure to take a leading role in community conservation programmes. There is a danger that they may be denied at a future point in time, or abandoned, and labelled as 'donor driven' programmes not in the interest or control of the authorities.

***Box 5.17: Community Conservation Practice: Some lessons***

- Identify and address diverse interests within local 'communities'
- Establish a forum for negotiations between the different stakeholders
- Evaluate costs and benefits of conservation for local users at household, community and district levels
- Build government capacity to foster negotiations over customary systems of tenure and resource access (rather than restrictive legislation and enforcement)
- Devolve control of wild resources to established local management systems
- Give long term commitment to individual projects managed according to principles of transparency, accountability and equity.

*Source: Homewood, Kiwasila et al. 1997; Gillingham 1998; Barrow 1998*

Despite these concerns, Uganda is in the forefront of community orientated national park management in Africa. Policy allows for up to 20% of the national parks to be used by communities for negotiated and controlled resource harvesting. With the exception of Lake Mburo National Park, which has negotiated access to water and fish with local communities, and Queen Elizabeth National Park, where management agreed to limited fuel wood collection and papyrus reed harvesting, the principle of allowing access to park resources has largely focused on the new forest parks, by-passing the older, savannah national parks. In such savannah parks collaborative management agreements are more likely to involve pastoralists and access to dry season grazing. General resource access may be less of an issue in expansive land use systems than access to critical resources at critical times. Lake Mburo National Park, for example, has twice in the last decade allowed large numbers of cattle (as many as 80,000) and their herders into the park during severe droughts.

The potential exists in Kenya for the use of collaborative management agreements for improved natural forest management. The 1994 draft forest policy, though not specific on collaborative management arrangements, nevertheless allows for it. A similar situation exists in Tanzania and Uganda. Given the pressures on government agencies and forest departments in particular, collaborative management represents a logical mechanism for improved natural forest management. Each country is making tentative practical and policy steps to realise this, though each is wary of the loss of control implied by devolution of rights and responsibilities to rural peoples. Protectionist mentalities are only slowly giving way to more enabling and facilitatory negotiated ways of undertaking conservation. The Forest Department in Tanzania has gone furthest with over 300,000 ha under some form of collaborative management with communities and villages.

# 6. Community-Based Conservation

In its broadest sense, community-based conservation entails natural resource or biodiversity management by, for, and with the local community (Murphree 1996b). Community-based conservation reverses top-down, centre-driven conservation by focusing on the people who bear the costs of conservation (Western and Wright 1994). Advocacy for community-based conservation is driven by several perceptions: the importance of areas outside direct state control for biodiversity conservation; the inability of state agencies to manage these conservation areas; the potential for cost-effective local management based on social sanctions; the need to draw on detailed local knowledge of ecological dynamics; and enhanced motivation to conserve natural resources when this creates economic benefit.

Economic improvement is both morally imperative and essential for environmental sustainability. Previously economic growth and environmental protection were carried out in isolation from each other and from the local level, often resulting in accelerated degradation. Thus *"the deeper agenda, for most conservationists, is to make nature and natural products meaningful to rural communities. As far as local communities are concerned, the agenda is to regain control over natural resources, and through conservation practices, improve their economic well being"* (Western and Wright 1994). As a means to improve their economic well being, communities will only invest where they can get better and quicker returns. But while there are many positive aspects about the outcome of economic tradeoffs which lead to conservation choices, there are many other situations where the economic tradeoffs are unlikely to lead to conservation choices.

Community-based conservation is still in its infancy in East Africa, though significant initiatives have started in Kenya over the past few years. Group or village ranches are found in many of the rangeland areas of Kenya and Tanzania. Although many lie in areas important for conservation, historically rural people living in such areas have not been involved in, or significantly benefited from, conservation related enterprise. Where they have it has been peripheral, and characterised by exploitation. However, there are notable exceptions; recently there have been concerted efforts to develop sustainable enterprise projects with such rural communities in some group and village ranches. Examples include the formation of Mwaluganje Community Game Reserve and Kimana Game Sanctuary in Kenya, the concession agreements and local level involvement of Dorobo Safaris with villages in the Simanjiro plains to the east of Tarangire National Park in Tanzania, and the evolution of conservancies in Kenya and Wildlife Management Areas in Tanzania (Leader-Williams, Kayera et al. 1995a; Robin Hurt Safaris 1995; Songea and Nyanchuwa 1995; Makilya, Lembuya et al. 1996; Tibenyenda 1996). Some important lessons learnt during the process are that it takes a great deal of time to plan and implement such projects in a manner that is most likely to be sustainable, and a great diversity of activities are required to ensure success.

There are a number of options for generating conservation-based income for communities outside protected areas. Hunting, game farming and non-consumptive uses such as ecotourism are becoming increasingly important, but all have mixed potential in their ability to promote community conservation (Table 6.1, Barrow, Bergin et al. 1995a; Barrow 1995). Benefits from tourism tend to accrue to commercial interests that dominate the industry at either national and/or international levels. Such companies may have concessions, lodges etc. either inside or

external to protected areas. Their activities may, in some cases, provide significant benefits to local resource users. But, unless the benefits are equitably negotiated, and dividends accrue in a mutually agreed transparent fashion, then this is not a true partnership. There is clearly the potential for more responsible private sector-community arrangements.

The hunting industry in Tanzania is operated by national and international hunting companies, and carries out its operations in Wildlife Division-controlled areas. Few benefits accrue back to the rural communities who live in such areas. The Wildlife Division shares 25% of certain types of revenue with district councils, but this rarely benefits the rural people affected. The Cullman Wildlife Project and the Selous Conservation Project are efforts to foster an improved conservation ethic through sharing hunting benefits (Baldus 1991; Krishke, Lyamuya et al. 1995; Robin Hurt Safaris 1995), while hunting in both Kenya and Uganda is still banned.

***Table 6.1: Land Use and Conservation Enterprises***

| Type of Land Tenure | Some Examples | Potentials and Constraints |
|---|---|---|
| Private or company lands | Ranch hunting (Tanzania), cropping (Kenya); game farming and ranching; nature ecotourism | **Potentials:** Commercial focus, benefits and dividends to individual, company. Conservation value more easily integrated into land management; clear authority, responsibility and decision making<br>**Constraints:** Does not benefit the majority of poor rural resource users, who still pay conservation costs; large land areas required |
| Group, village lands - held under statutory law | Hunting (Tanzania), cropping (Kenya); community wildlife reserves and sanctuaries, for example Kimana and Mwaluganje in Kenya; cultural homesteads and curio sales, for instance in Maasai land; ecotourism | **Potentials:** Involvement of significant numbers of poor rural people to support sustainable conservation as a component of a viable land use system<br>**Constraints:** People normally have a subsistence focus. Establishment of enterprise projects requires much commitment and is time consuming. Potential for exploitation high. Difficult decision making processes; communities often divided |
| Lands held under customary tenure: title vested in local authority | Hunting (Tanzania); tourist lodges, *bandas* and campsites; walking, horse and camel trips; cultural homesteads and curio sales - Samburu, Maasai | **Potentials:** Many such lands are important conservation areas, e.g. in Kenya, and where conservation can play a significant economic role to rural people<br>**Constraints:** Security of tenure not vested in rural people. Potential for exploitation high. Difficult to create legal groupings when tenure not assured |

Source: Barrow, Bergin et al. 1995a; Barrow 1995

Conservation related enterprises that are based on private or company commercial lands in areas of important conservation value may be owned and managed by land owners, or as part of a negotiated lease agreement with a national or international company. A number of ranches in Kenya, for instance around Laikipia, and some in Tanzania have such enterprises. Returns from tourism create a bundle of economic choices for the land owner. In some cases conservation has become the main economic choice, for example Lewa Downs Ranch in Laikipia, which has significantly reduced its livestock enterprises in favour of wildlife related business. Such conservation related economic activities are helping land users become more responsible with respect to conservation as the power to generate tangible benefits increasingly rests with them.

Communities occupying lands without secure title, such as the trust lands of Kenya, are in a more difficult position. Although the tenure of these lands may be customarily recognised, it is vested with local authorities, not local communities. This makes successful community-based enterprises difficult, and where there are conservation related enterprise projects, the benefits are more likely to accrue to the local authority through leases, and not to local people.

## 6.1 Uganda

In Uganda, changes in conservation law and policy (Republic of Uganda 1993, 1996) have created the potential for community-based conservation activities. Inclusion of provisions for granting use rights, and the establishment of community management areas (similar to Wildlife Management Areas in Tanzania), as a category of conservation area has created both the climate and the legal structures for community-based conservation.

There are already a few existing community-based conservation projects in Uganda, though they are donor and NGO driven. USAID supports the Shea Nut Tree Project, an NGO that works with communities to promote the conservation of the Shea Tree (*Butyrospermum parkii*) on their own lands. CARE's Queen Elizabeth National Park Fishing Village Project includes support to the Fisheries Department for more community focused fish conservation approaches (Box 6.1). The Forest Department has received considerable technical expertise through Britain's Voluntary Service Overseas and USA's Peace Corps. This has led to the development of a number of small community-based ecotourism initiatives to link forest reserves to local communities.

***Box 6.1: Fishing Villages Inside Queen Elizabeth National Park***

Queen Elizabeth National Park presents another set of issues with significance for community conservation. The park, gazetted in 1952, contains within its boundaries two large lakes, Lake George and Lake Edward, reported as two of the richest inland fisheries in Africa (Olivier 1990). The park was created during a period when the area had been largely depopulated by the colonial government in the fight against sleeping sickness. This could not, however, prevent the return of several communities who had long existed in the area as subsistence, and later, commercial fishing communities. Ten villages currently exist in the park as enclaves. Although originally intended to be nothing more than 'work camps' by the park authorities, they have evolved into villages and small towns with an estimated total population in 1988 of 20,000 (Infield 1989). The annual fish catch was valued at $5 million in 1987 (Olivier 1990). Despite occasional attempts by the park management to remove villages from the park, and a general tension between the park authorities and the fishing communities, the industry has continued given its importance to the local economy. In recognition of this the park was declared a Biosphere Reserve in 1979, and the current management plan provides for zoning of the park into strict conservation areas, tourism areas, multiple use areas, and development areas.

Community conservation initiatives in Queen Elizabeth National Park have developed largely in relation to the existence of the fishing villages. The peculiar nature of the villages has, however, made the development of community programmes difficult. The villages have a small core of permanent residents, but a large number of transient workers or business people, attracted by the ready availability of cash. Infield (1989) found that 82% of the population was born outside the villages, while 59% had land outside the park (Infield 1989). The majority of the inhabitants are hired labour from outside, employed by the boat owners who hold fishing rights. They have little long term interest in the development of the villages. Many of the boat owners do not, themselves, view the villages as their residence. Early initiatives included negotiated agreements with communities to allow access to firewood in the park, used for both domestic cooking and for fish smoking. Agreement was also reached to allow harvesting of papyrus for the roofing of village houses. More recently, a CARE project has been initiated to work with the fishing village communities on improving fishing methods, developing improved fish smoking kilns to reduce the quantities of fuel used, and establishing wood lots to supply the demand for fuel wood without recourse to the park's wood resources.

Examples of communities benefiting from conservation outside protected areas have been more difficult to find. The Game Department formerly had responsibility for the control of hunting, which took place mainly on lands occupied by local people. Few benefits flowed back to local people and communities, and those that did were usually *ad hoc* and incidental. The flow of benefits was reduced by the hunting ban of 1978 in response to the decimation of wildlife during the 1970s. Despite the ban, however, it is clear that hunting has never ceased. Though illegal, this activity has been viewed as a benefit to communities in wildlife areas. For example, it is estimated that as many as 10,000 Impala were taken off private lands around Lake Mburo National Park in a five year period (Lamprey and Mitchelmore 1996). The value of these Impala, approximately $300,000, mostly went to a few individuals, including corrupt members of the Game Department. Communities certainly received some share of this value, and also gained access to the meat itself. With the merger of the Game Department and Uganda National Parks in 1996 to form the Uganda Wildlife Authority, and the accompanying legislation that allows for the granting of use rights, it is reasonable to expect that community benefits from wildlife resources outside protected areas will increase, and may help reduce illegal hunting. Box 6.2 provides an example of this potential.

***Box 6.2: Kyambura - an experiment in the privatisation of wildlife management***

Kyambura was gazetted as a game reserve to act as a buffer zone around Queen Elizabeth National Park. During the years of chaos it suffered badly from encroachment, and by 1988 settlers had converted about 20% of the reserve to bananas and other subsistence crops. By 1991 an estimated 518 families were found living within the reserve boundary, having entered during the previous five to 10 years from neighbouring communities. Since the settlers on this land had no long term rights, having only recently arrived, it was possible to reverse the encroachment. In 1988, the President visited the area and supported the game department in demanding that all illegal dwellers leave the reserve. As most had access to land outside reserve, they did so. Between 1988 and 1991 over 200 families moved back to their lands outside the reserve.

Despite the partial success of government in removing encroachers it was clear that the Game Department had limited capacity to prevent a recurrence of the problem, and had no capacity to create tangible economic benefits through the management of the reserve. Kyambura thus became Uganda's first experiment in the privatisation of wildlife management, when a contract was signed with a South African company. The primary hope behind issuing this contract was that private investment would create economic returns, some of which could be shared with local communities and thus reduce the threat to the reserve from future encroachment. Though there is little evidence of significant levels of benefits reaching local communities, cash donations have been made. Furthermore, anecdotal evidence indicates that a positive relationship has been created through the active involvement of the reserve's management in problem animal control, which has both reduced crop damage and provided meat to the communities. It is interesting to note that Kyambura Wildlife Reserve is one of the few protected areas where growth in large mammal populations has been recorded between 1992 and 1996 (Olivier 1990; Lamprey and Mitchelmore 1996).

Part of this success may be attributed directly to the 1988 visit of the President and his clear support for conservation. In addition, the Wildlife Club of Katerere, possibly the first independently initiated wildlife club in Uganda, was formed in 1988, and worked in and around the reserve area. The objectives of the club were to raise local awareness of wildlife conservation issues, and be a vehicle for environmentally sustainable community development activities. The club, which had no external support, started an anti-poaching campaign amongst the community, which, combined with the work carried out by the investor, seems to have been successful.

Of interest and long term concern is how the use rights legislation will be implemented. Community conservation should enable land owners to derive economic benefits from conservation and contribute to rural livelihoods. Though conservation objectives should be a secondary concern, the potential influence that use rights could have on land use is of great interest to conservation. Creation of tangible and predominantly economic values will support conservation on private or communal land, in the absence of which these valuable natural resources may disappear. Given the growing population and land use pressures, many conservation values are still likely to disappear with time. Those which survive will do so if conservation can become integrated profitably into local land use.

How can resources of conservation value be managed by local communities, in either consumptive and non consumptive ways, to yield economic benefits to those communities? The inclusion of use rights in the new legislation is an important step, but in itself is inadequate. Until regulations for implementation are developed, and approved by government, communities will still be unable to gain benefits legally from wildlife outside protected areas. A number of initiatives have been carried out to support the eventual implementation of use rights. The work carried out by the National Environment Management Agency (NEMA) with World Bank and USAID support, to build the capacity of local and district authorities to manage wildlife resources is of central importance. Preliminary steps towards designing a pilot wildlife farming project have been supported by AWF's Community Conservation for UWA project through a series of workshops to lay the ground at local and national levels. Support has also been provided for the development of guidelines for the implementation of use rights.

The response of government to these initiatives remains to be seen. There has been willingness to see certain use rights implemented, including those that would allow the establishment of an internal pet trade in wild animals, and those that would allow ranching or captive breeding of certain species (eg. ostrich, crocodile, guinea fowl) for commercial purposes. Government is likely to be more reluctant to grant use rights for activities that are more controversial, difficult to monitor and control, and for which there is a much greater public demand, namely hunting and game farming rights. The World Bank's proposed PAMSU Project in Uganda has a significant component that will focus on wildlife conservation outside protected areas. It might prove to be a lever for progress towards private individuals seeking use rights for farming, or community-based management for wildlife on communal lands. In both these cases, ecotourism based projects could also be promoted as well as consumptive use.

While the policy for community-based conservation is enabling in Uganda, it has yet to be adequately translated into practice and procedures. At present, UWA appears to lack the capacity to achieve this. Continued failure to implement community-based conservation will certainly result in wildlife continuing to disappear from rural landscapes as they provide negative economic returns to land users.

## 6.2 Tanzania

Community-based conservation in Tanzania has undergone a period of incubation. The Ngorongoro Conservation Area (NCA), established 35 years ago, has been Africa's pioneering experiment in combining community development and wildlife conservation (Box 6.3), and its history has been well documented (Homewood and Rodgers 1991; Kijazi 1995; Thompson 1997b). The NCA has achieved much in the 35 years since it was established, and helped pave the way for many of the other community-based conservation initiatives in East Africa and further afield. However, though the resident Maasai people and wildlife have continued to coexist in the NCA, the Ngorongoro Conservation Area Authority is facing increasing difficulties in reconciling conservation and development, particularly as human populations continue to grow and demand more development inputs (Bensted-Smith and Leaver 1996; Lane 1996; Taylor and Johannson 1996). Many of the challenges relate to land use conflicts and the related distribution of benefits. There are some similarities between the situation in the Ngorongoro Crater and Mkomazi Game Reserve (Box 6.4).

**Box 6.3. The Ngorongoro Conservation Area**

The Ngorongoro Conservation Area is supposed to be a multiple land use area with Maasai pastoralists co-existing with, and benefiting from, the wildlife in and around the crater area. However, the Ngorongoro Conservation Area Authority (NCAA), responsible for the management of the Ngorongoro Crater and its surrounds, has had a very mixed reputation for the extent of its community involvement and range of benefits which accrue to the local communities (Perkin and Mshanga 1992).

Resident pastoralists in the NCA are assured of rights to habitation, grazing, and access to water and salt. However, the actual accrual of benefits resulting from tourism has been less clear, and has caused an increasing amount of conflict between the resident peoples and the NCAA.

The NCAA recently developed a new general management plan for the area (Ngorongoro Conservation Area Authority 1995). Despite criticism (Lane 1996; Taylor and Johannson 1996), the development of this plan has

been a more participatory process than any preceding it (Bensted-Smith and Leaver 1996). While not perfect in terms of the extent and scale of local consultation, it provides for an improved means of developing greater Maasai participation in planning for the area. A series of workshops was held first at the local level, and then in representative fora with other stakeholder groups.

The GMP has been an effective vehicle for improved understanding between representatives of wildlife and conservation groups, the tourist industry and the pastoralists' representatives; many residents openly stated that this was the first time that the NCAA had actively sought the views of the local people concerning future management. The GMP sets out basic directions for planning, operations and management of the area to:

- maintain a dynamic multiple land use system which perpetuates the historical balance of people and nature;
- conserve the biodiversity and ecological integrity of the Serengeti ecosystem and Ngorongoro Highlands;
- conserve the area's internationally significant palaeontologial and archaeological sites and resources;
- protect water catchments vital to the region's ecology and residents;
- safeguard and promote the rights of indigenous residents to control their own economic and cultural development in a manner that leaves exceptional resources intact;
- encourage responsible tourism which benefits the local, regional and national economy;
- provide opportunities for interpretation, education, and research of the area's natural and cultural resources;
- maintain and promote those values for which the area is designated as a World Heritage Site and International Biosphere Reserve (Ngorongoro Conservation Area Authority 1995).

A major reorganisation and streamlining of the community development department, and measurable targets for performance have also been proposed.

It is important that the participatory process which the GMP started is actively continued and fostered. Continued participation in planning, and agreed rights and responsibilities for all the parties, will be key to the future success of the NCA as a multiple use conservation area. Of particular concern is how the NCAA will handle such issues as integrating livestock and wildlife migration routes, providing support for transhumant pastoral production, land and water rights, supporting community resource tenure arrangements, food security and the sharing of benefits from the NCA. These will be key issues to integrate if the NCA is to remain one of the wonders of the world.

***Box 6.4: Whose Rights, Whose Roles? Mkomazi Game Reserve in Tanzania***

Land, water, grazing, and wild resources are important to pastoralist and farming households in the Mkomazi area. They all depend on fuelwood for energy, often gathered illegally in the reserve. A high proportion of wood is used to make charcoal, again often illegally. Most (92%) farming households make regular daily or weekly use of wild plant foods gathered mainly in the reserve. Sale of gathered resources is an important source of income. A small proportion of households specialise in beekeeping and honey production, for which the reserve has great potential. Poorer women and young people sell wild foods for small, but significant amounts. The importance of the reserve for pastoralists can be seen by the number of cattle using it. Before the mid-1980s, between 20,000 and 90,000 cattle would use the reserve; however, this number was highest from the mid-1970s to the mid-1980s due to lack of pastoralist responsibility for the area, as they no longer had customary control and the government did not have the ability to control grazing access.

Conservation bodies were quick to blame pastoralists for allowing too many people to graze too many livestock in the game reserve areas. It was also claimed that the pastoralists killed wildlife, consumed large amounts of wood for fuel, building poles and fencing. As a result of such statements, the Kilimanjaro Regional Development Council agreed in 1988 that the pastoralists and their livestock should be removed from the reserve. The pastoralists stressed that their interests needed to be considered as well as those of wildlife and suggested some form of grazing rotation which would integrate both wildlife and livestock in a more systematic manner. However this did not happen and eviction resulted with devastating losses (Mustafa 1998). To resolve this continuing conflict, the Pastoral Network of Tanzania in 1992 proposed that the Mkomazi Game Reserve should be established as a multi-purpose land use area, and that residence and grazing rights should be restored to the evicted pastoralists. They also proposed that the residents should participate in the control, management and future development of the reserve (Mustafa 1998).

Currently there are several levels of conflict, including low level contravention of reserve regulations, particularly extraction of firewood, hunting and grazing. One of the more extensive pressures is grazing inside the reserve – either as daily incursions or as longer-term invasion by large herds, particularly during the short and long rains. There is also some evidence of elephant hunting. As a result Mkomazi has reached an impasse. The deadlock between state authority and community rights drags on in the course of day to day interactions around the borders of the reserve. Mkomazi does not contribute to the national purse or fund itself from tourist or hunting revenues. Its main source of revenue comes from imposed fines which do not even begin to cover the costs of running the reserve. They instead represent a source of tension and hardship. As the interest of the government is, increasingly, to foster community conservation, and to create good relations with villagers living around the reserve, other ways to enable communities to benefit from reserve resources must be investigated.

*Source: Homewood, Kiwasila et al. 1997*

In the early 1990s the GTZ-supported Selous Conservation Programme was generating lessons from the field (Box 6.5), and applying experiences from Zimbabwe, Zambia and other countries (Baldus 1991; Krishke, Lyamuya et al. 1995).

The Misali Island Conservation Area of Pemba, Tanzania is the basis for an innovative approach to community fishery and coastal resource management (Cooke and Hamid 1998). The fisher community is highly diverse, comprising 1640 fisherpersons from 29 coastal wards or *Shehias* (Cooke and Hamid 1998). The basic approach has been to consult the community fully and to involve them directly in formulating objectives and workplans, and to evolve a sustainable mechanism for community participation in the long term management of Misali. This led to the development of a committee system as the principal means of decision making by the community, and legislation with an outlined management plan to legitimise this system and working resolutions. Legislation developed by the project aims to ensure that the community has an effective collaborative role in management through the granting of powers for management to a management committee, which is dominated by community representatives. In order for this to work more efficiently it is proposed to create the Misali Island Conservation Association as an NGO which can solicit for funds and project activities. The community response to date appears to have been very good, with the lesson that full

community participation must be the basis for any successful local protected area in such places (Cooke and Hamid 1998).

***Box 6.5: Selous – Do Benefits Outweigh Costs?***

The Selous Conservation Programme was established in 1988 as a response to the destruction of wildlife during the later 1970s and early 1980s. It is a bilateral programme between the governments of Tanzania (Department of Wildlife) and Germany. Its objectives are to safeguard the existence and ecological integrity of the Selous Game Reserve as a conservation area, and to reduce significantly conflicts between the reserve and local populations by implementing village wildlife management and utilisation on a sustainable basis (Baldus 1991; Krischke and Lyamuya 1991). The project operates primarily as a conservation initiative, not a rural development programme. It aims to encourage the direct involvement of rural people in wildlife management and conservation by offering tangible wildlife-related benefits (Baldus 1991; Krischke and Lyamuya 1991). Buffer zones have been established around the reserve for the sustainable use and conservation of wildlife by local people. These buffer zones are located on agriculturally marginal lands which are unsuitable for cattle keeping due to tsetse fly (GTZ and Department of Wildlife 1994). The project works with 41 villages in five districts.

A consultative land use planning process for the buffer zone was undertaken and enabled the villages to apply for formal land title. It was not possible for each village to have its own wildlife management area (WMA). However the villages cooperate in the management of the larger WMA, and the benefits of wildlife utilisation are shared equally amongst the villages. Village wildlife committees were created and village scouts appointed to take responsibility for the management of wildlife on village lands.

Wildlife utilisation began in the 1992/93 hunting season. Overall utilisation of the villages' hunting quota has been about 50%. In addition to the revenues generated from the sale of meat, the villages also receive an annual donation from the tourist hunting operation. The total income for nine villages in the 1994/95 hunting season was US $2,310 from the sale of meat and hunter operation donations. As this community wildlife operation is still in its preparatory phase it is expected that the revenues will increase in future. In addition, villagers of the area do recognise that wild resources make a necessary and complementary contribution to their household subsistence – being used to meet basic needs for housing, material and energy.

However, as the villages still had not received formal land title, they did not have the authority to harvest the economically valuable resources of wildlife and timber on their lands. These are being used by outsiders – tourist hunters and pit sawyers who are sanctioned by the state. Most villagers depend on subsistence agriculture for their subsistence and cash needs, and in this context the village wildlands can impose negative impacts on the village. The incentives to conserve are not high enough compared with the costs, and there is not a strong motivation for collective action for the sustainable management of wildlife. The impacts on human/wildlife relations have to date been limited. The balance of costs and benefits have yet to tilt in the villagers' favour. Promoting collective action by rural communities can be difficult especially where community cohesion is weak. Socio-economic status and political influence are two important divisions which can hamper fuller community participation at the level of the village grass-roots.

Source: Gillingham 1998.

The wildlife sector is now searching for a way to integrate the various lessons which have been learned from these activities and to implement them more broadly.

In the mid-1990s the USAID-funded Planning and Assessment for Wildlife Management (PAWM) project, managed by AWF and WWF, drafted a new sectoral policy as well as a new specific policy for community-based conservation (Baldus 1991; Krishke, Lyamuya et al. 1995; Wildlife Sector Review Task Force 1995). From this evolved a new wildlife policy, recently approved in Tanzania (United Republic of Tanzania 1998).

This new policy has a strong community conservation focus in its vision: to *"involve all stakeholders in wildlife conservation and sustainable use, as well as in fair and equitable sharing of benefits; promote sustainable use of wildlife resources; and contribute to poverty*

*alleviation and improve the quality of life of the people of Tanzania"* (United Republic of Tanzania 1998). The previous concept of 'game controlled areas' in which the central government claimed to manage wildlife populations on community or open lands is being replaced by a new system of Wildlife Management Areas (WMAs) *"to promote the conservation of wildlife and its habitats outside conservation areas, and to transfer the management (WMAs) to local communities for the taking care of corridors, migration routes and buffer zones, and ensure that the local communities obtain tangible benefits from wildlife conservation"* (Tanzania United Republic of 1998).

The recently-formed community-based conservation section of the Wildlife Division will track and support the establishment of Wildlife Management Areas, based on lessons learned in Selous and other pilot areas (Baldus 1991; Leader-Williams, Kayera et al. 1995). WMAs are anticipated to operate around certain national parks and game reserves as well as in game controlled areas. No WMAs have yet been designated, though 38 potential WMAs have been identified (Boshe 1996).

While the policy is innovative and shows strong support for community conservation, it still requires changes in the substantive wildlife legislation, and there is a major gap between policy and practice, for example with respect to what has happened around Mkomazi, as well as Moyowosi, and Usangu swamps (Homewood, Kiwasila et al. 1997).

## 6.3. Kenya

A large proportion of Kenya's wildlife is found outside the protected area system. However, when KWS was formed in1989 there was no formal community wildlife department – instead the focus was on safeguarding its protected areas from the rampant poaching which dominated the 1980s. The KWS Policy Framework and Development Programme 1991-1996 called for the establishment of some form of community programme, and the Community Wildlife Service (CWS) was created. This evolved into the Partnership Department in 1996 which emphasised the decentralisation of services to the regions, requiring a dramatic attitude change within KWS and of its staff.

The underlying philosophy behind the Community Wildlife Service was that KWS could work directly and indirectly with target communities to demonstrate that wildlife has economic value which can benefit local communities, and that wildlife can 'pay for itself' in various ways (COBRA Contract Team 1994). A pilot utilisation programme has been running in Machakos, Laikipia and Nakuru for the last six years (Heath 1995). The areas selected for experimental wildlife ranching and cropping of specified species on a quota basis were private lands where wildlife populations were not shared with those of parks. The programme would also allow limited marketing of meat and skins. Currently KWS regulates over 50 landowners who are authorised to crop animals under their use rights programme. They also license activities such as ostrich, guinea fowl, crocodile and butterfly farming.

Although the programme has been successful in changing landowner perceptions of wildlife and demonstrating that even very little revenue to individuals can assist in the conservation of biodiversity, it has had several problems associated with regulation. Some have included overestimation of ostrich eggs and chicks, and overestimation of wildlife populations in order to

get larger quotas and using these quotas to crop in unauthorised areas. It has also increased poaching for meat in areas neighbouring these private lands.

KWS began in the pilot districts by offering a 25% share of revenues from gate fees to communities neighbouring parks (Bensted-Smith 1992, 1993; KWS 1992; COBRA Contract Team 1994; AWF 1995; Barrow, Bergin et al. 1995a). Criteria for the revenue-sharing included the importance of the dispersal area, wildlife damage, goodwill and commitment, park revenue, size and needs, conservation value, and other urgent needs (Bensted-Smith 1992).

This policy soon resulted in demands to share revenue by all districts neighbouring parks country-wide. It soon became clear that KWS could not deal with all those demands, and neither could it sustain this level of revenue sharing. There was also no clear linkage in the minds of local communities between the development projects and the well-being of wildlife on their land. Therefore, once projects were completed communities soon forgot that the money they had used was derived from wildlife conservation activities in the park and began to ask for more.

As a result the revenue-sharing programme was converted into the WDF (Wildlife for Development Fund) in 1993, as a mechanism to share benefits and encourage viable conservation related enterprise projects country-wide in areas important for conservation (KWS 1993, 1994, 1997). Contributors to this fund include KWS Revenue-Sharing and the Government of Kenya, and donors - in particular USAID and the World Bank. The WDF was designed to provide a pool of funds to support sustainable community and enterprise development projects for communities which co-exist with wildlife or neighbour protected areas. In this way local people could invest in environmentally friendly income generating activities, as well as projects of a more community development nature. This approach has enabled communities to set up conservation related enterprises, for instance wildlife sanctuaries, concession areas with private sector business, campsites, tourist bandas, and other ecotourism activities (Boxes 6.6, 6.7 and 6.8). The aim of the WDF approach is to benefit rural people, and conserve the biodiversity and uniqueness of these ecosystems (see also Section 8.1.1).

***Box 6.6: Kimana Community Wildlife Sanctuary***

Kimana Community Wildlife Sanctuary is situated along the critical wildlife corridor between Amboseli and Tsavo West National Park. It is owned and managed by the Kimana-Tikondo Group Ranch members.The sanctuary encompasses a swamp fed by two permanent streams, and numerous springs in the upper portion of the swamp, derived from the subterranean waters from Mt. Kilimanjaro. The swamp also supports the seasonal Kikarankot river which feeds two seasonal wetlands, namely Olngarua lo Lochalai and Olngarua Lenkerr. This wetland creates a panoramic view between the undulating Chyullu range and Mt. Kilimanjaro, and is home to a wide variety of wildlife.

Historically, Kimana-Tikondo Group Ranch was a designated hunting area before the hunting ban in 1977. The ban meant that the local community could no longer use hunting income to fund their children's education and other community programmes. KWS's revenue sharing programme, initiated in 1992, meant that the communtiy could again start to accrue benefits from conservation.

There were several positive reasons to establish the sanctuary:

- it would help generate tourism revenues for the local community;
- more viable use would be made of an area that was unsuitable for agriculture due to high salinity levels;
- it would help maintain the important wildlife corridor, thereby creating a larger overall area of conservation.

The Kimana area opened up for tourism in and around the Amboseli area as many tour operators made game drives to the Kimana Group Ranch. The tourism potential of the Ranch was confirmed when Amboseli National Park was closed for three weeks during the floods of 1990. The Group Ranch earned approximately US $2500 in game viewing fees from 118 vans which brought in over 826 tourists during that three week period. Income generated from the sanctuary will be used to pay school and college bursaries, community scout salaries and provide direct dividends to members of the Ranch.

This example demonstrates that substantial synergy can exist between alleviating poverty and environmental conservation. Economic development in wildlife areas is closely linked to conservation and the development of one, to the exclusion of the other, causes imbalances. However, the full potential of this sanctuary has yet to be realised due to a lack of appropriate management skills at the local level (Lichtenfeld 1998).

*Sources: Makilya 1995; Makilya, Lembuya et al. 1996*

***Box 6.7: Mwaluganje-Golini Wildlife Corridor***

The Mwaluganje-Golini elephant sanctuary was the first community sanctuary in the country. It was created to conserve a corridor for elephant movement between Mwaluganje forest reserve to the north and Shimba Hills reserve to the south. Elephants need this corridor to access important areas of their range at different times of the year. Before the creation of the sanctuary, the land on this corridor was owned and occupied by landowners generally under two groups, home owners who are immigrants into the area, and traditional landowners who use their land for agricultural subsistence. There was significant conflict between the landowners and wildlife, and in particular elephants. As a result a lot of effort was put into trying to seek the best ways to resolve these conflicts and create a mechanism for mutually beneficial development (AWF 1994b).

In order to create an area specifically reserved for wildlife use the landowners had to be persuaded to join the wildlife association for the Mwaluganje-Golini Reserve and commit their land for conservation. A recruitment committee consisting of government representatives, KWS, elected leaders and farmers was selected to focus on individuals and families who own land within the corridor area. The recruitment committee used 'focus group discussions' where a group of four to six farmers gathered under the guidance of a group facilitator to discuss the proposed association. The method took time and required patience and tolerance in order to allay the concerns and fears of the landowners. They also had to explain the benefits of the reserve and the association to the farmers, and compare these to the benefits from traditional forms of land use. In order to join the association farmers were required to turn over their land to conservation. This involved signing an agreement for vacant possession of their land with Mwaluganje Community Wildlife Reserve Ltd. Shares would be issued one for each acre or part thereof. Title deeds would remain with the landowners and allocation of funds to participating landowners would be done annually on production of title deeds and on the basis of acreage vacated.

The sanctuary formally opened its doors to tourists in 1995. It draws most of its tourists from the nearby Diana beach. It has a visitor centre, and is planning to develop a small camp. The main interests in the area include elephants, other large mammals, unique flora and a high diversity of butterflies. In January 1998 the Association paid Kshs. 1,000 (approx. $15) per acre to registered landowners within Mwaluganje. With the proposed camp development the association hopes to pay Kshs. 3,000 (approx $40) per acre in the next year.

***Box 6.8: Illngwesi Bandas***

The Ngwesi Group Ranch lies on the edge of the Mukogodo hills and to the north of the Lewa Conservancy, not far from Samburu Game Reserve. It covers about 8,600 hectares and has about 600 members.The inhabitants of the area are the Ngwesi, originally hunter-gatherers related to the Maasai, and now pastoralists living on marginal land in and around the forested hills. However, the ranch also includes some low-lying country, which is little used due to the prevalence of tick-borne diseases, and lies on a major wildlife route.

The Lewa Conservancy which lies to the south of Illngwesi is 30,000 ha of savannah, wetland, grassland and indigenous forest, and has a large population of elephants which range widely and are now thought to be a part of the Laikipia population of 2,500. Wildlife habitat in Lewa would be heavily degraded without the use of neighbouring lands, particularly the Ngwesi group ranch, which is vital for wet season migration of giraffe and elephant. It is important to keep these migration routes open.

The management of Lewa Downs initiated steps to engage the members of the group ranch in wildlife tourism as a way of raising income and creating tolerance for wildlife. They held meetings with leaders of the group ranch to explain the concept, how it would work and the benefits that would accrue from tourism development. As a result the group ranch formed Ilngwesi Co. Ltd. and selected directors with different expertise and experience from the ranch and the neighbouring Lewa Conservancy. The company was given the mandate to manage all tourism affairs within the group ranch. This included supervision of construction of the lodge and its operations.

The Liz Claiborne Art Ortenberg Foundation, with the African Wildlife Foundation and Kenya Wildlife Service, provided a grant for the construction of a self-catering lodge which was completed in December 1996. It is expected to generate approximately US$ 50,000 per year for the community. It has already become a popular destination. To diversify activities, a cultural homestead has been opened and is being visited by tourists from the lodge, Borana ranch and Lewa Conservancy. The lodge employs 26 community members who have been trained to undertake all aspects of running the facility. Marketing and booking is done in Nairobi.

All expenditure is authorised by a general meeting of the group ranch members where a quorum needs to be present in order to make any decisions. The accounts are audited. The community is using money generated from the project for construction, school bursaries and has bought a vehicle to assist with security and transport of sick people to the nearest clinic. Future revenue will be distributed to individuals and some left over for social facilities.

Several lessons have been learnt. Grants can be used to 'kick start' important conservation projects that can have positive impacts on attitudes and the socio-economic well being of local communities. The interest, commitment and partnership with neighbours who have experience and expertise can also be indispensable. The role of the Lewa Conservancy was critical in this project. Finally, proper institutional set-ups at the local level, systems for marketing the tourism product, training of local people and proper financial procedures were all important ingredients in the success of this project. Attitudes in this community have changed and wildlife has once again become the 'second cattle'.

*Source: KWS Partnership Newsletter, November 1997; reports from Lewa Conservancy; KWS reports*

Enabling policies are required to allow land users greater economic opportunities and options to benefit from wildlife so that it can become an economic asset, not a liability. This has led to the experimental addition of wildlife utilisation as an option or production strategy in non-protected areas, in addition to tourism. A detailed wildlife utilisation study was compiled to guide this process (Heath 1995and 1996). Land users who wanted utilisation rights had to demonstrate they could manage their wildlife; carry out wildlife counts, and have them approved by KWS; have access to the necessary abattoirs which required the approval by the relevant veterinary and health authorities; apply for use rights to the director of KWS; and use these rights.

To make wildlife a viable land use option, extensive range areas are required. Communities and land users have responded to this by organising themselves into Wildlife Associations, Forums, Conservancies and Trusts with the help of KWS and various NGOs, such as the African Conservation Centre and AWF (Table 6.2). These fora can bring together several

communal group ranches or several private land owners, resource users or stakeholders interested in a particular resource and area.

***Table 6.2: Wildlife Associations in Kenya***

| Association | Association |
|---|---|
| Golini Mwaluganje Community Conservation Limited (Kwale) | Kitengela Landowners Association |
| Amboseli Tsavo Wildlife Association | Embakasi Landowners Association |
| Machakos Wildlife Forum | Illngwesi Wildlife Co. Ltd. |
| Laikipia Wildlife Forum (now a Limited Company) | Isinya Wildlife Association |
| Nakuru Wildlife Forum | Namunyak Wildlife Conservation Trust |
| Samburu Wildlife Forum | Leroghi-Kirisia Conservancy |
| Olchorro Oiroua Wildlife Association | Waso-Wamba Conservancy |
| Mombasa Boat Operators Association | Kenya Crocodile Farmers Association |
| The National Wildlife Landowners Association | Kenya Taxidermy Association |
| Kenya Ostrich Producers Association | Taita Taveta Wildlife Associations |
| Watamu Fishermen | Association of Mt. Kenya Operators |
| Koiyaki Lemek Wildlife Trust | Maasai Mara Group Ranches Association |

One example of an association of group ranches is the Amboseli-Tsavo Association. This Association was registered in 1996, with assistance from the Wildlife Conservation Society and comprises seven group ranches neighbouring Amboseli and Tsavo West National Parks. Its objectives include providing development co-ordination, and an environment and wildlife conservation forum for the seven ranches. The group aims to conserve the ecological diversity and integrity of the Amboseli and Tsavo ecosystems, and manage and conserve the wildlife on its land to ensure that its members benefit fully and directly. The Association is run by an executive director and is among the first that has been able to raise substantial funding directly from an international donor. Currently the running of the Association is funded largely by USAID and the African Conservation Centre.

The Ol Chorro Oiroua Wildlife Association is an example of an association of individual Maasai landowners. It is in the northern Mara within the Mara-Serengeti ecosystem and was established in 1992 to protect the northern wildlife dispersal areas of the Maasai Mara against encroachment by arable farming. The association neighbours Koyaki and Lemek Group Ranches, two important wildlife dispersal areas. The association previously collected wildlife viewing fees from tourists staying in three lodges in the northern Mara on behalf of its members. Following a dispute which was successfully resolved, the group now collects fees from only one of the lodges, while funds from the other two now go to the Koyaki-Lemek Wildlife Trust which uses part of these funds to provide management for the area and disburses the remainder to its members. The Association was among the first to be established and did so entirely as a community effort without assistance from donors. It has been successful in arresting habitat loss and in demonstrating that wildlife can earn significant incomes as part of integrated land use. The group's success was further reinforced by the decision to reintroduce 10 white rhino from the Natal Parks Board of South Africa in 1995. However the nature of Ol Chorro Oiruwa group ranch membership, its links to the national elite, and the economics of its revenue and its distribution make this an interesting, but atypical example of community conservation.

Other types of associations that have been formed by resource users include the Mombasa Boat Operators Association (MBOA) at the Kenyan coast (Box 6.9), and the Association of Mt. Kenya Operators (AMKO, Box 6.10).

***Box 6.9: The Mombasa Boat Operators Association (MBOA)***

MBOA, with 152 paid up members, was officially registered as an Association with the help of KWS following a workshop in 1992 between boat operators and fishermen operating within Mombasa Marine National Park and Reserve. They sought to establish understanding as a basis for cooperation between KWS and the community whose activities are in and around the marine protected areas. The objectives of MBOA are to improve the boat operators' tourist business, raise funds to assist one another, improve members' economic performance and participate in and promote marine conservation.

The MBOA takes tourists out into the marine parks for a fee. It has received in excess of $10,000 from the KWS revenue sharing programme. In addition it has received 400 identification cards for its members, aluminium boat identification plates, a grant of $600 to match funds raised by MBOA as promised by KWS and a revolving fund to repair boats. Members can borrow funds ranging from $33 to $165, repayable at a maximum period of 24 months at 1% interest. The funds are set aside to help operators improve their boats and minimise pollution. They have also been provided with boat safety equipment, which was purchased and shared among the boats in all the six beaches, and included life rings and snorkelling glasses. The MBOA members have received training, and, together with KWS have been instrumental in the negotiations, and eventual implementation of the Beach Management Programme (BMP). This BMP is providing improved security and general cleanliness of the Kenyan beaches in the north coast, and is being implemented with hotels along the coast, KWS and MBOA. Under it, the burden of collecting park entry fees by the operators has been shifted to the hoteliers.

***Box 6.10: The Association of Mt. Kenya Operators (AMKO)***

The Association of Mt. Kenya Operators (AMKO) is made up of people and organisations interested in the utilisation and conservation of Mount Kenya's natural resources, and includes porters, tour operators, hoteliers, guiding organisations, conservation NGOs, local community and conservation pressure groups. The organisation was formed in 1993 to improve the quality of tourism activities in the Mt. Kenya area and to help in the conservation of Mt. Kenya so as to benefit local communities. The mountain is subject to great pressure from an increasing number of visitors and the growing human settlement around it. Tourism services had become a source of conflict between porters and guides on the one hand and neighbouring communities on the other. Litter is a problem of concern and AMKO has been actively involved in keeping the mountain free of litter.

General problems facing many of these community-based institutions include:

- the lack of management and business skills;
- insufficient funding either from donors, or as a result of their own income generating activities;
- the large areas some of these forums and associations cover;
- the lack of real understanding and commitment of these institutions by their membership, especially when it is large and widely dispersed;
- vested interests among members;
- poor governance;
- the small amounts of benefits whose impacts is not always felt; and
- the lack of a clear policy environment for them to really accrue significant benefits from wildlife.

These various lessons have helped inform and influence research and policy to find ways of reducing conflicts between people and wildlife. Much has been done to research wildlife utilisation and user rights, land use and proprietorship, and the development of a legal base that is consistent with beneficial wildlife use. A revised *Wildlife Act* is waiting to be debated in parliament, which places a much greater emphasis on community conservation.

# 7. Enabling Community Conservation

## 7.1 Current Institutional Arrangements

Earlier chapters have described the work of the region's conservation authorities, together with the range of activities being implemented by those authorities and their partners. This section explores some of the institutional arrangements between the partners in more detail. As a result of the wide range of activities being undertaken, the scope of community conservation and its complexity, a range of institutional mechanisms has evolved to provide synergy to the efforts of official authorities. Many of these arrangements relate to decentralisation processes. Some have been described in previous sections, for example the roles of MBOA and AMKO in Kenya (Boxes 6.9 and 6.10). However it is useful to examine some of the more important institutional arrangements in the region, as important lessons are emerging.

### *7.1.1 Uganda*

Uganda shows a particularly complex set of institutional players in community conservation.

Many NGOs have 'taken over a park' for the purpose of supporting community conservation work. However, this has often meant that these projects develop parallel structures to the existing government set-up. Left largely without support, UNP staff failed to develop sufficient capacity or interest in community conservation initiatives to be meaningfully involved. Positive community responses resulting from the projects were largely focused on the projects themselves rather than on the conservation authorities. These projects, which include CARE's Development Through Conservation project; IUCN programmes supporting Mount Elgon, Kibale and Semliki National Parks; and WWF's support to Ruwenzori Mountain National Park have since increased direct support to park management, through the provision of technical advisors, support for participatory park planning processes, and funding of community conservation programmes.

AWF's Lake Mburo Community Conservation Project implemented its programme through park management structures and staff rather than creating parallel structures, and worked to build the capacity of park staff to implement community conservation programmes. Though project activities were constrained by the capacity of the park's limited human resources, community responses to the programme focused on the park itself. Surveys suggest that local communities have little awareness of the project, though they may be aware of its existence, and relate the benefits experienced and the improved interactions with park staff as emanating directly from the park management itself (Namara and Infield 1997).

A number of these projects, together with UWA, identified the need for community institutuions so that park management could interact with communities on a wide range of issues. In 1993, UNP took the first step towards the development of community institutions on a national basis, the Park Management Advisory Committees (PMACs, Box 7.1).

***Box 7.1: The Park Management Advisory Committee's Institutional Context***

As UWA recognised the need for dialogue and consultation with local communities, so the need for some form of mechanism for these interactions became evident. Uganda has a decentralised political structure comprising of local councils (LCs), from LC1 (village level), through LC2 (parish level), LC3 (sub-county level), and LC4 (county level), to LC5 (district level). This structure provides a potentially important link for direct day to day contacts between conservation area managers and communities, and provides a structural link to district decision making processes. However national parks, wildlife reserves and most forest reserves are under the legal control of national bodies, not local authorities. In addition most of the protected areas border more than one village, and may straddle parishes or even districts. The fact that more than one district may have interests in a particular protected area means that the LC structure as it stands cannot meet all the needs of an institution for dealing with protected area and community issues.

The Park Management Advisory Committees (PMACs) were designed to attempt to overcome this problem. Representation on PMAC is drawn from parishes bordering protected areas. To facilitate this process and deal with specific parish level interests, Parish Resource Management Committees (PRMCs) or Local Conservation Committees (LCCs) were also established. Park and district officials sit on the PMAC, generally as non-voting members, to provide technical information to the committee members. Though PMAC has raised awareness of the need for some formal consultative mechanism, concerns over the degree to which PMACS and PRMCs are representative of the perspectives of communities and problems associated with their close association with the protected area authorities, has led to a re-evaluation of community institutions. The duplication of functions and the failure of PRMCs and PMAC to interact effectively with local government structures has led to the proposal that PRMCs should be replaced by a sectoral committee of local government, a combined Production and Environment Committee. This committee would be responsible for direct interaction with the protected area management on issues affecting parish communities. Representatives of this committee would join with representatives of other parishes surrounding a protected area to deal with larger, regional issues related to communities and the protected area.

The history of PMAC formation, in relation to difficulties identified with it, is illuminating. A clear problem with the institution revolves around its 'ownership'. The question of who identifies with the institution and for what reasons, is critical to its mode of operation, who it represents and what it achieves. PMAC suffers from confused and contradictory 'ownership'. The funding base for PMAC is also critically important. At present, all financial support comes from the protected areas themselves. Not only is PMAC subject to UWA's analysis of its importance in prioritising budget allocations for its operation, it also means that there is a tendency for the protected area management to fund PMAC meetings only when there is an issue of concern or interest to them. PMAC therefore tends to function more as a conduit for protected area management concerns than for those of communities. In addition, the fact that PMAC members are very aware that they are funded by the park greatly constrains the freedom with which they express themselves and the issues they raise.

Prescriptions for PMAC membership set by UNP were rejected by some park managers, who felt it important that PMAC represented ordinary community members from parishes bordering the park. At Lake Mburo National Park, for example, committee membership was drawn only from parishes bordering the national park, and only parish representatives had voting rights. A number of other protected areas have since followed this model. Even then, PMAC members often did not really represent community interests. Not only have members tended to be atypical in many respects (richer, more educated etc.), they have also tended to identify more closely with the interests of the

park, and government in general, than with those who elected them. They have thus often acted as park proxies, educating the community about the value of the park; warning people not to break the laws, and in some cases getting directly involved in policing; and generally representing the park's interests and perspectives.

PMAC has thus largely failed the communities' need for an institution that can adequately represent their concerns to park authorities. PMAC has also failed to meet UWA's needs for a community institution. UWA has its own structures and staff for law enforcement and education, and is well able to represent and further its own perspectives and interest. As its title indicates, PMAC was formed to 'advise' UWA on community interests and perspectives so that these could be properly addressed by park management. PMAC has been largely unable to provide this advice, partly because it is financially dependent, at the discretion of the warden, on UWA, and partly because the individual members tend to perceive themselves as more closely aligned to park interests than community interests. Thus, at the heart of PMAC's problem is the issue of 'ownership' and it is this issue that any reform of the institution must address.

Finally, the lack of formal links between PMAC and the LC system has placed it in an uncertain position. In response to these issues, UWA has undertaken a process of review and has developed a draft policy which proposes to separate any community institution from UWA. To achieve this it has proposed that two committees of local government, the Production Committee and the Environment Committee, both required by law, should join and take responsibility for the management and conservation of natural resources at the local level, and act as the link with UWA. Where particular issues concern a protected area, this committee should provide members to represent the interests of the communities (Uganda National Parks 1994a and b; UWA 1997).

### *7.1.2 Tanzania*

The institutionalisation of community conservation in Tanzania was marked by the TANAPA decision to make CC 'the way we do business' on an organisation-wide basis. This is a rare achievement as many CC initiatives have been criticised for never moving beyond the pilot phase, and for becoming showcase exceptions rather than the rule (Feldmann 1994; Wright 1994). A Community Conservation Service (CCS), part of the staff of the director of park management and conservation, was established to backstop and coordinate fieldwork and is an integrated aspect of park management. A Community Conservation Warden (CCW) is part of each park management team and works alongside the wardens for law enforcement, tourism, works and ecological monitoring. In large parks with different zones, the CCWs are supported by community conservation assistants. TANAPA systematically planned for the expansion of CCS activities and extension of the programme to all 12 parks, and developed a set of national policies for park management around the issue of CC. This policy affirms that CC activities will form an official part of the management strategy for all national parks in the country. Though the Tanzania Wildlife Division is restructuring, and a consistent strategy for community conservation has not yet emerged, a Community-based Conservation unit has been established in Dar es Salaam.

The growth of the CCS in TANAPA has been largely influenced by pre-existing characteristics of the organisation. Fortunately, as a parastatal organisation, TANAPA has a degree of flexibility not

found in line departments of government and this had aided creativity and reduced constraints. For example, the director general of TANAPA was able provisionally to establish the post of Community Conservation Coordinator and later seek ratification from his board. Creating a parallel post in the government Department of Wildlife would have required permission from the Civil Service Commission in the President's Office. Perhaps the most important factor is senior management's belief that TANAPA had both the right and responsibility to experiment with new approaches for the more effective implementation of the organisation's mandate.

The Community Conservation Coordinating Committee, or C4, was established by TANAPA in 1991 to ensure a thoughtful and consistent approach (see Bergin 1996, 1998). The rationale behind its establishment was TANAPA's decision that it could not afford to be sending mixed messages and inconsistent decisions to its neighbours. Since its formation, the Community Conservation Coordinating Committee sits quarterly with the director general as its chairman and the coordinator of the CCS as secretary. Each of the NGOs and projects which are supporting community conservation activities in TANAPA are invited to participate. Key departments whose support is necessary for the success of the CCS, such as finance and planning, are also included. The Community Conservation Coordinating Committee discusses issues arising from the field, and crafts tools and protocols to guide a systematic approach to community conservation. Although specific issues vary in each park, general mechanisms for extension and benefit sharing were proposed and sent to the board of trustees for ratification (TANAPA 1994; Bergin 1995; Bergin and Dembe 1995; Melamari 1995).

TANAPA's CCS, like many other CC initiatives, was started with the support of outside organisations, but unlike many other initiatives, TANAPA has taken ownership of the programme, and receives most of the credit. In doing so, TANAPA has ensured that it has sufficient organisational interest to make the CCS work. This seems to have helped promote the sustainability of the CCS programme (Bergin 1998).

### *7.1.3 Kenya*

KWS, under its partnership programme (see Section 6.3), has been creating an environment conducive for devolution of rights and responsibility to landowners with significant wildlife on their land. The pilot 'wildlife use rights' programme, currently in operation in Laikipia, Machakos and Nakuru Districts, is a clear demonstration of how, in some places, communities who have wildlife on their private land, can earn money through their own enterprises on a long-term, sustainable basis (see Section 6.3). Indeed, pilot activities show that 'wildlife use rights', whether they be tourism-related or consumptive, can provide benefits, and that such activities strengthen communities' abilities to be meaningful partners in the business of conservation (COBRA Contract Team 1994; Heath 1995, 1996).

KWS now realises that it does not have the capacity to manage and regulate an expanded consumptive utilisation programme, neither can it look after all wildlife country-wide without the participation of landowners. The management of numerous individual use rights holders is also too cumbersome for the institution. Any further devolution of wildlife user rights to landowners

must be contingent on the formation of responsible management institutions at the various levels by communities and landowners who live with wildlife. The provisions for their formation are included in the current draft wildlife bill. As a result a national forum, as well as district and local level wildlife associations and forums have been formed to address this need. The benefits of the forums are that they will:

- assist landowners in locating markets and co-ordinate sales of wildlife products;
- be responsible for ensuring that all use rights holders submit monthly returns to the forum and KWS detailing animals shot, together with any sales of meats;
- liase with county councils and the district administration through District Development Committees (DDCs) on local wildlife issues;
- be involved in monitoring wildlife numbers in their respective areas.

The National Wildlife Landowners Association (NWLA) is being constituted as an umbrella network of all community wildlife associations, trusts and zonal wildlife forums (Table 6.2) to develop common approaches towards wildlife conservation and communities in Kenya. The NWLA aims to represent all groups of landowners involved in wildlife utilisation, whether consumptive or non-consumptive. The association will provide a forum for discussion of wildlife issues with the government and KWS; and will lobby government for appropriate policies and protect the interests of its membership through dialogue with relevant authorities. It will collect and disseminate relevant information, provide advisory services and negotiate with various authorities on issues that affect members' welfare.

As the association draws its membership nationally from regional, district and other associations, it will not undertake any wildlife management. Senior members of the association will sit on various regulatory boards which will be established once the proposed bill becomes law. Hopefully the association will be able to play a role in ensuring that its members comply with rules and regulations that will be used to govern consumptive use. Association funds will be raised through subscriptions and annual membership fees.

Ultimately it is hoped that the forums and associations will take on all management matters for wildlife in their areas of jurisdiction, but will continue to require the assistance of KWS on law enforcement and regulation. This will be the level at which wildlife management takes place, management and land use plans are developed and wildlife monitoring is undertaken. It is thus the level at which implementation of programmes will continue to take place.

It is clear that conservation authorities and land users are testing different institutional arrangements to foster the improved and responsible involvement of land users in conservation; create mechanisms for dialogue and devolution of authority; and establish functional and representative structures so that the wide range of stakeholders and stakeholder groups can be responsibly represented. This is all with the aim of conservation and creating improved benefit flows to those living with, or affected by conservation. Lessons are being learnt and these institutional arrangements continue to evolve.

## 7.2 Governance

East Africa has seen rapid changes in population pressures, land use patterns, systems of governance and transparency since the 1960s. This has accelerated over the past 10 years, and has been characterised by burgeoning state bureaucracies in a climate of declining incomes, precipitating a rapid increase in the levels and scale of corruption. Structural Adjustment Policies, retrenchment and decentralisation have all emphasised the necessity for devolving rights and responsibilities from the centre to the periphery. The international community has also been showing an increased interest in governance and civil society. Much policy now supports this, and community conservation is one example of this happening. However, while the role of government and governance has been evolving in East Africa, the bureaucracies are still based largely on colonial models, with their 'command and control' legacies.

***Uganda***

As has been noted, Uganda suffered between the early 1970s and the mid-1980s from political, social and economic chaos, characterised by corruption, civil war and the increasing collapse of the central state apparatus. During the latter years of the Amin regime and for much of the second Obote government, social and political control at the village level was held by individuals. These individuals might have been part of a government body, such as the police or local government, but their authority largely depended on their personality. Government officers tended to personalise their positions, so that, for example, the local Fisheries Officer would undertake control of the fish resource as his own personal resource base. Resource management thinking became, inevitably, very short term. Despite the great strides taken by the current NRM government, the 'personalisation' of government functions and the general collapse of concepts of civic duty and social obligations outside the family unit continue to influence the management of natural resources in Uganda today.

Though less severe perhaps than in Kenya, the lack of transparency has become entrenched in Uganda, growing naturally from the requirement for individual survival during the Amin and Obote years. This has resulted in a continuing weakness of the rule of law, evident not only at central government levels and within urban society, but also at local government levels, and informs much of the general behaviour of the rural majority. This situation has a strong influence on the conservation and management of natural resources. Although laws may be created, their implementation is far from sure, emphasising the need for participatory processes and approaches. Recently, parliament has been taking a strong stand on corruption.

This situation both supports and is supported by government's policy of decentralisation and the parallel processes of privatisation and civil service reform. In all areas of government, including natural resource management, responsibility has been decentralised. Local councils and authorities are expected to be responsible for the development of social infrastructure, payment of local officials, and the management of local resources.

***Tanzania***

Tanzania has a post-independence history of relatively strong but peaceful government control. The policies associated with the administration of the first president, Julius Nyerere, are often referred to as failures. However, this seems to be true chiefly of his economic policies, while many

other social interventions seem to have been largely successful. After independence, Tanzania embarked on a strong and purposeful programme of social engineering to build national identity. This programme included the promulgation of Swahili as a national language, the redistribution of civil servants and students to areas other than their home areas and the dissolution of tribal authorities and chieftanships. A highly structured system of government and party institutions was introduced from the centre to the region, district, division, ward, village, and finally to the 10-cell household level.[11]

It seems likely that the resulting national identity partly explains the relative lack of opposition to national projects and assets such as national parks. Tanzanians are accustomed to the idea that a resource belongs to the whole country. This may explain why Tanzania has such a large percentage of its land under national management. However another aspect of Tanzania's political patrimony is the lack of financial realism. Game reserves and district wildlife offices have suffered from the fact that areas which should be conserved lack the financial support required to effect this. The current movements towards the decentralisation of the management of wildlife outside of protected areas reflects the need for government to reduce its burden to manageable levels as much as to empower communities. However, for all the community conservation rhetoric, the reality has often meant the devolution of responsibilities and imposition of constraints on reserve-adjacent dwellers while further limiting their rights and the benefits that accrue to them (Homewood, Kiwasila et al, 1997).

***Kenya***

In Kenya, corruption and personal patronage have been publicly acknowledged as some of the major causes of the economic decay of the 1980s and 1990s, affecting all aspects of life in the country. The lack of capability to manage the nation's wildlife estate in the 1980s was as much due to corruption as to poaching. Though dramatic progress has been made in the wildlife sector in the 1990s, the story in the forest sector is most distressing. Important national forests have been degazetted at an alarming rate over the 20 year period, ostensibly for the national good, but more often for personal gain; for example the destruction of Ololua forest through quarrying, Mt. Kenya forest through illegal extraction of timber, and Karura forest for housing. More recently examples of corruption and mismanagement are highlighted in the national press, and Kenyans are increasingly demanding accountability. It is hoped that the public demand for accountability will result in improved service provision, reduced levels of corruption, and more responsible natural resource management.

## 7.3 Tenure of Land and Resources

Secure tenure over, or clear use rights to, land and natural resources is of crucial importance if rural people are to manage their resources (Barrow 1990 and 1996c). Land reforms aimed at securing these rights and obligations are essential for improving natural resource management.

[11] It has been observed that Museveni's various levels of Resistance, and now local councils, reflect in part his exposure to the Tanzanian system while at the university of Dar-es-Salaam.

Today, two sets of contrasting tenure rules co-exist in the region: statutory and customary. Conflict arises because in statutory law land is treated as a single unitary resource, while in customary law it is not. Customary law distinguishes in detail between resources and is a complex bundle of rights of access, of renewable or consumptive use, and of disposal. Such rights may be disaggregated by resource; or certain wildlife may be used under certain conditions and at certain times by defined groups of users; or individual trees or groups of trees may be subject to different rights by product and by time, for instance when to grow or browse (Barrow 1996). While communal tenure is complex, it has two essential elements: equal access to land, and the legal and economic fact that land is not a commodity (Okoth-Owiro 1988).

Government policy tends to promote privatisation of land, since land suitable for cultivation is thought to be under-utilised if left to, for example, pastoralism. This misconception has allowed private individuals, parastatals and government bodies to take over such land. Confusion over the relative status of customary and statutory laws relating to land and resource tenure has led a number of African states to revise land laws. At least nine sub-Saharan countries, including Uganda and Tanzania, are in this process, and many of the issues are similar, including the:

- Role of the state in land ownership and control;
- Future of traditional forms of land ownership;
- Extent to which land regulation should be democratised; and the
- Extent to which a market in land may be encouraged without unrecoverable social cost (Wily 1997a)

In both Tanzania and Uganda prospective Land Bills have their origins in the goal of making land more readily available for investment as a stimulus to economic growth. Both consider that changes in the way land is owned and transfers regulated are necessary, and that the process of registering rights in land and issuing certificates of proof is important. However they adopt different strategies to do this (Wily 1997a). In Kenya the complexities of land tenure and the need for reform stem from wider questions of governance and the need to re-invoke the constitutional principles established at independence (Leach 1996). As a result land tenure is one component of the recently initiated constitutional reform process.

Land tenure cannot be separated from land use. Tenure rules emphasise human issues and regulation of competing interests in land use. Land use emphasises human and environmental issues, and the regulation of its use to conform with acceptable methods of husbandry and conservation. Thus the holder of tenurial rights has to assume that the objectives of land use are realised. Therefore, land use decision-making is a tenure issue (Okoth-Owiro 1988). Because of this, ownership and control of, and access to, land and resources is becoming the single most contentious issue in East Africa. Control of land is related to issues of increased population pressures, reduced availability of higher potential lands, greed and power. Within this framework issues relating to land and resource tenure have evolved separately in the three countries. Unfortunately those groups and agencies involved with conservation have not until very recently become involved in the debate from a conservation and natural resource management perspective. This stemmed partly from their confidence in the nations' conservation estates, and from the separation of conservation issues and daily national life; a flawed assumption.

### *7.3.1 Kenya*

In Kenya there are many laws and regulations which govern and regulate land use. Both statutory and customary forms of tenure exist, and despite over 40 years of tenure modernisation programmes, customary and traditional tenure arrangements remain the most widespread form of tenure (Leach 1996). The *Registered Land Act* governs land formally held under customary law, and replaces what was essentially continuous communal law with that of individual ownership (Republic of Kenya 1985). This Act mainly applies to the trust lands, which fall under the jurisdiction of county councils and which can be adjudicated, consolidated and registered (Republic of Kenya 1970). However, in many parts of the country this is not possible. In particular the pastoral lands are still governed and managed on the basis of customary law. There has been a tremendous push to replace communal with individual tenure regimes, more due to political and power based considerations than sociological, ecological and management reasons, which make it very difficult to effect in reality (Wanjala 1990).

The *Land (Group Representatives) Act* under which 'group ranches' have been formed tries to preserve some element of customary and modern law by giving group title deeds on a co-operative basis to a communal area (Kenya Republic of 1969; Wanjala 1990; see Box 7.2). However, the focus is now to subdivide land under this Act into private lands and through the allocation of title deeds. Such private title deeds usually benefit the more powerful and wealthy, and marginalise the poor even further. This has been a characteristic of modern tenure, namely the conversion of customary rights of access into individual tenure, and the conferring of exclusive property rights of parcels of land (Leach 1996).

In Kenya, the situation is further complicated in that land use is regulated by separate sectoral legal frameworks (eg., agriculture, forestry, etc). This can lead to confusion and abuse. For instance, current legislation does not provide for a rational selection of land use priorities; nor does it provide a framework for systematically curbing encroachment on agricultural land. Furthermore, law and custom tend to confer rights on the person who first clears the land, for instance for agriculture, which encourages destruction of natural resources (Okoth-Owiro 1988). This is based on the premise that land not used is under-used, a false premise that has fostered the destruction of many important conservation resources.

While there is a political thrust in Kenya to subdivide, there is an increasing body of empirical information which argues for a more rational approach that is more equitable, and does not increasingly marginalise. But this awareness of the positive aspects of common property resource land management has lagged far behind the processes of land alienation and privatisation in Kenya. This is one of the major areas that needs to be addressed during the constitution review process.

***Box 7.2: Group Ranches - Still an Opportunity in Kenya?***

The *Land (Group Representatives) Act*, Cap. 287 (Republic of Kenya 1969) was enacted to give title deed to representatives of a group who have been recorded as owners of an area of land under the *Land Adjudication Act*. Group ranches were demarcated in a number of rangeland areas of Kenya, including Kajiado, Baringo, Narok and West Pokot districts. The Act was supposed to recognise:

- The need for pastoralists to graze communally as determined by environmental and range conditions;
- Pastoralists' grazing systems, comprising wet and dry season areas combined with areas for drought time grazing as well as access to water, salt etc.; and
- That, through securing statutory title, such land users would be able to access credit for land improvements.

While the theory behind the *Group Representatives Act* was to try to formalise existing pastoralist range land management systems, which are based on sociologically and ecologically viable land units, the reality of implementation has been quite different and has been characterised by:

- An emphasis on boundaries, rather than on ecological and social viability, and not necessarily based on customary rangeland management systems;
- The group ranch committees often failing to function as they should have, being dominated by elites sometimes to the exclusion of the actual managers of the land and grazing. Elections were not held as regularly as they should have been; and
- Loans which rarely benefited the majority of members, nor the group ranch in general.

However the Act did achieve one key goal; securing land tenure for the customary users, and made it more difficult for outsiders to gain access to land.

As a result of the many problems facing group ranches, and the politicisation of land tenure in Kenya, there is has been a push to privatise such lands in the past 10 years. This has resulted in fragmentation, and loss of access to critical seasonal grazing areas, water and salt. Owners now had, but did not necessarily understand the consequences of, individual tenure. As a result land was sold, and many poorer pastoralists were marginalised from pastoralism, while the richer and more powerful consolidated and expanded their holdings. In addition outsiders have now been able to acquire such lands.

Despite these problems, with community conservation becoming increasingly important and combined with the lessons which have been learnt from the sub divisions that have taken place to date, an important opportunity may still exist for group ranches to:

- Fulfil their original purpose so as to gazette large areas of trust rangeland into group lands;
- Reduce the emphasis on boundary demarcation and instead address the issues from social and ecological perspectives, and link demarcation to land use. It is now well recognised that pastoralism is as much socially driven as it is ecologically based;
- Clarify the nature of the 'Group Ranch' property rights (Galaty 1992);
- Assist such land owners with improved land management practice for livestock and to look at the real economic opportunities conservation might present. This is already happening in Il Ngwesi (Box 6.8), and could happen in the Loita area (Box 5.14), and some areas of Narok; and
- Ensure that management structures and representation are improved to promote accountability and responsibility.

### *7.3.2 Tanzania*

Much of Tanzanian land is still communally owned and managed. This is an appropriate structure for community-based conservation as it allows groups to manage wildlife on lands which they jointly control. But the government's wide ranging powers to alienate land (Presidential Commission of Inquiry into Land Matters 1991) leads to insecurity of tenure in general and customary title in particular. There are also contradictions in the laws that govern land use, allocation and ownership. The extent to which national, regional and district regulations acknowledge the importance of customary regulations in the management and conservation of such valuable resources is also open to question. The state does confer both individual and group title deeds even though radical title rests with the state. Many customary laws are informally recognised and Tanzania's land law is in a process of change. But important customary rules and 'laws' must be positively re-enforced if they are to be incorporated into village rules, laws and regulations which could then be ratified at district, regional and national levels, thereby reducing the risk of outsider encroachment and degradation.

Tanzania is also struggling with the consequences of the disruption of tenure caused by the villagisation process, where people were moved from homesteads to village centres to facilitate access to services. As the villagisation policy became less rigorously enforced, some former land holders returned to their previous lands to find them already occupied by new settlers, thereby creating conflict. In some cases, old holdings are being reclaimed after many years.

At one point, Tanzania adopted the strategy of attempting to register all traditional holdings, thus effectively translating them into modern tenure. However, the financial implications of surveying, mapping, demarcating and issuing deeds for such extensive areas were not taken into account. Unfortunately land mapping and registration has generated as much conflict as it resolves. In pastoral and agropastoral rangelands, customary use was sufficiently flexible to allow overlapping bundles of rights for access and use. Land registration does not enable this sort of continuously negotiated time-sharing to continue.

The *Tanzania Land Act*l builds upon a strategy of land change for growth which recognises customary land rights as equivalent to more formal 'European' based tenure regimes (Tanzania, United Republic of 1999). Knowing that customary land is already bought and sold, Tanzania has formally declared such lands as tradable (Wily 1997a). However, there is also a strong commitment, through the imposition of constraints on land use for speculation, to promoting equity and growth in the smallholder sector. Control over land registration is, wherever possible, at the community level. This represents a brave attempt to modernise traditional regimes, and enable communities and villages to make decisions about tenure and land use. However, this process may overlook the ability of government agencies to undergo an apparent policy shift or restructuring while maintaining essentially the same practices and processes as before. This process was based on the findings of the Presidential Commission of Inquiry into Land Matters (1991), a consultative process without parallel in sub-Saharan Africa, attended by about 83,000 people in 277 public meetings (United Republic of Tanzania 1994b). The value of the Presidential Commission Report was, however, greatly reduced by the *1994 Land Act* which was rushed through parliament immediately prior to the release of the Commission findings. Although some of

the key recommendations were not adopted, the findings have laid a clear basis for the new land law, and have been discussed in detail elsewhere (Wily 1997a, 1997c).

However, substantive land policy change will be slow. Central government officials and Tanzanian bureaucracies are reluctant to give up their strong positions and privileges (Homewood, Kiwasila et al. 1997). As elsewhere the relationship between land law and tenure over other natural resources is not clear. This was illustrated when communities in Loliondo division of Ngorongoro district found that their area was being used as part of a hunting area. Despite their having title deed the government allowed the hunting operation to use the area with minimal leasing arrangements with the title holders of that land. Such contradictions and implications must be resolved if community conservation is to work with clearly defined rights and responsibilities.

### *7.3.3 Uganda*

The Ugandan constitution recognises three forms of land tenure: customary, freehold and leasehold. It also indicates that the land of Uganda is owned by the people of Uganda. Though positive in many respects, the constitution actually provides little guidance in the matter of land tenure. This continuing uncertainty has led to high levels of land disputes in Uganda and inhibits sustainable development.

The complexity of the land question stems from the interventions of colonial government (Doornbos 1978), which began as early as the 1900 agreements forced on the kingdoms of Buganda, Toro and Ankole (Kamugisha 1993a). *Mailo* land brought in the concept of 'freehold' ownership by individuals in perpetuity, contrasting strongly with traditional forms of land ownership (see below). Prior to this all land was held under a variety of systems, none of which entailed the concept or actuality of permanent ownership, though effective permanent use was largely guaranteed. In the Nkore Kingdom, for example, the King in traditional, though largely symbolic, terms owned all the land, and his subjects held it for him. In pastoralist areas there was little if any individual attachment to land parcels. Even in farming communities, though short term tenure was unequivocal and might be passed from generation to generation, the great availability of land and the shifting nature of cultivation also resulted in weak attachment of families to specific plots of land (Kamugisha 1993a). The British administration, on signing treaties or agreements with existing states or kingships, or after invasion and subjugation, declared great tracts of land as Crown Lands. This was followed by the granting of plots to important chiefs or kings, especially those that had been instrumental in the extension of British control (Doornbos 1978). As the colonial administration proceeded to develop, the granting of plots of land was increasingly used as a reward for service in the administration (Table 7.1). These plots, called *Mailo* land in Buganda (where it was first introduced because the plots were measured in square miles), were granted as freeholds and could be bought and sold. Though the land was supposed to have been granted on free, uncultivated land, this was often not the case and thus formerly 'free' peasant farmers were suddenly converted into tenant farmers required to pay rent to landlords (Doornbos 1978). This imposition of a foreign land tenure system onto a traditional one caused considerable social dislocation, the effects of which continue to be felt today.

The Land Reform Bill of 1974 attempted to do three key things:

1. To defuse the growing conflict between the owners of freehold land titles and their tenants, often referred to as 'squatters'. When owners wanted to remove tenants so that they could develop the land, or use it for some other purpose, conflict often resulted.
2. To open up large areas of land for development, as much of the freehold land was hardly used by its owners who tended to be part of the urban elite.
3. To harmonise land ownership in Uganda under a single system.

This Bill declared all land as state land. Owners of freehold titles were required to convert them into government leases of 49 or 99 years. Leases were not new as government had been granting them to private individuals from 'communal' or 'state' land for decades. What was new was that the historical elite were affected. The conversion of all land to state land also gave great power to the centralised Department of Lands and Surveys. In a highly corrupt time it was possible for individuals to secure leases to land already occupied by others. Indeed, under the Bill, traditional owners had no security of tenure, and could be legally removed if a lease was granted. Inevitably, this led to high levels of conflicts over land. The attack on the elite and the uncertainty felt by many rural populations led to a general failure of the Bill. Although it remains on the statute books it has never been fully implemented in a consistent way.

***Table 7.1: Land Distribution in the 1900 Buganda Agreement***

| Beneficiaries | Area (Ha) | % |
|---|---|---|
| Crown forests | 388,500 | 7.7 |
| Crown land | 2,33,000 | 47.9 |
| Royal family (Buganda) | 128,982 | 2.5 |
| County chiefs (20) | 82,880 | 1.6 |
| Regents | 24,864 | 0.5 |
| Muslim leader | 6,216 | 0.1 |
| Chief of Koki County | 5,180 | 0.1 |
| Chiefs and private land owners (1,000) | 2,072,000 | 40.8 |
| Churches | 23,828 | 0.5 |
| Government stations | 12,950 | 0.3 |
| Total | 5,076,400 | 100 |

*Adapted from Kamugisha 1993a*

Although traditional land tenure is recognised by the constitution it is clear that there is a growing loss of faith in it. More and more individuals are attempting to navigate the complex and costly process of securing titles to their land. The responsibility for issuing land titles has been decentralised under the *Local Government Act* to District Land Boards. However, though the National Land Board has been disbanded, District Land Boards have not yet been established, so there is currently a hiatus in the granting of new titles.

Uganda lacks a clear land use policy and a land use plan. Although land use controls exist in the legislation, these are scattered through a number of different statutes and are under the control of several ministries. Legislation exists controlling the stocking rate of cattle per hectare, banning the use of fire in rangeland management, preventing the cultivation of fields within a given distance from a river, requiring the carrying out of environmental impact assessments, and for preventing development in road reserves. However, no legislation binds them together in a coordinated form. A consequence of this is the haphazard nature of much urban development, and the failure of government to separate mutually incompatible land uses.

In summary, land use policy and legislation in Uganda is complex and controversial, and a proposed new Land Bill has been much debated (President Yoweri Museveni 1998; Uganda Land Alliance 1996; Wily 1997a; Kabushenga 1998). Despite intensive efforts by government to finalise the development of a new statute, and the considerable support for this initiative by the World Bank and USAID, parliament sent the Bill back for radical revision before it was finally passed (Uganda, Republic of 1998). The new Act differs considerably from Tanzania's, and assumes that:

- Customary tenure does not provide a basis for commoditisation on the grounds that customary rights do not represent private, or tradable property; and
- Smallholding is a less desirable target for investment than commercial farming, and that opportunities to aggregate holdings must be available (Wily 1997a).

This promotes a programme which transforms landholding into 'European' forms of ownership, weakening traditional rights, and in particular communal rights. It supports the interests of investors over the smallholder with minimal constraints upon land accumulation (Wily 1997a). As the Uganda Act was developed primarily through a top-down approach it is still facing problems, many of which are gradually being resolved through, belatedly, a more participatory and consultative approach (Nsamba-Gayiiya 1999).

The nature of land tenure clearly has implications for resource use and ownership. Though the government has indicated its interest in allocating rights to private individuals or groups to use natural resources on their lands, this intention is hampered by the land tenure confusion. Much of the most potentially valuable areas for wildlife use are currently on communal land, such as in Karamoja. It is not clear, however, whether the new legislation allows for communal land ownership. Formerly communal land belonged to the state, and was under the control of the districts. The Local Government Statute also gives responsibility to district authorities for the management of natural resources. The implications of this are unclear. On the one hand it paves the way for more land to be expropriated, and on the other it enables districts to plan for the development of wildlife industries by controlling land use and working with UWA on the issuing of use rights.

### *7.3.4 Comment*

Although some argue that only private, individualised land holdings can promote sustainable development, others believe that communal land ownership and management is equally effective

when closed access regulatory mechanisms are in place. It is clear, however, that an environment of overall uncertainly over land tenure cannot promote development. Both investment and responsible stewardship are endangered when land holders and users are uncertain that they will be permitted to remain on the land. This stimulates a tendency to mine resources while they are available and to ensure that investments that must be left behind are minimized. Both these make the development of community-based wildlife management systems almost impossible.

Security of tenure, be it individual or communal, is of paramount importance for development. It secures sociologically and ecologically viable land-use systems, especially in pastoral and rangeland areas, and provides the security and confidence needed for development.

The extensive tracts of land required to support wild animal populations are being physically demarcated and split into agricultural units which threaten wildlife, for example around the Nairobi National Park dispersal area (Gichohi 1996), the Maasai Mara National Reserve (Norton-Griffiths 1996), and the Amboseli-Tsavo region in Kenya (Southgate and Hulme 1996). Many land units are now smaller than the minimum viable area for wildlife populations (Howard 1995; Mwau 1996).

In terms of communal rights to natural resources, it is important to understand the heterogeneity of a community, the different actors that make up that community-based on class, religion, gender, origin, socio-economic status, etc. This diversity, combined with the multiple and often mutually exclusive use that can be made of natural resources, complicates the equitable distribution of rights of access in terms of who, when, how much, and what? (Fortmann 1987) However, community control over natural resources, both directly and indirectly, has a number of advantages, including that:

- natural resources can be managed as a whole and the use can be spread over a wider area;
- natural products can be distributed more equitably across the community;
- the community can use the area as an asset to meet its needs;
- the community may be better able to protect the natural resources against incursions from outside (Fortmann 1987); and
- within a communal access system, there may be mixed and varied individual rights to natural resources, which can be better regulated by the community than by government (Barrow 1996c).

In areas where the elders' authority has been reduced, customary management rules are increasingly difficult to enforce (Scherr 1989). Where some authority remains, such rules can have a significant beneficial role in development and should be fostered and built upon.

## 7.4 Influence of Key Players and Events

A number of individuals have had a powerful influence on the policy, direction and pace of community conservation. The influence of key events and players is often underestimated, and if addressed, rarely given the analysis it deserves in the assessment of the success or failure of projects (Murphree 1994). Conservation in East Africa, as elsewhere, has attracted its own array of

key players and 'characters', as well as being informed and influenced by key events. This brief analysis attempts to show the importance of such key players and events.

The issue of key players is also of great importance with respect to the way well-placed individuals might engineer community conservation issues to serve their own interests. The personalization of resource management described for Uganda, with officials of conservation agencies seeing themselves as controlling exploitation of the conservation resource to the exclusion of others, rather than as stewards for the wider good, is widespread elsewhere and also applies to Tanzania (Ngorongoro Conservation Agency, Mkomazi, Serengeti). It may not be useful to see this and related problems as isolated cases of, or even institutionalised, corruption. It may be better to recognise that communities are not egalitarian, and that benefits will commonly flow along channels of power and influence, and to plan accordingly.

The role of individuals in the conservation of Uganda's wildlife has been marked, both in positive and negative directions. The influence of Idi Amin in ignoring the laws of the land and promoting a culture of the individual still affects Uganda today. Amin and his senior officers had no compunction against hunting inside a national park, and the protected area authorities were powerless to prevent it. In addition, statements made by Amin, to the affect that Ugandans should be free to settle and live where they wished, led directly to the encroachment of protected areas.

In direct contrast to this, the support given to conservation by the current president, HE Yoweri Kaguta Museveni, has been critical to the recovery of the Forest Department's control over significant areas of forest estate. He has also intervened directly on matters of Uganda's wildlife estate, on one occasion to order encroachers to leave the Kyambura Game Reserve (Box 6.2) and on another, to ensure that part of the contested and controversial Lake Mburo National Park remained a national park.

Individual officers of UWA have had significant impact on the status of specific conservation areas or the institution as a whole. In 1990, the Warden-in-Charge of Lake Mburo National Park, through personal commitment and investment of his own money, constructed simple visitor accommodation in the park and began encouraging his friends to visit. At a time when the park was in great danger of being completely lost, this action was crucial to its survival. Similarly, the personal commitment of two expatriate conservationists (William and Peter Moller), who devoted themselves to supporting the management of Queen Elizabeth National Park between the early 1980s and mid-1990s made an enormous contribution to the safeguarding of the park and its wildlife, and significantly strengthened the Uganda National Parks organisation at a time of great difficulty. The championing of community conservation by Arthur Mugisha while working as Warden-in-Charge at LMNP and then Kibale National Park was critical to the acceptance of community conservation in UWA. He subsequently became the UWA's first Community Conservation Coordinator.

The influence of individuals between countries is also interesting. In 1991, the KWS director at the time, Richard Leakey, made his famous promise that 25% of park revenue would be shared with local communities. This was heard in Tanzania and immediately taken up by local politicians near parks. It was eventually stated by the prime minister and then the president that Tanzania should

do likewise. It took TANAPA much expense and time to educate leaders about the Support Community Initiated Projects (SCIP) programme which was already in place with much better links to conservation objectives and extension work (TANAPA 1994; Bergin 1995; Dembe and Bergin 1996). Uganda's politicians also began to lobby for revenue-sharing following Leakey's lead, eventually inserting a specific clause requiring it into the 1996 Wildlife Statute. While Richard Leakey's promise of 25% revenue sharing has had its political downsides, he did bring the notion of communities benefiting from national parks to the table in a dramatic manner. The percentage originally defined was not sustainable, but it has ensured that conservation authorities now think strategically on this issue and a more pragmatic approach to enterprise development based on conservation has since evolved.

In Kenya, the beginnings of community conservation in Amboseli in the 1970s had a great deal to do with individuals who believed in the role of the Maasai in conservation. Such individuals included Daniel Sindiyo, warden at the time; David Western; a researcher, Thresher, demonstrating the economics of livestock and wildlife; and Dhyani Berger working with extension (Western and Thresher 1973; Western 1982; Berger 1988, 1993). Although the programme did not succeed as outlined in the development plan it planted the seed for community conservation activities to be re-initiated in the mid to late 1980s through NGOs. For example, AWF partially based their initial community conservation work on this past work (AWF 1990a, 1994a). Wildlife Conservation International, now the African Conservation Centre, which was involved in those early days in Amboseli, has used those early lessons to build its current community conservation programme.

More recently, the Lewa Estate and other conservation entrepreneurs have demonstrated that wildlife can become a profitable part of land use on private land, especially in Kenya. Such people have been able, to varying degrees, to take the risk of integrating wildlife into their other economic enterprises. As a result they have been able to gain support for such work from KWS and donors, for example through use rights, ecotourism development etc. An example is the developments in Lewa including the lodges, a conservation education centre, wildlife utilisation and ecotourism ventures, as well as the more traditional livestock enterprises. Recognising that the Lewa ranch, on its own, could not sustain viable wildlife populations (the wildlife required a much larger dispersal areas) Lewa Downs Ranch went into partnership with other surrounding ranches, most notable of which is Ill Ngwesi Group Ranch (see Box 6.8). KWS and Lewa ranch have worked with Ill Ngwesi group ranch to develop the now famous community owned Illngwesi Lodge with a range of ecotourism options for visitors. This example shows the advantages of integrating, in a generally compatible manner, wildlife as part of land use; demonstrating it; and assisting others to do the same, in this case through the formation of the Lewa conservancy.

## 7.5 Fostering Active Participation

Historically, the notion of involving communities and rural people in protected area management was anathema to conservation managers. It still is for many. However, this perspective is changing as conservation area authorities begin to understand the value park management and biodiversity conservation can derive from having neighbours (rural people, communities, villages) of such areas as friends. There has been considerable evolution of this notion during the past 10 years, initially from

an approach of protected area outreach, to today's much more active participation by rural people in the conservation of natural resources (Chapters 4 to 6). This is partly as a result of decentralisation of government services, and also the recognition that rural people need to be actively involved in decisions affecting their own livelihoods.

To meet these changing perspectives conservation authorities have evolved a range of mechanisms to consult actively with rural people, and involve them in the management of natural resources both on their land and in some cases in gazetted areas. Increasingly, a range of participatory tools is being used in this process (see Table 7.3), based on Participatory Rural Appraisal (see for example Chambers 1983; Chambers, Pacey et al. 1989; Ford and Lelo 1991; Barrow 1996d).

***Table 7.3: Some Practical Examples of the Use of PRA Tools in East African Community Conservation***

| PRA Tool | Where and How Used |
|---|---|
| Matrix Ranking | Problem animals and priority problems, Lake Mburo, Mt. Elgon Uganda |
| Village Resource Mapping | Simanjiro Plains, Tarangire in Tanzania, Mt. Elgon and Kibale in Uganda |
| Community Action Plans | Ill Ngwesi, Kajiado in Kenya |
| Transect Walks | Mt. Elgon, Kibale in Uganda for collaborative management |
| Seasonal Calendars | Mt. Elgon and Kibale in Uganda for collaborative management |
| Participatory Forest Assessment | Mt. Elgon and Kibale in Uganda, Tanga in Tanzania for collaborative management |
| Gender Analysis | Tanga in Tanzania, Mt. Elgon and Kibale in Uganda |
| Other more general PRA tools which appear widely used include informal and semi-structured interviews, building rapport, group discussion, and direct observation | |

There is a range of levels of participation ranging from passive to self mobilisation and they have been well analysed (Kiss 1990; Wells, Brandon et al. 1992; IIED 1994; Pimbert and Pretty 1996; Barrow, Gichohi et al. 1998).

It is clear now, more than ever before, that the political, economic and social climates have had to embrace the real participation of rural people due to nationally fostered decentralisation processes and policies, and nationally and externally imposed restructuring and civil service retrenchment.

Enabling real local level participation is not easy, no matter how desirable and necessary.

1. The difficulties of incorporating full or active participation experienced by many projects and activities highlight the fundamental dilemma underlying community conservation (Kiss 1990; IIED 1994). It is often neither possible, nor realistic, to consult with everyone, or to ensure that every individual participates in the process. Very few rural development authorities can afford this, and, certainly, conservation authorities are not equipped for such all embracing participation. Ideally everyone should participate, as has been argued for in the context the Ngorongoro Conservation Area in Tanzania (Lane 1996; Taylor and Johannson 1996). But no matter how desirable, it is not possible or even practical, and is rarely, if ever, achieved in participatory rural development with its much longer history of working with participatory processes.

2. Another important weakness of the PRA approach is that the process is open to misuse by more powerful or articulate groups whose views or perceptions of certain issues may dominate. It is not possible for outside facilitators or researchers to gauge the extent to which this may or may not happen. Table 7.3 illustrates how different perceptions can be.

3. The focus of all community conservation activities is on rural resource user and stakeholder participation. Such participation comes at a very real cost to rural people who attend and partake in such activities. These costs are the time spent, time which rural people often do not have as they pursue their livelihood and subsistence objectives. It is all very well for projects to espouse participatory processes, but those costs need to be understood. Rural people participate because they expect something to come out of that participation e.g. an activity, a collaborative management agreement, improved resource access - all of which could contribute to their own livelihoods and economies. All too often participatory processes are carried out, and nothing happens in the end. Promises are made, and expectations are raised. It is vital that expectations are managed, and where raised, delivered upon, or else trust is lost, and rural people will no longer participate.

Uganda illustrates the problems faced by a national organisation with a national mandate and conservation estate trying to become more decentralised, and attempting to undertake processes to include communities in wildlife conservation. Bwindi Impenetrable National Park is bordered by 52 parishes located in three districts. The difficult terrain, poorly serviced by roads which become impassable during the rainy season, makes it difficult to visit each parish for consultative processes. Even Lake Mburo National Park, which only covers 260 sq.km., is bordered by 15 parishes, several with very poor access.

***Table 7.3: Contrasting Perceptions of Environmental Issues in Mkomazi Game Reserve***

| Issue | Received Wisdom | Alternative View |
|---|---|---|
| Environmental Change | • Pastoralists damage the ecosystems by overstocking – soil erosion increases, rangeland vegetation becomes less palatable, and bush invades pasture | • Pastoralists do not damage the environment by overstocking<br>• Soil erosion does not increase to dangerous levels<br>• Vegetation dynamics are not driven by stocking rates<br>• Pastoralists make a positive impact on the spatial nutrient concentrations of the area, leaving nutritious grazing on old *boma* sites |
| Wildlife | • Pastoralists compete for resources with wildlife to the exclusion of the latter<br>• Pastoralists physically exclude wildlife from water sources and use up water, not leaving enough for wildlife<br>• Pastoralists exclude wildlife from good pastures and use the grazing | • Pastoralists and wildlife do not compete to the exclusion of the latter<br>• Competition over water and grazing is not sufficient to threaten the viability of the reserve's wildlife populations<br>• Pastoralists are excluded from some sites by the threat of disease held or transmitted by wildlife |

| | | |
|---|---|---|
| Burning | • Local burning practices are turning woodland into grassland and decreasing the reserve's biodiversity | • Changes in vegetation now observed are due to changing intensity and timing of the burns<br>• Exclusion of pastoralists and their cattle has left more vegetation to burn causing hotter fires |
| Elephants | • Exclusions of pastoralists is directly responsible for the increase in elephant numbers in Mkomazi | • Increases in the elephant population in Mkomazi reflect improved poaching controls in Tsavo National Park, not the absence of pastoralists in the reserve |
| Hunting | • The local population's hunting activity threatens wildlife populations | • Local hunting activities are not endangering wildlife ungulate populations |
| Management | • Local communities' resource use is not well organised. Either they are unable to act collectively of their own accord, resulting from the over use of resources; or attempts which they do organise are ineffective | • Local communities do organise their resource use<br>• Levels and extent of use are agreed and negotiated<br>• Sanctions are available to punish those who ignore these agreements |
| Land Tenure | • Land tenure arrangements inevitably encourage unsustainable use<br>• Land tenure arrangements should change from communal to private wherever possible | • Use of communal land can be controlled<br>• Changing the form of tenure will not prevent degradation |
| Environmental Awareness | • The health of the environment does not feature highly in local people's consciousness.<br>• Degradation does not concern them sufficiently to provoke preventive action | • Local people are aware of environmental problems and act to alleviate them |

Source: Brockington and Homewood 1996

During discussions at Lake Mburo to determine the level at which the park's Community Conservation Unit should interact formally with communities, it was found to be impossible to attempt regular interactions at the village level. Therefore, despite concerns over the failure to reach down to the true 'grassroots' level, a PMAC was established at the parish level. Even so, the requirement to make regular visits to each parish for a variety of purposes has only been met through the support of a donor funded project, and would not be possible using the slender resources of the park itself. Shortage of human resources allocated to the community conservation programme places severe limitations on what can be achieved (Uganda National Parks Restructuring Committee 1997).

Similar challenges are faced both in Kenya and Tanzania. For instance Tanzania National Parks faces the challenges of working with 28 districts with their councils, commissioners and MPs which border the TANAPA estate. Serengeti National Park in Tanzania borders six districts, while Tsavo National Park in Kenya also borders six districts and completely surrounds another. This has to be tempered with the human resources and logistic support available to conservation authorities for working with communities in community conservation.

## 7.6 Dealing with Conflict

Conflict management is a crucial tool for successful community conservation. Problem animals are one issue which raises conflict between people and wildlife and undermines community conservation initiatives. The damage caused to people's crops and wildlife, and the fear of wildlife itself, have created negative attitudes towards wildlife. However, until recently this has been poorly addressed by all institutions (donors, NGOs and government institutions) working with wildlife and community issues (Infield 1986; Infield, Marquardt et al. 1994). However, certain initiatives have recently been taken to address the problem.

At Lake Mburo and Bwindi Impenetrable National Parks in Uganda and Arusha National Park in Tanzania, projects have supported experiments with the propagation and establishment of live hedges of Mauritius thorn (*Caesalapina decapetala*) and Kei apple (*Dovyalis caffra*) to exclude wild animals. At Mgahinga National Park, communities have been assisted to construct a buffalo wall around the park to prevent them entering people's fields. The level of response to such problems has, however, been generally inadequate to deal with the scale, as perceived by community members.

Problem animal management has been very difficult to implement. National schemes for problem animal control and compensation have been tried and largely failed due to abuse. If there has been compensation, it is very small compared to the losses incurred, for example loss of life. For example, in Kenya there was a policy to compensate for wildlife damage to crops and livestock, as well as human injury and death. The scheme was administered from Nairobi, and proved too bureaucratic as it was distant from the local and district levels where the conflicts took place, and took a long time for people to receive compensation. Towards the late 1980s the compensation scheme was so abused[12] that KWS discontinued the scheme. Now problem animal management is a KWS responsibility. Under the draft new act and management policy, issues of compensation are being devolved to a more local level, eg. wildlife associations. Such groups and institutions will have a greater chance of being involved in assessing problem animal management and controlling abuses. In Tanzania the Wildlife Division is responsible for problem animal control, however little happens in practice due to resource shortages. TANAPA does not take responsibility for problem animal control outside their estate, except in exceptional circumstances.

In Uganda, the district of Mbarara has begun a collaboration with the management of Lake Mburo National Park to select, train and deploy community vermin guards. An initiative around Bwindi Impenetrable National Park has led to the local classification of certain species as 'vermin' and is in the process of identifying appropriate and viable responses to them which can be implemented at a local level. It is believed that these initiatives will assist in the development of a national policy on problem animals, which is currently being discussed within UWA.

The demand for land is another fundamental cause of conflict, especially in areas of high human population densities. Resolution of conflict may come about through a variety of processes.

[12]During its last year of existence only 15 large scale land users received all the compensation funds of WCMD for crop damage

Clearly, a prerequisite is dialogue. Mutual suspicion of the motives of respective parties is a common cause of conflict and will reduce as communities begin to work together. Some causes of conflict are tangible, but can be reduced through discussion or negotiation. The banning of access to certain resources is a major cause of conflict. Negotiated access to these resources may therefore partially resolve conflicts without compromising conservation objectives.

## 7.7 Training For Community Conservation[13]

In the early 1990s it became clear that there was a critical need for training in community conservation approaches. The only suitable course was started in 1988 by the College of African Wildlife Management in Mweka, Tanzania. Entitled 'Man and Wildlife', it was taught as part of the College's diploma and certificate courses. The course looked at the traditional ways man and wildlife had coexisted, and how this changed as protected areas were set up which excluded local communities and their access to traditional resources (Snelson 1996). Whilst this course may have served as a useful introduction to community conservation issues, and perhaps some students were able to share the information and knowledge they had gained with colleagues on their return to their home countries, for most practising wardens throughout East Africa, there were just no opportunities to learn despite a huge perceived need. This was verified in 1992/3 when the Protected Areas Conservation Strategy (PARCS) project undertook a training needs assessment of over 400 wardens across 16 countries in Africa, one of which was Uganda (Snelson 1993, 1995; Pitkin 1995). Community conservation consistently emerged as one of the top three training needs identified by protected area managers across the continent.

Consisting of a blend of community development, extension, enterprise development and wildlife utilisation expertise, it is hardly surprising that there were few existing training opportunities which encompassed the needs for community conservation training.

Since then a few such courses have been developed. The Kenya Wildlife Service's (KWS) Community Wildlife Service started to develop an in-service training course for its community wildlife officers. The rationale was to create a practical course which taught appropriate knowledge and skills and to build students' confidence so as to feed into evolving policies and procedures of the new Community Wildlife Service. Similar types of training have been carried out in Uganda, though not in such detail and more project focused.

One course was run by Mweka College and TANAPA staff in 1995 for Tanzanian protected area authorities staff. This has formed the basis for the first of the community conservation warden courses. AWF, TANAPA and UWA staff ran a different course in 1996 in Uganda which was based on the concepts to be included in a second level course for Community Conservation Wardens (Barrow 1996). It is through initiatives such as these that information-sharing networks can be forged and future training materials that may be developed can be taken up and used more widely. In 1997, Uganda's Katwe Wildlife Training College introduced its first course on community conservation. The

[13] The authors are very grateful to Deborah Snelson for the significant input into and comment on this section, and for the *Rural Extension Bulletin* of Reading University, UK for permission to reproduce an article (Snelson 1996), which has been adapted for this review.

course included a field trip to Lake Mburo National Park to examine the community conservation programme there and to receive instruction from the wardens and rangers working in the field.

The role of gender has become increasingly important, recognising the gender differences in the way women and men access, use and have responsibilities for different natural resources, at different times and for different reasons. This is being integrated into training programmes both as a separate focus, but also as part of other training. This is an important area since most conservation authorities have been dominated by men.

The issue of sustainability of these initiatives is relevant to allow the sharing of course materials. Mweka College is planning to expand its range of services and include more in-service training courses in the future. In addition the newly established Community Conservation Service Centre in Arusha, Tanzania, will be able to offer community conservation training courses, based on this model, both in Tanzania or elsewhere in Africa. It is hoped that the community concepts for ranger training will also be included in more formal ranger training in various ranger training schools in the region. These agencies will however not be able to meet the continuing demand for knowledge and skills that protected area authority staff and their client communities will need. What will be crucial to success will be for the community conservation wardens, trained in adult learning approaches and participatory techniques, to take those lessons and their own experience, and recognise the responsibility they have to share their knowledge and skills.

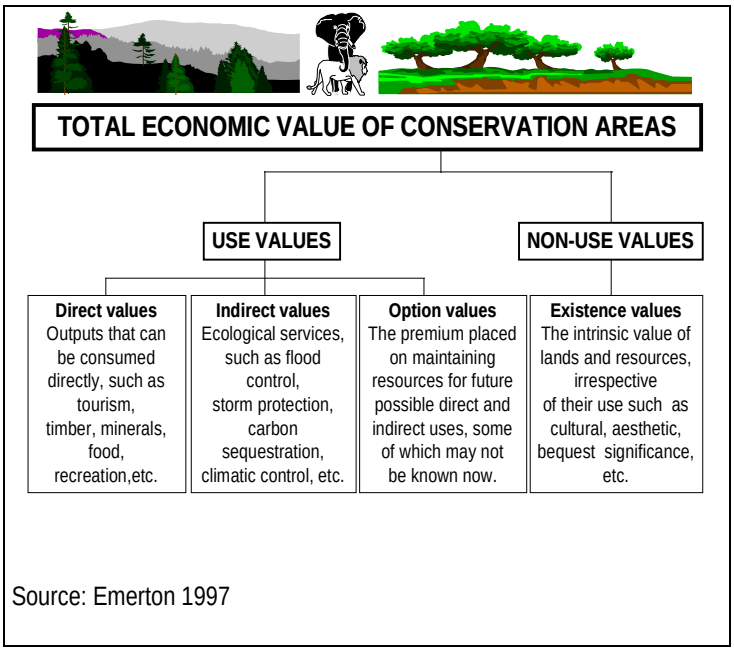
Given the wide range of training that has been carried out in the region for a variety of different objectives, and at different levels, a challenge is to bring this cumulative experience together in a form that is useful and usable, but avoids duplication of effort and investment. This could be done following a simple modular form based on existing material and adapted for different calibres of staff, eg. warden, rangers, foresters in a similar manner as for Collaborative Forest Management in Nepal (Jackson, Malla et al. 1996).

# 8. Sharing the Benefits of Community Conservation and Impacts on Wildlife

## 8.1 Equity and Economic Benefit Accrual[14]

The benefits that accrue from conservation areas can be classified into four broad areas: direct, indirect, option and existence values (Box 8.1). These benefits, however, are not all obvious, and do not always accrue as 'real' or tangible values. Nor are they usually divided equitably between different groups and interests. Of particular concern to community conservation is the extent to which they reach the local people living near or in a conservation area, and whether they are proportional to, or accrue in a form which can offset the 'costs' incurred by conservation areas.

The costs of wildlife conservation are better understood than the benefits. Especially, and arguably of greatest importance to community conservation, the opportunity costs of wildlife can impose untenable burdens. Opportunity costs comprise the economic activities that are foregone or precluded by wildlife, such as crop production in protected areas or certain types of wild resource utilisation, and are discussed in more detail later in this chapter.




Source: Emerton 1997

***Box 8.1: The total economic value of conservation areas***

Some recent attempts to quantify the benefits of conservation – for example its contribution to foreign exchange earnings or to national income, or the monetary value of ecosystem functions – may be beneficial to government planners, and certainly provide much needed arguments for wildlife conservation at the national level. They are however unlikely to be convincing to local communities unless they are of a sufficient value and type to balance the costs that conservation incurs. That wildlife can generate substantial income and other benefits is not usually at issue – rather, the problem of wildlife costs and benefits is one of inequitable distribution (Barrow, Bergin et al. 1995a). All too often the bulk of wildlife benefits accrue externally; to national or international

[14] Lucy Emerton (Co-ordinator, IUCN EARO Biodiversity and Economics Programmes) has had significant input into this section, for which the authors are very grateful.

firms and companies (Leader-Williams 1996), or to foreign tourists; not to the people who live with wildlife on a day-to-day basis, and suffer economic costs and losses as a result. Many wildlife options and existence values will be received by the global community or future generations (Emerton and Mfunda 1999).This concern with distribution arises from the fact that although wildlife contributes substantially to the national economies of East Africa, a high national economic value is not enough to ensure that it will be conserved.

The main concern in economic approaches to community conservation is not the total economic value of wildlife but rather the extent to which wildlife benefits actually reach landholders and land users in wildlife areas and the government agencies mandated to manage wildlife resources and implement community conservation activities (Emerton 1997c).

Benefit-sharing is one local level attempt to redress the inequities of wildlife conservation that directly affect rural resource users. It is not, however, a straightforward exercise. The process of negotiating what type of benefits to share, with whom, over what duration and for what purpose, is long (Box 8.2). The temptation will always be present to adopt an expedient approach in which immediate wildlife conservation needs or political pressures form the primary criteria for working with communities (Barrow, Bergin et al. 1995a).

**Box 8.2. Who Benefits? An example from Uganda**

Mgahinga National Park in Uganda illustrates some of the complexities of benefit-sharing. New rates were set for gorilla treks in April 1998 at $250 per visitor per gorilla viewing trek. In theory this includes $20 for local communities and a further $20 to tackle the problem of gorillas crop raiding (a problem at Bwindi Impenetrable National Park). With six trekkers per day, this gives a possible revenue of $1500 per day at Mgahinga (perhaps $200,000 - 500,000 per year).

In a region of reasonably recent agricultural settlement and significant population shifts associated with warfare, whose *de facto* or *de jure* property rights in the park's land and its resources should be recognised? Amongst whom should the revenues from gorilla trekking be shared? There are many possibilities - the landless or the land owners; the immediate neighbours of the park or the whole district; and so one - and each threatens to raise a political hailstorm of questions about fairness, justice, and need. Turning gorillas into a resource capable of yielding US dollar revenue in quite large quantities is not a magic solution to conservation or local development problems; it creates its own dynamic of competition for the resulting revenues (Adams and Infield, 1998).

Benefit-sharing in East Africa can broadly be classified into several functional types (Table 8.1, Barrow, Bergin et al. 1995a). These types of arrangements can have a recognisably positive impact on local perceptions of wildlife, and often provide an effective tool for improving relations between park authorities and community members. If they are to address some of the issues related to the imbalance of the local economic costs and benefits of conservation areas, benefits should make a demonstrable contribution to local livelihoods and welfare, and to ensure long term sustainability benefits should not be seen as handouts; instead there should be a tangible link between benefits received and conservation effort. Knowledge, attitudes and practices studies and surveys indicate that already many rural people feel that they receive, either directly or indirectly, benefits from conservation. These include improved infrastructure, developmental inputs such as schools and clinics, transport and communications as well as purely financial revenue.

The possibility for success is increased if the activity addresses community needs, and represents an approach around which a community has formed a consensus; benefits community members in an open, easily understood and straightforward manner; is one in which the maximum number of members of a community or group benefit and see themselves as benefiting; and stands the greatest chance for long-term sustainability. An agreed framework needs to be established to satisfy all the varying stakeholders, have policy support, and be practically oriented. Policy guidelines have been instituted for the sharing of benefits in East Africa, namely the Wildlife Development Fund - Revenue Sharing (WDF-RS) in KWS and Support for Community Initiated Projects in TANAPA (SCIP), and Revenue Sharing in Uganda (KWS 1993; Uganda National Parks 1994; Bergin and Dembe 1995).

***Table 8.1: Some Practical Examples of Different Types of Benefit Sharing in East Africa***

| Type | Some Examples | Planning requirements |
|---|---|---|
| No direct additional expenses required | Advice, support, training, for example of village guards. Technical advice relating to, eg. agroforestry, school buildings, problem animal management and control, conservation education | Minimal – timing and work planning |
| Redirection, planning of normal recurrent expenditure | Road maintenance near parks. Use of lorries for transport of goods, people. Bringing people into conservation area to view conservation activities | Little – depends on what is available and what people want to do |
| Planning of development expenditure | Siting a ranger post or interpretation centre so that communities can benefit more easily | Community participation in park-facilitated process |
| Community development projects; support from special benefit sharing funds | 1. Infrastructure: Village offices, school buildings, health facilities, roads, live and electric fencing<br>2. Service: Cattle dips, wells and water points, equipment purchase<br>3. Recurrent: School bursaries, salary support for community game scouts. | Considerable in terms of commitment, contributions and responsibility from both conservation authority and communities, with community directing process |

Source: Barrow, Bergin et al. 1995

### *8.1.1 Kenya*

KWS initiated its Revenue Sharing Fund in 1991 with a national focus (Bensted-Smith 1992; KWS 1992). At first it was based on 25% of gate fees derived from non-resident (i.e. tourist) adults, a figure which has since been revised to become more realistic and institutionally affordable, based on lessons from the trial revenue sharing around Amboseli National Park (Barrow, Bergin et al. 1995a; Box 8.3). This led to the evolution of the Wildlife Development Fund (WDF), which set out policy and criteria for application to, and implementation of WDF (KWS 1993, 1994; see Section 6.3).

***Box 8.3: KWS Trial Revenue Sharing in 1991***

In 1991 KWS set aside approximately $115,000 to be shared by the four Group Ranches within the Amboseli ecosystem as part of the initial KWS revenue sharing scheme. The criteria for sharing the funds included proximity to the park; proportion of wildlife distributed on the ranches during migration; and the original ownership of Amboseli Park land. Conflicting interests emerged including defining equitable mechanisms for distributing revenues. For eight months during 1990 to 1991, AWF staff held a total of 298 meetings on the distribution of revenue sharing with parks staff, women, Maasai pastoralists, local politicians, the county council, Group Ranch members, Group Ranch management committees, various NGOs, and other interested parties. This difficult process illustrated the complexities of working with communities, and resulted in an agreed format for the distribution of revenue.

After the allocation of the first revenue sharing funds, AWF staff held a further 70 meetings on what each Group Ranch should use the money for. These meetings were held with Group Ranch members, the Amboseli Park Warden, sub-district development committees, and relevant district authorities to ensure that proposed projects were properly prepared and then approved by district authorities and KWS. This helped KWS develop mechanisms for disbursement, fine tune criteria for allocation, and formulate application and screening criteria. Mechanisms were developed for allocating revenue sharing funds based on various conservation and human-wildlife interaction criteria (COBRA Contract Team 1994; KWS 1994).

*Source: Barrow, Bergin et al. 1995a*

Between 1991 and 1995 funds worth over US$1.25 million generated from protected areas were put into the Wildlife for Development Fund, and allocated mainly to the development of social infrastructure in adjacent areas (education (50%), water and health (21%), wildlife control (8%), self help activities (5%), famine relief (4%), enterprise development (4%), and other (8%)). However, a growing recognition that the provision of social infrastructure is not in itself a sufficient condition either to financially benefit land holders or to offset the economic costs that wildlife incurs to them (Emerton 1998c) has led to a shift in emphasis to building the capacity of landowners to develop their own wildlife based sources of income. There is an increasing emphasis on income generating projects. The WDF now operates under the following principles:

- Wildlife should, as far as possible, pay for itself. Revenue-sharing/WDF should provide direct benefits to communities who bear the greatest burden of coexisting with wildlife.
- KWS, other government agencies and communities, should engage in partnerships to conserve wildlife so that people see that it is in their economic interest to conserve wildlife, protect habitats and prevent destruction.
- KWS helps organise groups to benefit from wildlife within a legal and open framework, so that WDF can assist groups to manage their own resources better and on as sustainable a basis as possible.
- KWS requires that any projects funded through revenue-sharing/WDF conform with Sessional Paper Number 1 of 1986 on District Focus on Rural Development (Republic of Kenya 1987) to ensure that revenue-sharing/WDF activities are not developed in parallel to or in isolation from other activities.
- Where possible, KWS works with relevant government agencies, county and urban councils, and also co-operates with a variety of NGOs (KWS 1993; COBRA Contract Team 1994).

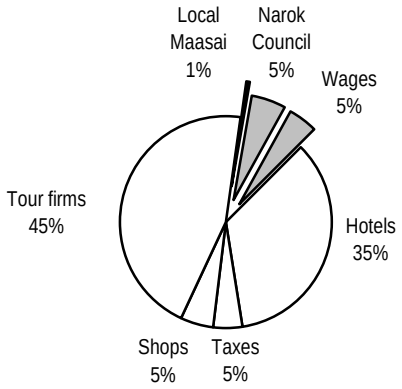
While KWS had started to share benefits through the WDF, this process has been slower with other institutions, such as the county councils who are responsible for Kenya's national reserves.

Though there are seemingly vast revenues to be earned from wildlife tourism – the Maasai Mara National Reserve earned $20 million in 1988 while the surrounding Group Ranches earned a further $10 million (Douglas-Hamilton 1988), local communities received less than 0.5% of all tourist revenues from the Maasai Mara National Reserve in Kenya in 1988 (Douglas-Hamilton 1988; Box 8.4). In 1989 these amounted to 1.6% of gross tourist revenues from the Group Ranches or 0.5% of all tourist revenue in the Mara area (Norton-Griffiths 1996).

This is similar to Amboseli National Park, where in 1990 the landowners of the wet season dispersal areas received 1% of the $15 million of wildlife revenues (Norton-Griffiths 1996). Consequently, there is a clear trend on the part of the Maasai both to develop their land and to sell land to developers so that land use is changing from traditional pastoralism to agriculture and ranching (Douglas-Hamilton 1988; Parkipuny 1989; Anderson and Grove 1993; Norton-Griffiths and Southby 1995).

***Box 8.4: Distribution of tourism revenues to communities in Kenya***

In 1988 the 122 500 visitors to the Maasai Mara National Reserve accounted for over a tenth of all tourist bednights in Kenya. In addition to spending money on accommodation and reserve fees, tourists also directly supported a range of other enterprises, including balloon safaris, sales of handicrafts and various travel and transport-related purchases. Total tourist expenditure for the area was over US$ 26 million. However, although almost twice as many tourists visiting the Maasai Mara stayed – and most wildlife was found – on communal lands rather than in the reserve, less than 1% of cash income accrued to local Maasai and under a tenth remained in the district as council revenues or wages to local employees.




*Adapted from Douglas-Hamilton 1988*

Changing land uses in wildlife areas constitute a major threat to conservation. In particular, the profitability of crops gives cause for concern. A study in Laikipia district indicated that most high potential land has been put under agriculture, realising the high potential returns on such lands; and that wildlife is found in the low and medium potential lands which are best suited to ranching, and where the opportunity costs of keeping wildlife depend on the extent to which livestock and wildlife are complementary (Elliott and Mwangi 1997). Table 8.2 shows that livestock returns have been low, as they are relatively more affected by climate and rainfall, and indicates that there is potential for multiple land use integrating both wildlife and livestock which will yield more income than any on their own. The challenge for such land users will be to improve the economic returns to combined wildlife and livestock land use (Elliott and Mwangi 1997). However market entry requires large land areas, of approximately 10,000 ha., good access, excellent wildlife viewing opportunities, the right

partners, access to capital and a market niche (Elliott and Mwangi 1997). Such requirements are beyond most land owners, except for commercial large scale operations.

***Table 8.2: Returns per Hectare for Alternative Land Uses in Laikipia***

| Activity | $/Ha per annum 1995-1996 | Return on capital % per annum |
|---|---|---|
| Wildlife tourism | 4.40 - 4.70 | 2.20 |
| Wildlife cropping | 0.20 - 0.40 | 0.30 |
| Livestock | 0.20 - 1.40 | 0.70 |
| Agriculture (high potential lands only) | 132.50 – 166.20 | 4.70 |

*Source: Elliott and Mwangi 1997*

Increasing the value of wildlife may prove a positive force for conservation. A number of communally held land areas, and the majority of the 50 private ranches in Kenya, currently profit from extractive wildlife utilisation and many simultaneously run non-consumptive wildlife tourism enterprises. This has greatly increased income in these areas – engaging in mixed land uses which include wildlife utilisation can raise returns to land by a factor of between 1.6 and 17.9 for commercial ranchers, and increase pastoralist returns by 12 to 320% (TACK 1996). As the wildlife sector becomes increasingly liberalised this is likely to increase even further (Table 8.3). The Maasai around Maasai Mara National Reserve are increasingly taking to cultivation on a small scale and renting land to commercial farmers. The livestock management is under their direct control. In both these cases they benefit directly and immediately from all the revenues and profits (Norton-Griffiths 1996). Tourism, like livestock rearing, is also an extensive form of land use. But tourism revenues are generated largely by tour companies. The Maasai landowners have neither the capital nor expertise to participate fully in tourism, and have little influence on it. Their returns, or profits, are in the form of access fees, bednight fees and other minor revenues.

***Table 8.3: Actual and Potential Value of Wildlife Utilisation in Kenya***

| | Actual Value (US$ mill.) | Potential Value (US$ mill.) |
|---|---|---|
| Cropping | 0.34 | 1.00 – 2.00 |
| Farming<br>• Crocodile/ostrich<br>• Butterfly<br>• Bird shooting | <br>0.27<br>0.02<br>0.03 | 0.75 – 1.50 |
| Sport hunting | | 5.00 – 15.00 |
| Total | 0.66 | 6.75 – 18.50 |

*Source: TACK 1996*

It is not just the commercial value of wildlife which can act as a positive incentive for conservation – subsistence values are also important determinants of people's behaviour in conservation areas. In terms of forest conservation areas there are a number of interesting examples (Boxes 8.5 to

8.7). Emerton (1996b) found that the Aberdares National Park and forest provided considerable benefits to local people surrounding the forest (Table 8.4), and this does justify conserving the forest in purely economic terms compared to other forms of land use. Furthermore, the high value of local forest use, and its central role in people's livelihoods provides an important justification, and a strong local incentive, for maintaining the area under forest cover (Emerton 1996b).

***Table 8.4: Average Annual Value to Users of Produce from Aberdare forest, per Household***

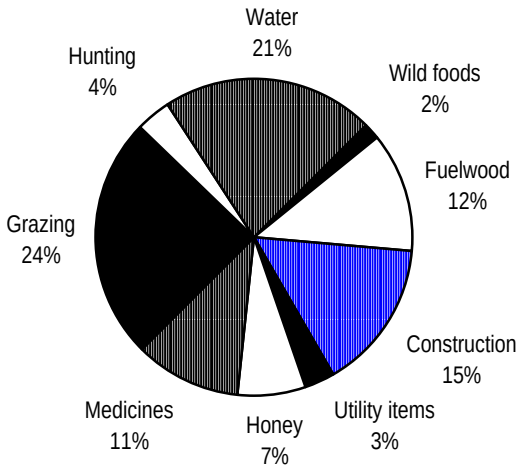
| **Product** | **Average annual value ($s)** |
|---|---|
| Timber | 14.6 |
| Medicines | 43.8 |
| Honey | 29.2 |
| Building materials | 51.1 |
| Wild foods | 21.9 |
| Hunting | 7.3 |
| Grazing | 58.4 |
| Charcoal | 29.2 |
| Fuelwood | 51.1 |
| TOTAL | 305.6 |

Source: Emerton 1996b

Conservation cannot compete with alternative, destructive, land uses if it does not yield real and tangible economic gains to landholders – in both monetary and livelihood terms. Thus policy reform is undoubtedly a necessary condition for making conservation an economically desirable, and viable, land use option for local communities. The case of Mount Kenya Forest is an interesting example. Mount Kenya Forest competes for scarce land, money and other resources with other forms of land use and investment opportunities at local and national levels. In order to justify conserving Mount Kenya Forest it is necessary to demonstrate that not only can conservation compete with other land uses and investment opportunities, but that it can simultaneously generate multiple economic and development benefits at both national and local levels (Box 8.6)

***Box 8.5. The Value of Oldonyo Orok Forest***

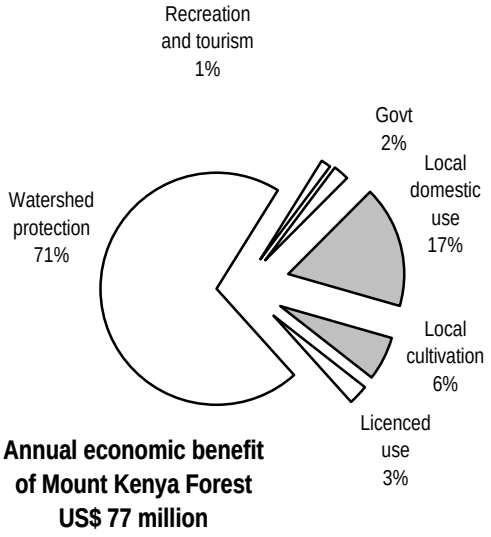
Oldonyo Orok forest provides few obvious benefits in terms of usually recognised forest benefits – timber, wildlife, rare and endangered species, biodiversity or ecological services; none of these were considered to present sufficient justification for conservation. However, the high value of subsistence forest use to local households provides the major justification for conserving the forest. Most local Maasai households regularly use the forest for fuel, shelter, foods and medicines. Subsistence forest use is worth an average of $100 a year each for the majority of 1,000 directly adjacent dwellers, equivalent to over a third of the annual value of subsistence livestock production. It provides the only local source of dry-season and drought refuge for livestock in a dry and climatically uncertain area and supports up to 1,000 more households from a much wider region in times of stress. Pasture and water alone account for nearly half of the perceived value of the forest. The forest, by sustaining livestock production, supports basic human survival and generates broad economic benefits for the region

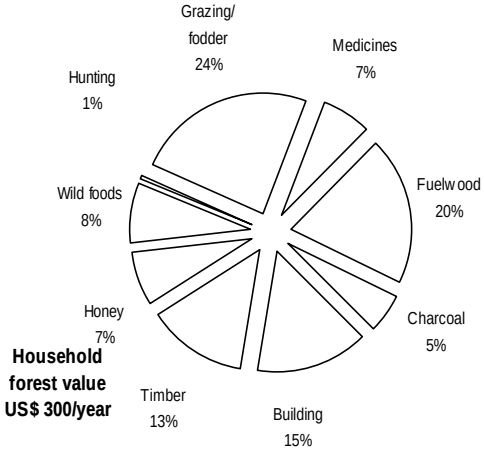



*Source: Emerton 1996*

***Box 8.6: Economic incentives for forest conservation in Mount Kenya***

The forest provides a stream of goods and services which generate economic benefits and support economic activities which accrue to the global community, the Kenyan economy and the livelihoods of the people who live around the forest (see the pie charts). Mount Kenya Forest and its component resources form a stock of natural capital which if managed sustainably can yield a wide range of direct and indirect economic benefits to human populations. Conserving the forest will maintain these economic benefits, while forest degradation and loss will constitute a loss of these goods and services and impose a high cost on the national and local economy over the medium and long term.




The total quantified gross benefits of conserving Mount Kenya Forest are worth US$77 million a year, composed of local forest utilization[15], local cultivation of forest land under *shamba* system arrangements[16], other licensed utilization of timber and non-timber forest products[17], tourist and recreational values[18], government revenues[19] and watershed catchment protection benefits.[20] Not only is this value large, it is in excess of the economic benefit of forest clearance and land conversion to settled agriculture – the major threat to forest status and integrity. Use of forest land for agriculture is estimated to have a potential gross value of US$ 72 million a year or to be sufficient to provide for the livelihoods of approximately 8,000 households[21]. Taking into account the unquantified benefits

[15] Calculated on the basis of participatory environmental valuation of domestic resource utilization by forest-adjacent households (Emerton 1996a).

[16] Calculated on the basis of farm income under existing forest *shamba* cultivation patterns less license fees (Emerton 1997b).

[17] Calculated on the basis of market value of forest products less license fees (Emerton 1996a).

[18] Calculated on the basis of existing visitor willingness to pay (Emerton 1996b).

[19] Including tea zone revenues, license fees and royalties from forest products and land rentals (Emerton 1997b).

[20] Calculated on the basis of the difference between downstream production values under different riverflow regimes for Tana river basin and soil and water conservation replacement costs for Athi river basin (Emerton 1996b).

[21] Calculated on the basis of net returns to cultivable forest land and average settlement farm areas (Emerton 1997b).

associated with Mount Kenya Forest and their wider social and economic significance – goods and services such as carbon sequestration, micro-climate regulation, options on future possible uses and applications of forest species and products, local cultural and national and international aesthetic values – strengthens still further economic arguments for forest conservation in this case.
**Source: Emerton 1997b**

Policy changes are needed which help to capture these costs in a demonstrable way, especially by increasing the proportion of these benefits accruing to local communities. There is currently a range of market failures which limit the degree to which forest benefits are captured as real financial values or reflect full social and environmental values. Under the *status quo* many who benefit from conservation bear few costs – especially commercial users of forest products, downstream water consumers and recreational visitors, who gain significant values from the forest at no charge. In contrast, other groups – local communities and the Forest Department – gain a level of forest benefits which is disproportionate to the costs they bear. This imbalance has two implications – the groups who provide forest benefits do not financially gain because they are unable to raise cash to cover the costs that the production of such benefits incurs on them, and the consumers of forest goods and services receive forest benefits for which they pay little or nothing. This produces a situation where there exist perverse economic incentives which encourage both forest consumers and producers to over-consume, under-produce and under-conserve Mount Kenya's forest resources.

There are various economic instruments through which failures and distortions in the market for forest goods and services can be overcome, and through which forest economic benefits can be captured as real financial benefits and redistributed to the cost-bearers of conservation. Despite their potential importance in providing both incentives and financing for forest conservation, such instruments have to date been largely ignored in attempts to initiate community-based conservation in Mount Kenya Forest. Although there is a range of possible new international, national and local markets in forest goods and services which could be established – such as carbon offsets, biodiversity prospecting fees, forest resource shares and various forms of bond and deposit systems – three major existing markets for forest benefits could most easily be improved in Mount Kenya Forest: those for forest products, water and tourism.

It is clear that unless sufficient economic incentives are provided to local communities so that they receive a net gain from Mount Kenya Forest, conservation will not take place. Under traditional exclusionist approaches to forest management, these conditions have not been met. Community-based forms of management provide a means of setting in place the economic conditions and incentive structures which will meet both community livelihood and forest conservation goals. These economic conditions include:

- maintaining sustainable levels of local forest utilisation
- ensuring that forest-substituting activities and forest-saving technologies are available and attractive to local populations,
- improving the markets for forest goods and services so as to increase the extent to which forest economic benefits are captured as real financial values
- establishing local rights to forest management and use which enable communities to benefit from forest conservation.

Each of these conditions is necessary, and together aim to provide sufficient incentives to ensure that Mount Kenya Forest is conserved at the same time as local economic welfare is increased.

A final set of economic conditions is also necessary to conserve Mount Kenya Forest. These conditions are largely external to the directly forest-adjacent area. Local communities are not the only groups with interests in the forest, or with the capacity to influence its status by their actions. Especially, commercial loggers and the threat of large-scale encroachment into the forest for settlement and agriculture present major threats to the forest. Unless Mount Kenya is simultaneously and effectively protected against these activities, community-based approaches to forest conservation are unlikely to have any long-term impact.

### *8.1.2 Tanzania*

TANAPA's Support for Community Initiated Projects (SCIP) was initiated in 1992 as part of TANAPA headquarters and park strategic planning (TANAPA 1994). The SCIP programme works with communities bordering or close to national parks, and stresses supporting *community initiated* projects. Box 8.7 provides an example of this. The approval mechanisms are at the park level. There is increasing liaison with enterprise type tourist related projects that neighbour parks.

***Box 8.7: TANAPA SCIP and Tarangire National Park***

Local communities requested assistance from the park in 1992 for provision of clean water, health and education projects, and problem animal control. The Community Conservation Service has to some extent met these needs in the SCIP projects provided to each of the target villages. The total value of these projects was approximately US$ 16,520.

Budgets for the Tarangire National Park SCIP fund total US$ 93,800 for projects in 16 villages in the five fiscal years 92/93 to 96/97; approximately $18,750 per annum. The perception amongst villagers of receiving benefits correlated with TANAPA's input to SCIP projects. The input to village projects seems to have provided much of the impetus in moving away from a history of negative relationship between the park and the local people to the current positive relationship. Furthermore, the impact of the SCIP projects seems to be broad in the sense that there is awareness of benefits in the villages where TANAPA had not been focused and villagers were eager for dialogue and to attract TANAPA to their village.

An issue typically ignored in the implementation of community conservation programmes is the balance of resources between the implementing organisation and inputs to the community. At village meetings held in 1997 it was consistently mentioned that TANAPA was well resourced and benefits going to community were minimal. Thus far the only benefits received by communities have been those received through TANAPA's SCIP benefit sharing programme or private sector initiatives. Opportunities for communities themselves to use wildlife resources on their land, such as the establishment of wildlife management areas, are still in the early stages of development.

In addition, two tourist operators, Dorobo Safaris and Oliver's Camp, have, since 1990, been engaged in dialogue and projects to get the benefits of conservation to the grassroots level in the community, while safeguarding their access to the resource on which their private enterprises depend. The experience of these private companies indicates promising results and the issues they have had to deal with are central to the issues of community wildlife management. While the tourist operations of both companies differ on the ground, their shared principles and philosophies have meant that these companies were able to take a united approach in working with the communities. Both currently have legally binding contacts with the villages. The contracts with the villages provide these two companies with exclusive rights for tourist operations with the respective village, and allow them to market a unique tourist experience. Oliver's camp has an area set aside by Loibor Serrit village for a permanent camp and walking trips, while Dorobo conducts mobile wilderness safaris and sets up temporary camps in the area of Emboret village. Benefits distributed to the villages thus far have amounted to about US$ 16,670 between 1990 and 1993. Transparency and accountability have been encouraged through wide involvement of villagers in meetings after initial discussions with village councils. While the company directors are keen to see that funds filter down to the local level, they have also been sensitive not to dictate the use of funds and to encourage village-wide decisions on how these are spent (Oliver and Howit 1994).

Source: Kangwana and Mako 1998

The SCIP fund currently amounts to about 7.5% of each park's operations budget. Community members seem to place great emphasis on the knowledge that TANAPA is actually putting its institutional hand into its pocket and pulling out something substantial from its own revenues. Tanzanians may be used to a donor culture, but it is highly unusual for a Tanzanian parastatal to voluntarily spend over $350,000 of its revenue in a year on assisting community projects (Bergin 1998). Donor support to the SCIP fund has been relatively small and on a matching basis. This feature is important because TANAPA sets the scale and pace of the revenue sharing. Communities are quick to perceive whether the agency is really sharing revenue or is simply a pass-through for donor funding.

In order to access this fund, communities fill out a simple one page form in Swahili. The proposal is then reviewed by a park SCIP committee using a set of 13 guidelines prepared by the Community

Conservation Coordinating Committee, as well as the strategic plan for that park (TANAPA 1994; Bergin and Dembe 1995; Bergin 1996). In addition to the funding, TANAPA often provides logistical and technical support to the communities to help ensure the success of the projects. The example of Arusha National Park illustrates the sort of activities that can take place, ranging from live fencing, support for schools, clinics and water development.

In addition to SCIP there are a number of examples of other forms of benefit-sharing mechanisms in Tanzania. In Mkomazi for example there has been a drastic collapse in the local livestock economy following eviction, with the loss of an estimated £500,000 per annum. This caused the loss of a whole range of secondary businesses, and considerable distress for many livestock rearing families (Homewood, Kiwasila et al. 1997). The reserve management has undertaken extension activities in the form of high profile projects aimed at meeting local needs. These are funded by the Tanzanian Wildlife Protect Fund of the Department of Wildlife to a total of $20,000, but the benefits are small compared to the costs.

The private sector can also be a source of benefits to local communities (Boxes 8.7 and 8.8), although many of these private sector schemes work with one or a few villages. Hunting can also be a major source of revenue for local villages. At Mkomazi hunting brought in over nearly $40,000 in one half season. Some of this revenue ($2,600) was returned to villages in Same District as part of the government policy of redistributing wildlife revenues to districts. The funds were used for water and primary school development project (Homewood, Kiwasila et al. 1997).

***Box 8.8: Private sector benefit-sharing around the Serengeti National Park***

In the north-west buffer zone of the Serengeti a series of effective community economic incentives for wildlife conservation have resulted from the development of a new range of markets for wildlife products and services, largely driven by private-sector demand and the dependence of commercial tour operators on community compliance in wildlife conservation. These include:

***Revenue sharing by tourist hunters:*** The most lucrative wildlife-based enterprise in the north-west buffer zone is tourist hunting. Hunting outfitters and their clients are beginning to allocate revenues directly to the villages on whose land they operate. A voluntary levy of 10%, over and above trophy fees, has recently been imposed on all tourist hunting activities. This levy has the potential to generate up to US$ 12,500 a year for each of the four villages in the north-west buffer zone upon whose land hunting concessions lie.

***Local sourcing of products:*** Hotels, lodges and hunting camps are increasingly obtaining food products from local sources. It is estimated that sales of beef, chicken, fruit and vegetables are currently worth between US$ 10,000-15,000 a year to villages in the north-west buffer zone. As well as providing cash income, these arrangements have acted to stimulate and diversify farm production among local households.

***Community wildlife cropping:*** For the first time, communities in the north-west buffer zone have been allocated their own wildlife cropping quotas, introducing a number of new markets for wildlife products. One of the most important impacts of cropping quotas has been to legitimise the sale and consumption of game meat, leading both to a decrease in the local price of meat and a downsurge in poaching. It has simultaneously stimulated the market for other wildlife products, such as horns, hides and skins. Currently worth some US$ 3,500 a year it is estimated that the value of cropping could almost quadruple to US$ 13,500 if quotas were allocated to all villages in the north-west buffer zone.

***Land leases and joint tourism enterprises:*** The greatest potential for local gain from wildlife lies in the direct participation of landholders in wildlife enterprises. Over recent years private sector tourist operators have started to work directly with villagers in the north-west buffer zone. Several joint private sector-community partnerships have been forged. These range from land lease and bednight levy arrangements worth up to US$ 10,000 per village per year, through to the development of a wildlife camp as a joint venture in which villagers hold equity, supply labour and food products and from which a proportion of profits are ploughed back into the community as share dividends, development funds and micro-credit, potentially worth more than US$ 20,000 a year.

Together these arrangements have increased substantially the economic and livelihood gains accruing from wildlife to communities – at the household level wildlife now has the potential to generate directly more than 60 times as much as under government benefit-sharing arrangements, excluding employment and secondary income benefits. For the people who live around the north-west of the Serengeti National Park, and who bear high economic costs from conservation, economic incentives have ensured that wildlife has started to be seen as an integrated and desirable part of local land use and livelihood systems.

*Source: Emerton and Mfunda 1999*

### *8.1.3 Uganda*

One of the major factors in the development of Uganda's revenue sharing programme was Kenya's decision to share the revenues of protected areas with communities living around those protected areas (Bensted-Smith 1992; Barrow, Bergin et al. 1995a). Though Kenya's decision was to an extent a response to political pressure, it was made in the context of significant revenues to share, a large institutional structure to implement the policy, and the support of technical expertise to assist in the design of the policy. Uganda National Parks were placed under great political pressure to initiate the same policy, and responded to this pressure as early as 1990 by making public statements that it would share 'up to' 20% of its income with communities. In the case of Uganda, however, there was

almost no income to share at that time, with tourism being at a very low level. Furthermore, the will to implement the policy was low at all levels of the organisation, and the mechansim for sharing of revenue had not been developed. It will be appreciated that provision to share 'up to 20%' was not recognised or accepted as such by communities or politicians, and their demand became for 20% of revenues to be shared.

Revenue-sharing guidelines were approved by the UNP Board in 1994 after a revenue sharing workshop (Uganda National Parks 1994), and were based on 12% from entrance fees, ranger-guide fees, accommodation, camping, Gorilla tracking and concession franchise fees. However the first funds from the programme were not distributed until 1996. It is unclear whether, in the absence of support and pressure from NGOs operating in the parks, this policy would have been implemented, despite the strong support of many park managers. In 1996 the revenue-sharing programme was modified by its inclusion in the Statute, which set 20% of park entry fees only to be shared with local authorities.

Lake Mburo National Park provides an example of different sources of revenues that can be shared with adjacent communities (Table 8.5). Sources of income for LMNP are limited, apart from external budgetary contributions, to fisheries and tourism activities. The gross income accruing from fisheries activities in LMNP in 1997 was $48,000, or an average of nearly $1,500 per canoe. Of this total, net income of approximately $41,400 accrued to local residents – 18 of the canoes are operated by UWA staff, and various fees and levies are paid by fishermen – divided 60:40 between license holders or boat owners and fishermen. In addition to fees payable to LMNP and to the Fisheries Department a levy has recently been imposed on fisheries of 10% of total catch value, paid to PMAC for community development activities. In 1997 this levy generated some $9,000. Spread out between the 15 parishes that border the park, this is a very small sum of money. It is, however, larger than any other source of funds available to these communities.

***Table 8.5: Summary Table of Quantified LMNP On-site Economic Benefits 1997***

| Economic Benefit | Total value $'000 | Park authorities $'000 | Community benefits $'000 |
|---|---|---|---|
| Park tourism | 78.1 | 66.4 | 11.7 |
| Rubale fish landing | 47.7 | 6.3 | 41.4 |
| Local resource utilisation | 1,413.0 | - | 1,413.0 |
| UWA budget allocations | 249.3 | 249.3 | - |
| Donor funds | 283.2 | 259.9 | 23.3 |
| **TOTAL** | **2,071.3** | **581.9** | **1,489.4** |

What should be remembered however is that despite a small gain in terms of development activities carried out under the Community Conservation for UWA project, local communities currently face a net economic loss of some $400,000 a year in opportunities foregone resulting from the continued conservation of LMNP. Local communities are subsidising wildlife conservation by foregoing productive resource utilisation activities (Table 8.6) as current park regulations prhibit the use of park resources. The major proportion of this cost – estimated to have a total value of $1.46 million a year – is accounted for by the foregone value of fishing, hunting and the extraction

of wood products.Given the widespread poverty and growing land pressure in the LMNP-adjacent area it is not clear whether this is a cost that they can afford – or be willing – to bear over the long term.

***Table 8.6: Value of LMNP Resource Uses Foregone for Local Communities***

| Resource | % of population excluded from LMNP resource use * | Approximate no. households excluded | Value of foregone resource utilisation ($'000/yr) |
|---|---|---|---|
| Polewood | 14 | 2,009 | 8.3 |
| Fish | 11 | 1,579 | 1,111.0 |
| Hunting | 11 | 1,579 | 131.6 |
| Firewood | 10 | 1,435 | 149.5 |
| Papyrus | 9 | 1,292 | 37.7 |
| Medicines | 7 | 1,005 | Nd |
| Thatch | 5 | 718 | 6.0 |
| Weaving | 4 | 574 | 16.8 |
| Honey | 3 | 431 | 4.5 |
| TOTAL | | | 1,465.0 |

*Source: Marquadt, Infield et al. 1994: *Households currently not using park resources but expressing a desire to do so.* ***Note****: values are additional to existing agreed and illegal resource use; per household consumption values as in existing use; farming, pasture and water excluded because they are dealt with elsewhere as an agricultural opportunity cost of conservation*.

The Lake Mburo example is illustrative. Even if funding to community development projects could be increased to a level commensurate with opportunity costs – which is unlikely, given the sums involved – this might not be an effective means of compensation (Emerton 1998a). Local communities utilise park resources because they need them, and some believe they have been unfairly excluded from lands and resources which they have a right to. However, increasng the benefits from sustainable use of park resources will at least reduce economic losses to local communities (Emerton 1998a).

## 8.3 Impacts of Community Conservation on Biodiversity

The ultimate judge of community conservation must be its impact on the conservation of biodiversity. Showing that community conservation has a positive impact on biodiversity is key to long term success. However, demonstrating benefits from conservation to rural livelihood is easier than measuring the impact on the conservation resource. There are a number of reasons for this difficulty:

- Changes in conservation status and biodiversity may be influenced by many factors - some local (for example, changes resulting from conservation programmes); others national (for example, impacts of changing land use policy); while others are of a global nature (for example, the effects of global warming). All these interactions make it difficult to establish direct cause and effect to understand the effect of community conservation initiatives.

- Few community conservation projects have tried to establish a baseline for future reference, and there are few adequate monitoring programmes for ecological or biological impacts. Despite some attempts (Kangwana 1998), there remains an almost total lack of empirical data with which to make such analyses.

- Even defining these impacts, together with functional measurable indicators, is difficult. If an increase or decrease in the population of an indicator species was measured, what would this indicate? Could it be attributed to the community conservation programme or did it result from some other variable? Was it a desirable change or not?

Whilst social aspects such as resource tenure and access changes, improvement in park relationships and levels of benefits have all been monitored, these may be affected by community conservation, but cannot be deemed a conservation gain unless the link between community action and biodiversity can be clearly made (Box 8.9).

Several initiatives have been undertaken over the years to establish programmes to monitor wildlife, most of them focusing on large mammal population trends. Difficult though it may be, there is a range of means of measuring conservation impact, based on conservation biology theory. Guidelines have been developed for determining conservation impact at three levels (Table 8.7).

***Table 8.7: Levels for Biodiversity Monitoring***

| WWF (1997) | GEF (1996) | WCMC (1996) |
|---|---|---|
| • Sensitive species<br>• Critical habitats<br>• Ecological problems | • Species or populations<br>• Community or ecosystem<br>• Regional or landscape | • Genetic diversity<br>• Species<br>• Habitats |

*Sources: Global Environment Facility 1992; World Conservation Monitoring Centre 1996; WWF 1997*

**Box 8.9 Linking Community Conservation to Wildlife Impacts**

Lake Mburo National Park illustrates the difficulty of interpreting data to provide an assessment of the impact of community conservation programmes. Research has shown that the community conservation programme, through a variety of community initiatives, has had significant influence on the attitudes of local communities towards the park (Namara and Infield 1998). It is not clear, however, if this change in attitude has been matched by a change in behaviour of the community leading to improved conservation of biodiversity. In 1991, over 600 families and 20,000 head of cattle were resident in the park. In 1997, following government initiatives to relocate resident families, there were no families resident within the park; and a significant improvement in the conservation status of the park (based on impressions of population increases of some large mammals within the park, and the reduction in areas bare of vegetation caused by trampling by cattle).[22] Can these changes be attributed to the community conservation programmes, and how should they be interpreted? The survey data which covers a larger area than the park itself shows a dramatic decline in the large mammal population (Lamprey and Mitchelmore 1996), attributable to poaching.

[22] However, other species such as plovers and waders seem to have declined since the removal of cattle.

Most of the survey area, however, was outside the area covered by the community conservation programme.

An interesting example which may provide some illumination is the conservation of mountain gorillas in Uganda's Bwindi Impenetrable National Park. The CARE Development Through Conservation Project and the International Gorilla Conservation Programme have been working with communities on a number of initiatives since 1989, including providing access to resources within the park, and sharing the benefits of gorilla tourism with local communities. During this period only one case of gorilla poaching was recorded, in which two adults were killed and a baby stolen. Investigations revealed that the culprits came from a community that, due to its isolation, had received little attention from the DTC Project.

One of the primary features distinguishing East Africa's famous savannah protected areas from those in southern Africa is that they are not, in general, fenced. The large concentrations of wildlife that are seen during peak viewing seasons exist only because a much larger dispersal area outside the park is available to wildlife. Thus the 'success' of East Africa's most important wildlife areas depends on maintaining a certain scale of conservation, and retaining wildlife habitat intact. A key indicator of conservation impact of community conservation programmes is the extent to which they mitigate conflicts in land use between parks and surrounding areas, or actively establish compatible land management regimes on contiguous lands. The Community Conservation Service of TANAPA has had some impact on the former in Tanzania, whereas the establishment of Wildlife Management Areas and conservancies attempt the latter.

In Amboseli in Kenya, community conservation and revenue sharing has been operating for more than 20 years. A range of activities has attempted to link benefits to conservation (Berger 1977, 1988, 1993; Barrow, Kangwana et al. 1995). The impact of these is reflected in the relative stability of wildlife populations in Kajiado district even during periods when there were severe declines elsewhere. The total number of wildlife in the Kajiado district in 1977 was 175,260. In 1994 the number was 148,770, a 15% decline in the area over a period of almost 20 years (Grunblatt, Said et al. 1995; Rainy and Worden 1997). This compares with the other rangeland district of Kenya where losses of 40%-80% have been recorded. Given the significant changes in land use in parts of Amboseli's dispersal area, a 15% decline may be thought to be small. Prior to 1978 there was poaching of elephants in and around Amboseli. After this period, except for the occasional spearing by Maasai warriors, elephants suffered little from poaching. However, they retreated into the park where it was safer. The Amboseli elephants therefore owe their current status to the presence of researchers, high numbers of tourists, as well as the Maasai who have been actively involved in elephant monitoring on the group ranches around the park and have a largely positive attitude to wildlife (Moss 1988; Kangwana 1993, 1995).

The elephants in the neighbouring Tsavo ecosystem were not so lucky. The drought of 1970 -71 claimed 6,000 elephants in Tsavo East and continued to take its toll several years after. The total mortality related to the drought and its aftermath was 9,000 animals. Coupled with heavy poaching in the 1970s and 1980s the population plummeted further from an estimated 20,000 in 1976 to 5,363 in 1988 (Grunblatt, Said et al. 1995; Rainy and Worden 1997). It is believed that the lack of community involvement in conservation activities contributed much to the decline of this population.

Another district in which landowners have been involved in conservation, mainly individual large-scale commercial ranchers, is Laikipia. Laikipia continued to be a stronghold for elephant and rhino populations, and is the only district where wildlife recorded an increase in numbers, up 12% between 1977 and 1994 (Grunblatt, Said et al. 1995; Rainy and Worden 1997). Other districts with abundant wildlife and where benefits accruing from wildlife are significant include Narok and Samburu. Populations in Narok have declined by 32% over this same period, from 522,588 to 356,679 (Table 8.8; Grunblatt, Said et al. 1995; Rainy and Worden 1997). This decline can be attributed to land use change and habitat fragmentation, particularly in the north and north-western parts of the ecosystem, where wheat and maize production has increased. Although the Mara is one of the most highly visited wildlife areas in Kenya little of the revenue filters down to the communities. Even now, community benefits are relatively modest.

Within the dispersal areas of the Mara ecosystem, wildlife populations declined between 1977 and 1993 and then started to increase between 1994 and 1996 (Grunblatt, Said et al. 1995, Table 8.10). The apparent increases may not be because of community involvement, but due to compression of the wildlife habitat. However, there have been improvements in benefit sharing and in involvement of landowners in conservation. Some communities have gone as far as to reintroduce species in their endeavours to conserve. For example the Ol Chorro Oiroua Wildlife Association purchased White Rhinos. Koiyaki Lemek Wildlife Trust has also become more involved in conservation as returns from wildlife to the community increases.

***Table 8.8: Changes in Wildlife Numbers in Narok District 1977-1996***

| 1977 | 1983 | 1986 | 1989 | 1991 | 1993 | 1994 | 1996 |
|---|---|---|---|---|---|---|---|
| 217,871 | 210,498 | 147,596 | 171,796 | 117,837 | 66,535 | 130,242 | 243,375 |

Source: Grunblatt, Said et al. 1995

It has been postulated that a reduction in poaching has occurred since the inception of the CCS in Tanzania (Bergin & Dembe, 1996), but data to substantiate this claim are not available (Kangwana and Mako 1998). For example, in Tarangire National Park there appears to have been a decrease in poaching since 1994. However, it is difficult to determine whether the observed trend in poaching reflects a true trend, particularly in the absence of data on the level of effort on the part of the park staff over time.

While it is difficult to demonstrate the conservation benefits of community conservation, these examples show that community conservation can, both directly and indirectly, positively influence the status of the conservation resource. While empirical data is scanty for wildlife populations, the example from Kenya demonstrates the linkages between wildlife populations and community conservation programmes, supporting anecdotal evidence and attitudinal data. Linking community conservation to the improvement of vegetation resources, especially forest areas, is more difficult again. The community impact, which may be positive, has to be separated from negative effects related to other factors, for instance corruption and poor governance. Demonstrating the impact of community conservation on biodiversity in a more adequate and convincing manner remains one of the key challenges for the future.

# 9. Summary and Analysis

## 9.1 Introduction

East Africa's tremendously varied biodiversity, landscapes, land uses, and peoples have led to a rich array of community conservation arrangements. Some evolved under customary conditions, others as a result of the region's decentralisation policies, while many grew from a wide range of NGO involvement. Some have clearly been influenced by the Southern Africa experience of conservancies, commercial wildlife ranching, and communal management of wildlife. Others drew on lessons from joint forest management schemes in India and Nepal, and collaborative management of forests in West and Central Africa. All, however, required adaptation to the particular mix of cultural and environmental conditions in East Africa including:

- the heterogeneity of peoples and landscapes;
- the complex arrays of conservation estates and biodiversity richness;
- population pressures not normally found in Southern Africa;
- policies which tend to favour more centralised government control;
- strong preservationist lobby and international interest in conservation and wildlife issues; and
- dominance of migrating populations in major ecosystems, particularly in Kenya and Tanzania, which are harder to manage in terms of community conservation.

## 9.2 Early Practice and Policy

Natural resources are, for many rural people, an important source of their daily needs for food, fuel, medicine etc. While the creation of protected areas has been effective in conserving biodiversity and the resource base, it has created hardship for, and enmity with people who used these resources, and were subsequently excluded from them. Many natural forests were gazetted, and local resource use rights curtailed, usually with little or no prior consultation. Customary local management was replaced, ineffectively, by centralised systems. Local rights and responsibilities were lost and replaced by increasingly irresponsible extractive use of natural resources.

Early community conservation work in East Africa has been characterised by efforts to reverse these negative impacts of protected areas. NGOs implemented a wide range of pilot activities, most based on a strategy of increasing active and responsible participation of rural people in conservation by engaging them in what are basically rural development activities. Early community conservation initiatives focused on national parks, and were initially 'outreach' programmes. The programme around Amboseli National Park in Kenya, early trials around Serengeti, Tarangire and Arusha National Parks in Tanzania, and the Lake Mburo Community Conservation Project in Uganda are all good examples. In Uganda, early activities which embraced resource substitution and improved livelihoods were modelled as Integrated Conservation and Development Projects, and began in the late 1980s. A notable example was the DTC project of CARE Uganda. As more projects were established in support of individual protected areas, the need for community conservation policies and central co-ordination became evident. It was some years, however, before efforts to achieve this came about.

In Kenya, the work of the 1950s, 1970s, and early 1980s demonstrates the need for policy development. Though innovative and far sighted, these early initiatives did not have policy support or national level institutional commitment, and thus failed to persist. It was not until 1975 that community aspirations were even mentioned in policy and legislation, though these were not acted on until the formation of KWS in 1989. As early efforts built into a more focused movement in the late 1980s and 1990s the practical nature of community conservation was addressed in parallel with the development of policy, allowing experience to influence and strengthen the development of both. The two must go hand in hand.

This parallel evolution has been important in creating the range of community conservation policies and programmes in the region today. The evolution and adoption of the KWS policy framework in 1990, and more significantly, of Annex 6 on community conservation (KWS 1990b), represented the first real attempt at community conservation policy formulation. Lessons learnt from early community conservation projects strengthened the formulation of a practical, implementable plan for community conservation.

In Tanzania, a firmly institutionalised approach to community conservation emerged in the early 1990s, following trials around Serengeti, Arusha and Tarangire National Parks. The evolution of community conservation outside protected areas has been slower as the plethora of institutions responsible for wildlife in Tanzania has made the development of policies particularly difficult. Though a number of pilot projects were initiated to support the establishment of wildlife management areas on communal lands, the overall policy context to support them has only recently emerged. The main potential for community-based conservation has been in the hunting industry, but little real effort has been made to involve or benefit those who live with the wildlife which was hunted. With a few notable exceptions, the benefits largely accrued to those in the hunting industry and to the Wildlife Division.

As the government of Uganda began to recreate its institutions in a more democratic and decentralised mould, the authorities responsible for wildlife began to emphasise the need to provide benefits to local people and to include them in the management of wildlife and protected areas. This emphasis, though inspired and perhaps even required by both the populist ideology of the National Resistance Movement government, and the major donor organisations and NGOs, remained largely rhetorical in the mouths of the technicians responsible for the management of protected areas.

Beginning in the 1990s increasing numbers of donor funded projects were established to work with communities around protected areas in Uganda. Although the majority of them depended on parallel institutions, and left the government authorities largely unchanged, it is significant that they were allowed to operate. As the impact created by these projects began to be recognised, and as pressure from other sources increased, UNP made stronger commitments to community conservation, shown in the emphasis on communities of the 1996 Wildlife Statute (Government of Uganda 1996b). This was clearly indicated when the organisational structure of the Uganda Wildlife Authority incorporated a four person Community Conservation Department and posted at least one Community Conservation Warden in each of the 20 protected areas. The recent

restructuring of UWA has, however, undone much of this progress (Uganda National Parks Restructuring Committee 1997).

Since the late 1980s then, there has been rapid development of community conservation. Though much of this development has tended to be largely uncoordinated and driven by donor funded projects implemented by NGOs, a positive result has been the rich variety of initiatives carried out. Developed in response to the situation on the ground at the individual protected area level, these initiatives responded to the specific set of circumstances created by their location with respect to surrounding communities, and the nature of the resources contained within the protected area, the history of the protected area and local communities, and the nature of the community itself.

## 9.3 Policy and Law - Keeping Pace?

As in many countries, the policies and legislation concerning conservation and environment in East Africa are inadequate and outmoded, often dating back to colonial times. They have not evolved to address and reflect current realities and circumstances. Combined with the insufficient capacity of governments to implement legislation, this has contributed to the depletion of natural resources both inside and outside protected areas. Poverty, low levels of environmental awareness, low levels of technology and poor managerial and technical expertise have all exacerbated the structural problems and policy weaknesses.

Customary forms of natural resource tenure and management operated effectively in conditions of low population and abundant resources, until centralised by colonial and subsequent governments. Ostensibly to improve management, and justified by the assumption that rural people were not capable of managing their resources, the exploitation of natural resources for national, or colonial, rather than local, gain was achieved. Polices and laws, many still in force, were promulgated to effect these 'command and control' systems, and bureaucracies were established to enforce them. These conventional approaches to wildlife policy and management caused wildlife to be removed from the market place. As authority and responsibility for wildlife was vested in the distant state, this approach did little to overcome the problem, or in some cases stimulated a range of problems (Box 9.1).

***Box 9.1: The Consequences of Removing Wildlife from the Market Place***

***Problems:***

- Conflict and competition between wildlife and other forms of land use.
- The treatment of wildlife as a common property resource by communities, but without any authority or responsibility for it.
- No incentive to conserve habitat for wildlife outside protected areas.
- Limited means of revenue generation.
- The failure to value wildlife appropriately.

***Consequences***:

- Local communities disenfranchised and removed from responsibility and authority for the resource.
- Wildlife management equated with protection and problem animal control.
- Dramatic decreases in numbers of wildlife as a result of habitat loss, poaching and population pressures.
- Centralised collection of benefits, and failures to use such benefits to support rural community development.
- Removing wildlife from the market place for private sector investment.

Source: adapted from Rudge, Hurst et al. 1997.

While governments were quick to take the rights and responsibilities over natural resources away from rural people, reversing the process has taken much longer. Conservation authorities seem reluctant to relinquish their power, and retain the belief, sometimes with justification, that rural people cannot or will not manage their natural resources on a sustainable basis. The anticipated loss of revenues to national treasuries has also slowed progress. This is attributed to deeply entrenched attitudes amongst government technocrats that they know 'what is best' for rural people. Circumstances have also changed. Human population numbers have grown, while natural resource areas have shrunk. New ways of handing over the rights and responsibilities that take account of the current realities must be formed. But state bureaucracies have been slow to be informed by the lessons learned by projects. Throughout the region, governments have established policies and legislation to decentralise management of natural resources[23], yet only recently have communities actually started to be allowed to take up their rights and responsibilities.

The slow pace with which most conservation authorities implement community conservation policies reflects continued concern over loss of power, equated with loss of control and management capability, as well as uncertainty over community conservation's ability to deliver. The vagueness of many policies, which permits wide interpretation, has allowed many protected area managers to persist with more conservative approaches. Policy changes have not always been explicit enough, as in the UWA 1996 Statute. This can make interpretation and implementation of policy fraught with difficulty as has been shown by the slow integration of collaborative management into institutional practice in the region.

Today the region is poised for further progress in community conservation, which has been given added impetus and focus by declining government budgets as structural adjustment polices force retrenchment. Community arrangements for the management of natural resources are now a necessity, not a luxury, and policy is changing to reflect this.

[23]For example, *Ujamaa* in Tanzania, district focus in Kenya, and decentralised government in Uganda (*Local Gov. Act 1997*).

The devolution of meaningful authority for wildlife management to a local level is a prerequisite for responsible community wildlife management. Such devolution has tended, however, to run counter to government wildlife management sectors, resulting in resistance (Murphree 1991). This has been exacerbated by the existence of vested interests in the wildlife resource. If community-based conservation is to become firmly established as a strategy for conservation, national policy and legislative frameworks for the wildlife sector need to support and direct the empowerment of rural communities as wildlife managers (Gillingham 1998). Issues of local organisation and governance must, however, be addressed at the local as well as national levels. Such policy is needed to address the issues of proprietorship over wildlife at the community level; set out distribution of responsibility and authority between stakeholders involved in co-management partnerships; and provide guidelines for the design of transparent, accountable institutional linkages so that stakeholders can negotiate access to, and gain control over, the resources.

## 9.4 Tenure of Land and Resources - Who Owns? Who Should Own?

Changes in policies and practices affecting the rights and responsibilities over natural resources by communities and local governments cannot be achieved without re-examining tenure issues. Secure tenure or use rights over land and natural resources, including wildlife and trees, is crucial if rural people are to manage them.

Tenure of land and resources is becoming the single most contentious issue in East Africa. Struggles for control of land relate to increased population pressures, reduced availability of higher potential lands, as well as greed and power. Customary tenure regimes were undermined, often creating conflict between rural people and urban elites, and groups such as pastoralists and hunter gathers are further marginalised. In many countries such marginalised groups have lost access to many of the resources on which their livelihoods depend.

The several issues concerning tenure in East Africa are similar. They include the role of the state in land ownership; the future of traditional forms of land ownership; the extent to which land regulation should be democratised; and the extent to which a market in land may be encouraged without causing unrecoverable social costs (Wily 1997c). Two persistent themes in development, privatisation and community empowerment, come into direct conflict over the design of land tenure arrangements. The privatisation lobby stresses the importance of a free land market in the encouragement of investment and the creation of wealth (Wily 1997c). Privatisation of East Africa's rangelands would, however, cause land fragmentation to a point where extensive pastoral production systems, including large wild mammal populations, are no longer viable. Arid and semi-arid lands would be particularly vulnerable.

Modern forms of land tenure tend to be biased in favour of settled agriculture, and have thus discouraged wildlife conservation. Throughout East Africa there has been a shift towards consolidation and individualisation of land. Many wildlife areas which were formerly large, communally-owned lands are now being sub-divided into small, individually-owned farms or settlement schemes. Although it has been argued that only private, individualised land holdings can promote sustainable development, communal land management under closed access

regulatory mechanisms can be equally effective. It is clear, however, that uncertainly over land tenure cannot promote development. Both investment and responsible stewardship are endangered when land tenure is uncertain - a tendency to mine resources results, while investments that may be lost are minimised. Where land tenure is vested with local authorities, rather than local communities, successful community-based conservation enterprises are unlikely as benefits tend to accrue to local authorities and elites.

Policies which limit private property rights in wildlife and natural resources can severely constrain the extent to which communities can benefit from the wildlife on their lands. The traditionally heavy regulation of the wildlife sector in East Africa, and the lack of community rights to own and utilise wildlife, provide strong economic disincentives to conserve wildlife. Even where wildlife can in theory generate high financial returns and compete with alternative land uses, local communities are not permitted legally to capture these benefits (Emerton 1998a). Land tenure reform aimed at providing those actually working the land with equitable and secure rights are essential for improving natural resource management. This might imply the need for legal recognition of customary land rights, together with safeguards to prevent *de facto* control by a small elite or outsiders.

## 9.5 Institutional Issues

Institutions, their characters and their internal and external relations, have an important influence on natural resource management and community conservation. Their ability to adapt, change and be influenced over time is critical.

Though all the forestry and wildlife authorities in East Africa have an institutional capacity for community conservation, these have evolved in different ways, and under different circumstances and conditions. While each country has evolved its capability in response to the particular needs of the country, there has been significant sharing of lessons and experience. For example, the development of revenue sharing in Uganda was informed by Kenyan, Tanzanian and other African experience (Uganda National Parks 1994). The development and implementation of projects supporting community initiatives in Uganda was also directly informed by processes developed in Tanzania.

Key to the acceptance of community conservation is whether it can be integrated into an institution's work ethic and practice. One of the most difficult changes required of institutional culture has been the change from protectionist, militaristic approaches to approaches based on facilitation, dialogue, and enablement. This change has demanded the use of participatory tools and needed to create changes in attitudes of conservation authorities as well as those of the communities. Trust is a key notion. Creating or re-creating trust is difficult and time consuming, and requires strong commitment by both conservation staff and rural people. Failure to create real change in attitudes in institutions more familiar with protection and preservation has been a stumbling block, though this has often not been recognised or acknowledged.

For local communities to undertake responsibility for resource management, responsible local and national leadership is required. Strong leadership must exist within conservation authorities, who

need to support devolution of authority. It must also exist within communities, to ensure that they are able to undertake their responsibilities. The strength and integrity of local and national leadership varies in East Africa. At local levels, where customary institutions are still strong, responsible leadership can still be found. In Uganda, for historical reasons, leadership in many rural communities is weak. In Kenya and Tanzania it is often stronger.

The role of local institutions in natural resource management is often misunderstood by more formal institutions. There may be a wide range of institutions within a community, both traditional and modern, for controlling access to and defining responsibilities for natural resource management. Their roles, however, may not be obvious and are often underrated. Many conservation authorities only recognise and work with institutions which are seen as 'official', for instance village governments in Tanzania, and local councils in Uganda. In certain areas, however, some of these 'official' institutions may have usurped power and authority from customary institutions with which rural people were better able to relate. Some 'official' institutions have however evolved directly from customary ones, for instance *Sungusungu* in Tanzania, and Stretcher Societies around Bwindi in Uganda. In East Africa both traditional and modern community institutions have been weakened by high levels of political, social, and economic uncertainty, and by high levels of population movement. Many communities are now highly diverse and often divided and unable to cooperate internally. Community conservation programmes have worked hard to support the development of stable institutions, often however without great success. Some projects have identified stable, functioning, and effective traditional community institutions, and incorporated them into the community conservation programmes. Others have worked to help establish new ones.

The ability of community institutions to exert effective sanctions over individual behaviour is a critical requirement for successful resource access programmes. Some individuals will always contravene the rules. If such contraventions are left unchecked, the danger of unsustained resource use is high. If conservation authorities are left to enforce compliance with agreements reached with community groups, a fundamental value of such agreements, the acceptance of responsibility by communities, will have failed. Uganda's Stretcher Societies, for example, working in stable communities appear to be effective in controlling the harvesting of forest products by providing effective sanctions against those that break the rules. An agreement to allow livestock to water in Lake Mburo National Park, signed by a newly established community institution (Parish Resource Management Committee) has, however, been abused. The community institution has been unable to establish compliance over a divided unstable settler community.

The co-management of wildlife by rural communities and the state requires institutional arrangements, ie. sets of rules, norms and authority relationships to determine who decides what in relation to whom (Oakerson 1992; Gillingham 1998). Where a community does not have some proprietorship over wildlife, the development of strong local level institutions to mediate interactions between resource users and the resources base is unlikely. Resource users have neither the authority nor incentive to make, monitor and enforce the rules necessary for effective CBC regimes (Gillingham 1998). However, the lack of such community institutions makes the devolution of authority to communities both difficult and potentially dangerous. Resolving this 'chicken and egg' dilemma remains an imperative for the development of community-based conservation.

## 9.6 The Cost of Community Conservation

The past 10 years have seen a large increase in the number and size of bilateral conservation projects. All have funded projects which relate directly to community conservation, both through official conservation authorities and NGOs. The relatively high level of funding has provided an important financial basis for community conservation in the region. This has complemented and supported smaller scale NGO funding.

Though community conservation has been promoted as a way of reducing government investment in conservation, it is by no means clear that this can be achieved. Certainly in the short term, it is clear that community conservation programmes are expensive and do not result in immediate returns. Investment in community conservation must compete for limited funds with other conservation management practices. TANAPA has, for example, successfully established budgets for their community conservation programmes; KWS and UWA, on the other hand, have found this more difficult. The tendency of bureaucrats to adopt low risk strategies and avoid innovation has meant that the development of community conservation programmes and practices has been largely donor funded. This has resulted in high costs and high infrastructure dependent community conservation structures and programmes. This perhaps was inevitable, given the nature of donor funded projects, but it means that conservation authorities must adapt these structures to the more modest financial resources available internally.

TANAPA's community conservation service shows the highest level of budgetary and personnel commitment of the three countries. The initial establishment of the Community Conservation Service was supported with an external investment of about $100,000 per year between 1988 and 1994. In 1992 the Community Conservation Coordinator successfully argued for the establishment of an operations budget line for community conservation activities for all parks, even those that did not yet have community conservation staff. The SCIP fund, which shares park revenues with communities was also established. Unlike programmes in Kenya and Uganda, TANAPA always made a clear distinction between operational budgets for Community Conservation, and funds for direct community benefit through supporting community initiated projects.

It is clear that, on their own, conservation authorities can not devote sufficient resources to community conservation. They, like many other government departments, are operating on declining budgets, and increasingly are being expected to 'pay their way'. Therefore, community conservation must compete with other sectors within the conservation authorities. As a result conservation authorities are creating other institutions, making alliances with other groups for community conservation, and devolving or empowering community groups to take more responsibility for their natural resources.

## 9.7 Role of Donor, Individual and External Influences

Charismatic and visionary individuals have been an important influence for both good and bad. The vagaries of chance can also be important. Where the right person is in the right position, at the right

time, with adequate resources, they may have significant impact. The examples of the Community Conservation Coordinators of UWA and TANAPA are instructive. The energy of these key individuals was instrumental in the development of community conservation within these institutions. Both the directors of KWS and TANAPA, between 1989-1992, took risks in introducing community conservation programmes, and supporting a pro-community perspective against the inevitable institutional opposition. Between 1994-1998 the director of KWS had a proactive role in helping to entrench the evolving practice of community-based conservation in Kenya, resulting in the wide range of community-based activities existing now in Kenya. This emphasis may have led to opposition in KWS, used to working in a more protectionist manner.

At an individual protected area level in East Africa, there seems to be a direct correlation between the capacity and commitment of Community Conservation Wardens, and the development of community conservation programmes. This shows that leadership is essential. In TANAPA the commitment of the Community Conservation Coordinator, who also had credibility with park wardens, was critical to the acceptance of the community conservation approach.

The role of local politicians in community conservation is growing, and at both local and national levels they are forcing issues, particularly in relation to the balance between conservation and rural livelihood objectives. Local government and members of the public are also helping to set national agendas, for example through the various pastoralist groupings in Kenya and Tanzania.

Issues of governance and corruption in the region have a strong influence on the conservation of natural resources. In an environment that is characterised by corruption, implementation and enforcement of laws are compromised. In Kenya, this has been a major point of contention, particularly in regard to the opening of consumptive use of wildlife, and thus the need for participatory processes and approaches is strong. Recently, governments have taken stronger visible stands on corruption. However, their effectiveness in this remains to be seen.

It is not a coincidence that the theoretical development of community conservation has been largely spearheaded by international NGOs and agencies, who remain largely responsible for the implementation of community conservation. The role of projects has been key in this respect, enabling and supporting individuals to take the risks necessary to promote community conservation, and providing them with information and experience from outside. On the other hand, some donor funded projects may have been over zealous in their promotion of community conservation, focusing on project outputs, rather than the longer term needs of local and national stakeholders. This is of some concern as it indicates that the ownership of community conservation has tended to remain external to national conservation agencies. Many of these remain relatively traditional in their approach, and continue to see community conservation as an idea imposed from outside.

In Uganda, at least, it is clear that adoption of a community focus was a conditionality of donor support for the wildlife sector. This has largely failed to increase capacity for community conservation within UWA, though improvements have been made on the ground in the relationships between parks and communities (Box 9.2). The relatively low staffing strengths allocated to community conservation, the slow speed with which community conservation practice is followed by clear policy changes (and *vice versa*), and the slowness with which collaborative

management agreements have been formally approved, all indicate the failure of donor pressure to achieve internalisation of community conservation. While UWA expressed support, and the policy strongly encourages initiatives that provide tangible benefits to communities, reservations remain at all levels of the organisation. UWA could respond to this situation by allowing resource access agreements to continue without adequate monitoring and support, or terminate them on the grounds of incapacity to support them. Either of these courses could prove damaging, both to the protected areas, and to the retention of positive relations between park authorities and local communities. UWA has yet to demonstrate that it has either the capacity or the commitment to provide consistent direction and support. A second concern is over UWA's failure to take a leading role in community conservation programmes. There is a danger that they may be denied at a future point in time, or abandoned, and labelled as 'donor driven' programmes not in the interest or control of the authorities.

UWA's failure to invest in community conservation is of concern, as it makes the sustainability of many donor funded initiatives uncertain. Consistency of approach is critical to successful community conservation, and this is only likely to come about if UWA clearly makes community conservation part of its programme, and provides an operational budget for it, both at headquarters level and within the individual protected areas. The decision to implement community conservation programmes cannot be left to Wardens in Charge, as many do not demonstrate a high level of commitment to community conservation and would leave it low down on the list of budgetary priorities. Furthermore, Wardens may not be prepared to take the risk of innovation without explicit headquarter support.

The proliferation of donor-supported community conservation initiatives was often the result of a lack of a clear agenda and policy for community conservation. This was of particular relevance for UNP and UWA. In Tanzania, although a range of NGOs and donors were involved, they were coordinated by the Community Conservation Coordinating Committee of TANAPA. Kenya had a large national community conservation programme, which operated in a number of pilot areas under KWS, and involved a number of NGOs. This was influenced by politically driven institutional changes which affected KWS from 1993 to 1995. As a result, many of their activities were implemented outside existing policies and legal provisions, for instance wildlife cropping. The range of experience created by the independence of action of field based projects has helped to inform and influence evolving community conservation policy and practice by providing examples of what has worked, or not worked, under a wide variety of conditions[24].

[24] For example, UWA is now attempting to implement a more systematic approach to community conservation under the 1996 statute. Enabling policies are being developed by the recently formed Community Conservation Department which are informed by practical experience of various operational practices, with the intention that these will be implemented on a nation-wide basis.

***Box 9.2: Consequences of diverse and uncoordinated community conservation activities in a policy and institutional vacuum: The example of Uganda***

***Advantages***

- Experimentation with community dialogue mechanisms determined by different conditions
- Evolution of varying institutional arrangements for working with local communities
- Development of community conservation practices yielded a range of practical experience
- Wide range of training was carried out using different approaches
- Variety of different forms of benefit sharing arrangements were established and tried over time
- Impetus was given to community conservation that might have been lacking at the time
- State institutions had to 'catch up' with developments through creating supporting policy and legislation.

***Disadvantages***

- Focus at protected area levels meant that UWA did not develop a headquarters capacity
- Lessons learned not sufficiently discussed between different projects and park management or used to inform national processes
- Range of procedures evolved for different issues leading to a lack of institutional uniformity of approach
- Donor and NGO ownership of initiatives meant that projects became the focus rather than a process of evolution towards a national programme
- UNP was able to vacillate over commitment, labelling them as 'donor driven' when this suited their purpose, or claiming them as their own when this was felt to be in their interest
- Activities at protected area level were in advance of and operated outside of clear policies from UWA, compromising consistency of implementation.

This analysis indicates the importance of key individuals and events to the development of community conservation, and the importance of risks taken by governments, NGO, or private or group land owners. Key events often took place as a result of a particular set of circumstances. Such circumstances may be beyond the influence of conservation. Indeed, it may take a crisis to force change. At the start of the 21st century, a crisis potentially exists in the region due to oversized, relatively unproductive and inefficient civil services, reducing government incomes, retrenchments and structural adjustment policies[25]. These, combined with increased pressure for decentralisation and the granting of user rights and responsibilities, may be the key for sustainable community conservation in the future.

## 9.8 The Practice of Community Conservation

With the increasing focus on decentralisation of natural resource management, community conservation activities are evolving quite rapidly in East Africa. Advocacy of community conservation is driven by several perceptions: the inability of state agencies to manage natural resources outside state-controlled protected areas; the potential for cost-effective local management using informal social sanction; the values of local knowledge of ecological dynamics; and enhanced motivation to conserve natural resources when conservation brings direct economic benefit.

While conservation should contribute economically at a local level, translating this into practice is both difficult and time consuming. Creating a viable business-like attitude in essentially

[25] The example of KWS is informative, where reduced incomes, as a result of other external reasons, has placed KWS in a near bankrupt situation.

subsistence communities is not easy. Business-based hand-outs will not work. The activity has to be properly planned and implemented, and implies significant efforts in training. It is recognised that benefits from hunting and non-consumptive uses such as ecotourism are becoming increasingly important especially when they accrue to rural resource users, becoming a component of their land use. Conservation and enterprise development activities may provide significant benefits to local resource users, and currently involve private sector and local community partnerships. Unless the benefits are equitably negotiated, and dividends accrue in a mutually agreed transparent fashion, this is not a true partnership. However there is great potential for more responsible and equitable private sector-community arrangements.

Such conservation businesses are helping land users become more responsible for their wildlife resources. The power to generate financial returns from conservation increasingly rests with them. This has required changes in land tenure and conservation policy, and the formation of partnerships. Devolution of wildlife rights has therefore made it possible for landholders to directly engage in wildlife conservation activities. The private sector and local communities are beginning to play an increasingly important role in wildlife tourism, particularly in Kenya, though there are a few examples in Tanzania and Uganda (Emerton 1998c).

Unlike private or company lands, the group or village ranches found in the rangeland areas of Kenya and Tanzania are subsistence based. An important lesson learnt from initiatives in these areas is that the diversity of activities required to ensure success can be large, and that evolving conservation related business ventures is more difficult and time consuming with subsistence based groups. However, it is such people who control important conservation resources, and who need to benefit from wildlife to diversify their economic base, and better secure their livelihoods.

Though relations between communities and conservation authorities are often strained, there is not a blanket antagonism of rural people towards conservation issues. However, though they may support wildlife conservation, rural people do not necessarily support the attempts of wildlife management authorities, or comply with legislation (Kangwana 1993). Community conservation projects which rely solely on the participation of rural communities as passive recipients of conservation benefits may not ensure the support of rural communities for long term conservation goals (Barrett and Arcese 1995; Murphree 1996). The empowerment of local people as resource managers acting in their own interests must be addressed (Gillingham 1998).

In order for this sort of empowerment to be truly community-based, and not simply the sharing of benefits, wildlife must become a resource of focused value. Because communities do not have proprietorship of the wildlife on their lands, they cannot legitimately claim the proceeds of, for example tourist hunting, which would contribute significant revenues. They are nevertheless expected to take responsibility for, and bear the running costs of, the protection of wildlife on village lands. This decoupling of authority from responsibility can effectively remove the motivation necessary for community conservation (Gillingham 1998). Financial gains, on their own, may not be sufficient to promote community conservation. Empowerment, participation, traditional values and awareness by communities of the larger issues at stake are also important.
One of the most difficult changes required of institutional culture has been the change from protectionist, militaristic approaches to approaches based on facilitation, dialogue, and

enablement. This change has demanded the use of participatory tools and changes in attitudes of conservation authorities as well as those of the communities. Trust is a key notion. Creating or re-creating trust is difficult and time consuming, and requires strong commitment by both conservation staff and rural people.

Participatory approaches and tools are used extensively by conservation authorities in the region. Box 9.3 illustrates some of the lessons from practice of using participatory processes.

***Box 9.3: Lessons from Practice of Participation***

- Use participatory approaches as much as possible
- Build ownership of, and responsibility for, activities among local leaders and resource user groups so that the focus is on the principal users
- Always use local knowledge and skills
- Issue identification and priority setting should involve as many stakeholders as possible
- Decision making should always be transparent
- Existing community groups, institutions, CBOs and NGOs can be important catalysts and implementers
- Greater community cohesion makes participation and management easier
- Respect the differences of local communities and ensure that assistance is appropriate to each group
- Participation is not only for project staff and outsiders to learn and interact with local stakeholders, but also for different stakeholder groups to begin to listen and understand one another
- Project staff should be based on site as this helps build trust through long term personal contact
- Map out and 'know' the local community with respect to space/area, ethnicity/culture, activities/occupation, and issues/problems
- Workshops are often an inappropriate tool in communities, at times yielding biased participation and results. A balance between workshops, other participatory tools and pilot activities may be more effective
- Benefits of participatory approaches frequently meet with scepticism, especially from government.

Source: adapted from Moffat 1998

## 9.9 The Role of Benefits, Incentives and Disincentives, and Meeting Livelihood Objectives[26]

Community conservation attempts to increase the levels of benefits received by communities from wildlife resources. Creating benefit flows to rural people from conservation areas has been an important starting point in altering relations between conservation authorities and communities. Already many rural people feel that they receive, either directly or indirectly, benefits from conservation, even without formalised benefit sharing.

As many of the financial mechanisms for wildlife conservation have only been recently set in place, it is difficult to assess long term impact. However, there are signs that financial profitability is a key factor influencing the status of wildlife, especially outside protected areas (Emerton 1998). Where private sector participation in wildlife tourism and extractive utilisation enterprises have been

[26] Lucy Emerton (Co-ordinator, IUCN EARO Biodiversity and Economics Programme) has had significant input into this section, for which the authors are very grateful.

established in Kenya, wildlife numbers appear to have increased (Norton-Griffiths 1996). In many wildlife areas however, local people perceive the potential for economic benefit from cultivation and livestock production, which they can control, as preferable to the more indirect economic benefits which come from wildlife.

In the absence of alternative sources of livelihood from protected areas, the tourism industry is making an increasing contribution to local economies. Frequently, local benefits are maximised in the informal sector where the scale of capital investment is low. Those populations who reside nearest to protected areas and who have therefore borne most of the costs of exclusion appear to participate least in the tourism industry (Goodwin, Kent et al. 1998). As examples in this review have shown, this need not be the case.

Although benefit sharing can assist in balancing the conservation costs which local communities bear, the philosophy behind creating community responsibility and ownership must be recognised. Passive receipt of benefits will not engage communities directly in conservation efforts. To some, revenue sharing is a conservation authority hand-out, simply a buy off. Furthermore, internal social dynamics within communities can also affect the success of wildlife management. An example is the mismanagement of village wildlife revenues and the variable quality of wildlife management by village elites in Selous. The structure of inequalities and power relations often mean that the majority of villagers have little incentive to take an active interest in resource management projects, dismissing them as being, in effect, the concern of the elite. This leads to poor accountability, failure to manage village wildlife revenues for the collective good, and ineffective management of wildlife on village lands (Gillingham 1998). It also means that the majority of the community fail to participate actively, and remain passive recipients of any benefits that may reach them.
What is therefore needed is a negotiation process for determining the rights and responsibilities of different stakeholders. Benefit accrual arrangements may be widened to encompass income generation, collaborative management and community-based conservation, along with the measures to empower communities critical for their success. Conservation then becomes part of the decisions taken on land use, investment and costs, compared with expected dividends and benefit accrual. Some of this work has been analysed (see Emerton 1998b), and is becoming an increasingly important component of community conservation, especially outside, but even within, formal conservation areas.

More comprehensive types of benefit accrual – those which address issues of costs, provide tangible benefits, and incorporate some degree of rights allocation – address the issue of long-term sustainability. Both in Kenya and Uganda some of the pressures to initiate benefit sharing were political. TANAPA has tried to ensure that its benefit sharing programme is institutionally viable. It dealt more effectively with political interference. What is important is that benefit sharing is seen to be transparent and accountable, with well defined principles and practices that are understood, agreed and accepted.

The economic desirability of wildlife is strongly influenced by factors which are beyond the control either of local communities or of government conservation agencies. Macroeconomic and sectoral policy distortions especially, significantly alter the economic returns of different land uses.

Profitability primarily affects landholders' choices. A range of policy and legal instruments, however, discriminate against wildlife limiting the ability of landholders to profit from the wildlife living on their lands, and thus encouraging agriculture and livestock production (Emerton 1997a).

Land-use policy in the region is heavily biased towards agriculture. For a combination of food security, economic and political reasons the agricultural sector has been protected in most African countries. Agricultural and economic policies in Kenya contain a range of measures aimed at stimulating domestic crop and livestock production including duty and tax exemptions on imported agricultural inputs, low interest credit facilities, agricultural price-fixing, protection against imported commodities and heavy spending on agricultural research and technology development. Although the agricultural sector has, over the last decade, been undergoing liberalisation throughout sub-Saharan Africa, it is still protected in comparison with wildlife. Wildlife inputs are more expensive in market terms because they are subject to taxes from which agricultural inputs are exempt and lack many of the subsidies agricultural inputs enjoy.

The wildlife sector has been highly regulated. A range of controls on wildlife ownership and use have prejudiced landholders against utilising wildlife, and have limited wildlife enterprise options. Wildlife has, for most of this century, been the property of the state which, although allowing some limited use rights to landholders, has retained monopoly rights of ownership and control. These restrictions have recently started to be dismantled, particularly in southern Africa, and wildlife use and management rights have been transferred to private landholders or to other institutions designated as 'appropriate authorities'. This devolution of rights to use and manage wildlife has undoubtedly encouraged landholders to engage in wildlife based businesses.

Although policy reform is largely the responsibility of the public sector, it is becoming increasingly apparent that raising a sufficient level – and quality – of benefits often lies beyond the capacity of governments. The private sector can often generate and share greater benefits with local communities. Commercial arrangements are often also more sustainable, because they are based on mutual obligations, and because conservation-based enterprises must benefit local communities in order to ensure their own commercial survival. The collaboration of private sector and local communities is, however, only embryonic in most of East Africa. There has yet to be any significant entry of the private sector into wildlife management in Uganda, for example, although there is much potential for it to do so. A range of incentives can be provided to encourage the private sector to invest. In addition to providing support for the development of wildlife enterprise, inducements such as sponsorship and advertising deals, the provision of tax relief on contributions; and the establishment of endowments, foundations and trusts to channel funding would undoubtedly make wildlife a more attractive investment option for the private sector (Emerton 1998a).

The dilemma facing governments of the region and the international conservation community is that if they wish to maintain the conservation values of, for example group ranches, the land must be kept in a relatively undeveloped state. However, like many traditional land users, the people living in such areas are usually comparatively poor. Their one asset is their land, and their main route to social and economic development is to exploit that land for economic gain, whether through tourism, wildlife use, agriculture, or livestock rearing (Norton-Griffiths 1996). There are

opportunities for involving local people in activities such as tourism, through improved private sector arrangements, more benefit flows from the conservation areas, and a more diversified economic base. However, in many cases, as the Maasai Mara example demonstrates (Norton-Griffiths 1996), revenues may never be as high as from alternative forms of land use. Such land users are providing the hidden subsidies for conservation, as well as the costs of lost production. This implies that conservation managers should meet those costs through improved financial arrangements, and more realistic pricing. Ultimately the potential value of the land cannot be denied to the owners; and people, such as the Maasai, cannot be condemned, in the name of conservation, to a perpetual poverty trap (Norton-Griffiths 1996).

Initiatives such as wildlife management areas will increase opportunities for local people to benefit from the wildlife resources on their land. However, models of conservation based on the argument that wildlife must pay, and that where it does, it will be conserved, may be simplistic. Support for conservation appears to be dependent on a complex and dynamic interaction between cultural values, livelihood issues, human relationships and economic benefits (Kangwana and Mako 1998). Community-based conservation shifts the focus from conservation to livelihoods. Where conservation benefits are significant, conservation objectives will become rural land use objectives. Where they are small or insignificant, conservation value outside protected areas is likely to be lost. Though conservation objectives may be secondary on private or commercial lands, the influence that use rights could have on land use is of great importance to conservation. Creation of tangible economic values will support conservation on private or communal land. Population and land use pressures, however, will place growing pressure on many conservation values which are still likely to disappear with time. Those which survive will do so to the extent they can contribute to local livelihoods.

## 9.10 Impacts on Biodiversity

The litmus test for community conservation is whether it improves conservation. There is some data to suggest it does, particuarly from Kenya (Grunblatt, Said et al. 1995; Rainy and Worden 1997), although empirical data is scanty for wildlife populations. Linking community conservation to the improvement of vegetation resources, especially forest areas, is more difficult again. The community impact, which may be positive, has to be separated from negative effects related to other factors, for instance corruption and poor governance. Demonstrating the impact of community conservation on biodiversity in a more adequate and convincing manner remains one of the key challenges for the future.

## 9.11 Summary

The notion of big 'command and control' government is increasingly out of date. As community conservation reaches out to rural people, the politisication of conservation inevitably increases. How conservation authorities respond to this can dramatically affect the success of community conservation. Politicians are now increasingly important actors in conservation. Furthermore, bringing conservation into the political limelight creates a wider and more transparent analysis of conservation's social and economic functions. Regional and local politics makes concentrating conservation benefits solely at the national level no longer acceptable. Politicians, however, must

recognise conservation as both a long term, viable land use which creates benefits for their electorate, and as a national imperative.

Community conservation must be set in an appropriate policy environment, which conservation authorities must both accept and buy into. As many community conservation activities in East African were originally NGO and donor driven, the degree to which they have been integrated into the policy and practice of conservation authorities is an important gauge of sustainability. For instance, the degree to which UWA has accepted the notion of collaborative management must be questioned. Even though collaborative management on a trial basis, and under the guidance and support of donor funded projects, has been allowed, UWA's low staff and funding allocations to it suggest a lack of real commitment.

Community conservation practices and policies continue to evolve, and experience from practice provides important lessons for its continued development. However, changing attitudes, both of rural people and conservation authorities, takes time. Results are not quickly visible, nor easily quantifiable. Partnership is crucial to the long term success of community conservation. To re-enforce this, community conservation needs strong institutional and policy support. Polices and procedures for the provision of benefits, resources, and training are all important for the establishment of sustainable community structures, which will support the evolution of positive relationships between protected area authorities, and their neighbours.

## 10. Community Conservation in the New Millennium

Community conservation is about developing a new consensus for conservation. Historically, it is probable that there were limited conflicts between conservation and development. Human populations were low, their demands for resources small, while the resource base itself was large. This was the situation that the early colonial administrators found on their arrival in East Africa. The high demands for resources and revenues by colonial administrators, and the growing demands from indigenous populations, soon reversed this situation. Today, there are large and growing human populations with high expectations, increasingly dependent on a small and shrinking natural resource base. In this context it is inevitable that short term and immediate conflicts exist between the imperatives of conservation and development.

The East African experience of community conservation has been largely developed from a variety of programmes focused on conservation areas. Unlike Southern Africa, where wildlife on private or communal land was the initial focus, and protected area management retained a traditional emphasis on law enforcement, the protected area authorities of East Africa have developed a wide variety of community programmes designed to alter the nature of the relationship between conservation areas and local communities. From a protected area outreach focus, arrangements for collaborative management and community-based conservation have evolved, indicating implicit recognition that community conservation is more than just outreach, but relates to livelihoods and sustainable use.

Community conservation has put conservation into the political limelight. The shift from hostility to partnership has created opportunities for increasing benefit flows and contributions to rural livelihoods. It argues strongly for the integration of conservation into local and national economic and land use planning, where conservation will compete with other forms of land use on an equal basis.

The range of institutions: government, parastatal and private, combined with different forms of conservation area, allows for great flexibility. This flexibility has, however, been constrained by traditional views of conservation areas as areas of exclusion of human use, and of wildlife as something which needs protection. Only recently have governments realised that they are unable to provide the level of protection wished. The dramatic declines of large mammal populations inside and outside protected areas over the last 15 to 20 years, and the significant encroachment of forest and game reserves, bears witness to this. The evolution of the different forms of community conservation was, perhaps, an inevitable response.

The fundamental philosophical change espoused in community conservation, that conservation of biodiversity can and should contribute towards livelihoods, is providing the main driving force for such change, however reluctantly in certain circumstances. Commonly held assumptions are being challenged and alternatives proposed.

***Creating strong institutional and policy support***

Despite the good intentions of institutions concerned with community conservation, it is unclear whether there has been much real devolution of ownership and responsibility for natural resources and their management. The reasons for this are complex. Conservation authorities and their technocrats often seem unconvinced of the desirability of building true partnerships with communities. They still tend to view rural communities as technically unable and politically unprepared to play a serious role in conservation. Despite rhetorical commitment to community conservation, real obstacles to the involvement of local people in the management of natural resources remain. The continuing weakness of government institutions, exacerbated by structural adjustment policies, and hampered by low wages and corruption, is an important factor.

A range of partnerships is crucial to long term success. To reinforce this, community conservation needs strong institutional and policy support. Polices and procedures for the provision of benefits, resources, training and human resource development are all important in encouraging the establishment of community structures which will persist. The lack of land use planning and ongoing uncertainty over land tenure issues is also important. Conservation and forestry authorities can contribute significantly to improved national land use by showing that conservation can be a valid economic option. Legislation, and not just those statutes and policies relating to conservation, will need to be more enabling so as to allow for:

- the proper definition of land tenure and proper instruments for land access and property rights;
- conferring of custodial proprietary use rights on land owners or local communities;
- decision-making bodies to become legal entities;
- defining of traditional and other stakeholder use rights;
- appropriate management regulations and means for redress;
- transparency and equity;
- mechanisms for generating and distributing revenues and benefits in return for undertaking management responsibilities;
- protection and management responsibilities for protected areas and important areas of biodiversity;
- complementarity with related legislation;
- requirements for environmental impact assessments (Rudge, Hurst et al. 1997).

***Closing the gap between policy and practice: conservation and consensus***

A gap still exists between evolving practice at the resource user level, and co-ordinated implementation of policy and law. Conservation authorities are practising forms of community conservation under different disguises, using language such as 'trial', 'at the discretion of the director' etc. This enables them to avoid commitment to community conservation principles, but allows them to undertake some testing.[27] These gaps between policy and practice are, in part, a function of traditionalist approaches to conservation management. Wider societal power shifts from the centre to the periphery, and the inevitable struggles against devolution of authority, which are equated with loss of power and status, are also being played out in conservation. Community

[27]However, TANAPA has made the greatest commitment by establishing institutional programmes for community conservation. In particular, protected area outreach and support for community initiated projects (SCIP), with board approved internal policies.

conservation challenges fundamental power relations between the state and its citizenry, and is at the core of this shift. Naturally there has been, and will continue to be resistance, despite enabling policies and political rhetoric.

African politics is traditionally based on consensus. The imposed politics of colonial administrations were based on opposition. The tension between these two different political processes led to many conflicts, not least in the management of natural resources. This conflict must be resolved and community conservation is making a contribution towards this. Interestingly, however, in moving away from the conflictual style of law enforcement as the dominant tool of conservation management, towards a more consensual approach, community conservation may have to stimulate a level of democratic conflict. Consensus in decision making in traditional African societies worked in small, relatively homogenous communities. In the large and complex societies of modern Africa, consensus is increasingly 'imposed' by political and economic elites, at both national and local levels. Where community conservation has helped to develop apparent consensus around protected areas, it may merely have concealed deeper conflicts by supporting elites to impose consensus. Ironically, community conservation may need to strengthen the capacity of the majority to resist the imposed consensus of the elites, and thus through creating opposition, build conservation structures that really resolve conflicts.

***Evolving coherent land use policies***

Conservation is increasingly being affected by the lack of land use policy over the region. The complex and diverse array of ecosystems provide significant and real opportunities for community conservation to improve livelihood and conservation objectives. However, with land use heavily biased towards agriculture, important rangeland areas, forests and wetlands will continue to be lost, and with them these opportunities. It is clear that policy changes notwithstanding, a more progressive approach is needed to integrate conservation into land use. As such it will be important to recognise:

- the rights of indigenous peoples to utilise natural resources for their economic and cultural well being;
- that the basic human need for development in rural areas has resulted in wildlife being linked to social and economic development;
- that inequity in land tenure has resulted in changes in the ownership of the land and the concomitant need to address the issues of communal rights of access to public and communally owned lands and resources;
- reduced government expenditures on management of the wildlife estate and to better capitalise on the economic potential of the wildlife resource (Rudge, Hurst et al. 1997).

***Building the capacity of communities***

The capacity of communities to accept the role that community conservation programmes and donor projects would have them play can be an important constraint to the development of real partnerships for conservation. Some community institutions are strong enough to take responsibility, while in many other areas they are not. However, communities need to be strengthened so they can undertake responsibility for natural resources, and can exert sufficient pressure on the authorities to be granted responsibility in the first place.

A general problem for many community-based institutions is their lack of management and business skills. Insufficient funding has made them dependent on donors, who by and large channel funds through conservation authorities. The large areas some community institutions cover and the lack of real understanding of, or interest, in these institutions by their membership, is also a serious problem. The lack of a clear policy environment for them further undermines their development, while conservation authorities, NGOs, donors and projects may have pushed the establishment of community institutions at the cost of community understanding and ownership.

The notion of community management of natural resources, both within and outside protected areas, presupposes true commitment of community institutions towards the sustainable management of natural resources and the conservation of the protected areas. It also presupposes the genuine commitment of the management authorities to share responsibility and management control. It is not clear to what extent either of these conditions have yet been met. Both are integral to long term success. TANAPA, for example, shows strong commitment to sharing control, but commitment to conservation amongst local institutions is less clear. Significant steps have been made towards establishing these preconditions. Until they are achieved, however, community conservation will remain an uneasy if productive compromise between the demands of communities, the reservations of management authorities, and the interventions of external agents. This compromise has resulted in a range of institutional mechanisms for working with rural people and communities, including:

- some form of Community Conservation Service;
- staffing for community work either from within the conservation institution or recruited externally, both at the warden and ranger levels, at headquarters and in the field;
- training programmes to re-orient and train staff in working with rural people and communities;
- some form of coordinating mechanism, such as the Community Conservation Coordinating Committee of TANAPA;
- various institutional arrangements to ensure that norms and procedures are in place and approved;
- having resources committed for community conservation;
- working with different local level institutions such as villages, group ranches, private land owners, and local councils which usually relate to the decentralisation process;
- creating, with varying degrees of success, institutions which specifically address conservation issues, for example Park Management Advisory Committees (PMAC) in Uganda, and the Wildlife Associations in Kenya, to integrate different groups of stakeholders better and more actively.

***Monitoring the impact on biodiversity***

While community conservation can contribute to rural livelihoods and lifestyles, it has proved much more difficult to show how it contributes to conservation objectives. Many activities were set up with little attention to the need to monitor impact on conservation resources. Without carefully designed programmes to monitor biodiversity it will remain difficult to measure the impact of community conservation empirically, making it necessary to rely on more subjective measures of success, including anecdotal indicators. Conservation biology lends itself to clear methodologies of

establishing baseline and subsequent evaluations of conservation impact (Kangwana 1998). For community conservation projects this should be made an integral part of project design and implementation. If this is not done, the complexity of establishing causal links and confounding variables may render severe limitations to these data and their interpretation (Kangwana 1998).

***Getting the economics right***

Benefit-based approaches, such as revenue sharing and the implementation of social infrastructure projects, have formed the guiding principle for many community conservation activities implemented in East Africa over the last decade. Although the economic rationale for benefit-based approaches to community wildlife conservation is sound, it is incomplete. Generating broad development benefits does not ensure that the presence of wildlife generates a net economic gain and is not the same as providing economic incentives for conservation. Neither does it address the issue of wildlife costs.

Benefit-sharing can have only marginal impact on either community welfare or wildlife conservation unless it directly offsets wildlife costs. Not only must benefits be provided to a sufficient level to balance the value of wildlife costs, they must also be generated in a form which directly compensates for the economic activities precluded or diminished by the presence of wildlife. Decisions on how to use land are taken by individuals on the basis of their economic needs. It is this decision making process that conservation must influence to have a lasting impact. New and innovative methods of meeting the costs of conservation must be found to ensure this sustainability. For local communities to be willing and able to conserve wildlife, therefore, wildlife benefits must exceed wildlife costs.

A range of other economic factors needs to be incorporated into benefit-based approaches to community wildlife conservation, and used to evaluate their success. These include:

- the level and form in which community benefits are received;
- the degree to which communities have economic choice and control over wildlife management, use and benefit generation;
- ways of creating benefits that accrue directly to individuals rather than the community; and
- wider policy factors which discriminate against wildlife as a profitable land use for communities.

**Is community conservation the way forward?**

Support for community conservation is by no means universal (Barrett and Arcese 1995; Murphree 1996a). It has been suggested that linked conservation and development is unsustainable (Barrett and Arcese 1995). Others argue that wildlife's existence values are reason enough to conserve (World Conservation Monitoring Centre 1992). The community conservation approaches discussed here have not been in place for very long, and their results are mixed. There are sufficient positive results, however, to suggest that they are an improvement on the more restrictive approaches. They provide incentives to involve many more people in the sustainable management of natural resources.

To date community conservation philosophy has not generally altered the institutions which deliver community conservation programmes; instead community conservation programmes were designed within the range of options made possible by the organisation's philosophy. However, this may change in future. The power of community conservation as a set of ideas is so strong that it will now begin to change the philosophy of the conservation authorities. The increasing practical evidence of its effectiveness, and national and international trends towards decentralisation, will hasten the metamorphosis of government conservation bodies.

Community conservation will, however, not just depend on the changes in policy and appropriate benefit flows. The ability of local communities to organise themselves to create governance structures that work, and appropriate and equitable methods of sharing revenue is also of critical importance.

The data collected and discussed here have shown the importance of demonstrating the willingness of conservation authorities to change their ways of perceiving and interacting with communities. Though the economic value of resources shared with communities remains small, the number of jobs created few, and the degree of genuine partnership low, community conservation programmes have begun to alter the nature of the relationship between communities and conservation authorities. It is unsure, however, whether these fragile advances can be maintained in the face of increasing pressures for development from growing human populations, and whether the level of commitment to policies and programmes will be maintained in the face of budgetary constraints. The recent cutting of the Community Conservation Department by UWA does not augur well. New and creative ways of supporting community conservation will have to be sought in the face of these declines.

Uganda is facing a problem which will overtake other countries in Africa before too long; namely, how to find room for wildlife and wild spaces in a land of more people. And populations are not just expanding in numbers, but in expectations for a more secure and comfortable life. It is likely that population and land use pressures will have a greater influence than any other single factor on the success of conservation. Community conservation shifts the balance of conservation and livelihood objectives in a situation where the conservation resource is finite, while the population pressure would seem infinite. This argues for conservation finding a distinct niche, particularly external to protected areas, in rural livelihoods and land use in the future. Ultimately conservation resources in rural landscapes must provide a comparative advantage over other forms of land use. Where this cannot be achieved, either due to the low earning potential of the conservation resource, or the high production value of the land under agriculture, conservationists must either reconcile themselves to the loss, strengthen protectionist measures, or look for new forms of incentives for local communities.

## References


Adams, W. 1996. In: W. M. Adams, A. S. Goudies and A. R. Over (1996) *Conservation and Development. The Physical Geography of Africa*. Oxford, England, Oxford University Press.

Adams, J. S. and T. O. McShane. 1992. *The Myth of Wild Africa: Conservation without Illusion*. New York, W.W. Norton.

Adams, W. and M. Infield 1998. *Community Conservation at Mgahinga Gorilla National Park, Uganda*. Discussion Paper: 12. Manchester, Institute of Development Policy and Management, University of Manchester, England.

African Wildlife Foundation. 1990a. *Protected Areas: Neighbours as Partners. Community Conservation around Tsavo West National Park.* Tsavo West Community Conservation Project Proposal submitted to USAID. Nairobi, African Wildlife Foundation: 29.

African Wildlife Foundation. 1990b.. *Protected Areas: Neighbours as Partners. Wildlife Extension Team for Tsavo West National Park*. Final report. Nairobi, African Wildlife Foundation: 23.

African Wildlife Foundation. 1994a. *Community Conservation Three Country Study Tour of Tanzania, Zimbabwe and Kenya.* Organized by AWF and KWS. Funded by USAID through the Conservation of Biodiverse Resource Areas Project. Nairobi, AWF: 18.

African Wildlife Foundation. 1994b. *Protected Areas: Neighbours as Partners. Community Conservation around Tsavo West National Park.* Tsavo West Community Conservation Project. Phase 2, Final report. Nairobi, African Wildlife Foundation: 37.

African Wildlife Foundation. 1995a. *Lake Mburo National Park Support and Community Conservation Project*. Nairobi, AWF: 60.

African Wildlife Foundation. 1995b. *Revenue sharing - Wildlife For Development Fund: Some Ideas and Perspectives for Discussion*. Nairobi, AWF: 15.

African Wildlife Foundation. 1997a. *Wildlife Enterprise and Local Development (WELD)*. Year 1 Workplan and Budget. Naiorbi, AWF: 3.

African Wildlife Foundation. 1997b. *Wildlife Enterprise Business Services (WEBS) Centre, Kenya.* Nairobi, AWF: 8.

Aldrich, M., Billington, C., Edwards M., and N. Laidlaw. 1997. *Tropical Montane Cloud Forests: An Urgent Priority for Conservation*. Cambridge, World Conservation Monitoring Centre: 20.

Anderson, D. and R. Grove 1987. The scramble for Eden: past, present and future in African conservation. In: D. Anderson and R. Grove. *Conservation in Africa: Peoples, Policies and Practices*. Cambridge, Cambridge University Press.

Anderson, D. and R. Grove 1993. Conservation in Africa: People, Policies and Practise. Cambridge, Cambridge University Press.

Andrews, G. 1996. Development of Mafia Island Marine Park. The journey from Arusha to Seychelles. *Successes and Failures of Integrated Coastal Zone Management in Eastern Africa and Island States. Proceedings of Second Policy Conference on Integrated Coastal Zone Management in Eastern Africa and Island States, 23-25 October 1996*. O. Linden and C. G. Lundin. Washington and Uppsala, The World Bank and SIDA: 241-254.

Andrews, G. 1997. Development of Mafia Marine Park. *Sharing Coastal Management Experience in the Western Indian Ocean. Proceedings of the Experts and Practitioners Workshop on Integrated Coastal Area Management for Eastern African and the Island States*. S. Humphrey and J. Francis. Zanzibar, WIOMSA: 71-84.

Bakema, R. and L. Iyango 1999. *Engaging Local Users in the Management of Wetland Resources: The Case of the National Wetlands Programme, Uganda.* Nairobi, IUCN Eastern African Regional Office. Social Perspectives in Conservation: 14.

Baldus, R. D. 1991. *Community Wildlife Management Around the Selous Game Reserve.* SCP Discussion Paper. Dar-es-Salaam, Wildlife Division and Selous Conservation Project.

Barbier, E. B. 1997. *Economic Valuation of Wetlands: A guide for policy makers and planners*. Gland, Switzerland, Ramsar Convention Bureau.

Barrett, C. B. and P. Arcese 1995. Are Integrated Conservation-Development Projects (ICDPs) sustainable? On the conservation of large mammals in Sub-Saharan Africa. *World Development* 23(7): 1073-1084.

Barrow, E. G. C. 1988. *Loima Forest, Turkana - Its Present Management and Future Conservation Issues*. Lodwar, Kenya, Turkana Rural Development Programme: 11.

Barrow, E. G. C. 1990. Usufruct rights to trees: The role of ekwar in dryland Central Turkana, Kenya. *Human Ecology* 18(2): 163-176.

Barrow, E. G. C. 1995. *Community Conservation Approaches to Conservation in East Africa: An Overview of Experiences to Date.* Proceedings of a Participatory Wildlife Management Workshop, Addis Ababa, Ministry of Natural Resources Development and Environmental Protection.

Barrow, E. G. C. 1996a. *Community Conservation Training Course Report for Community Conservation Wardens in Uganda.* Nairobi, African Wildlife Foundation: 82.

Barrow, E. G. C. 1996b. *Development and Conservation in Pastoralist Areas: Conflicting Interests or an Unrecognized Partnership.* Paper Presented at Kenya Pastoralist Forum Meeting February 1996. Nairobi, African Wildlife Foundation: 15.

Barrow, E. G. C. 1996c. *The Drylands of Africa: Local Participation in Tree Management*. Nairobi, Initiatives Publishers.

Barrow, E. G. C. 1996d. Partnerships and empowerment - community conservation approaches and experience from East Africa. *Rural Extension Bulletin*, 10: 5-13. Reading University, UK.

Barrow, E. G. C. 1997. CAMPFIRE and conservancies in Zimbabwe - now and into the future. In: *Wildlife Resources Outside the Zimbabwe Parks Estate: A Management Policy Framework.* Recommendations from the DNPWLM seminar on CAMPFIRE and Conservancies, Boulton-Atlantica, Zimbabwe, Department of National Parks and Wildlife Management, Zimbabwe.

Barrow, E. G. C. 1998. *Community Conservation in East Africa and Further: Some Lessons from Practise*. Proc. Regional Workshop: Experiences in Local and Community Integrated Coastal Zone Management, Lessons to Date, Zanzibar, SEACAM and WIOMSA.

Barrow, E. G. C., P. Brandstrom, et al. 1988. *Soil Conservation and Afforestation in Shinyanga Region: Potentials and Constraints.* Mission Report to NORAD. Nairobi, Norad, Tanzania: 85.

Barrow, E., Bergin, P., Infield, I. and P. Lembuya. 1995a. Community conservation lessons from benefit sharing in East Africa. In: J. A. Bissonette and P. R. Krausman (eds) *Integrating People and Wildlife for a Sustainable Future*. Bethseda, Wildlife Society: 21-26.

Barrow, E., Bergin, P., Infield, I. and P. Lembuya. 1995b. The people's voice: partnership and community conservation. In: J. A. Bissonette and P. R. Krausmann (eds). *Integrating People and Wildlife for a Sustainable Future.* Bethseda, Wildlife Society: 225-259.

Barrow, E.G.C., Kangwana, K. and D. Berger. 1995. *The Role of the African Wildlife Foundation in the Evolution of Community Conservation Practise and Policy in Kenya.* Workshop on Environmental Policy Formulation in Kenya: Private Sector/NGO Roles, Nairobi, Kenya, ACTS, Nairobi and WRI, Washington.

Barrow, E. G. C., Gichohi, H. and M. Infield. 1998. *Community Conservation in East Africa - An Analysis of Form and Function.* Manchester, Institute of Development Policy and Management, University of Manchester, England: 37.

Barrow, E.G.C and M. Murphree. In press. Community conservation from concept to practice: a practical framework. In Hulme D., Murphree M. (eds). In press. *African Wildlife and African Livelihoods, The Promise and Performance of Community Conservation.* James Currey, Oxford.

Bateson, J.D. 1994. *The Registration of the Forest Dwellers of the South West Mau Forest Reserve, 1991-1994*. Nairobi, Kenya Indigenous Forest Conservation Programme.

Beentje, H.J. 1988. *Report on a Visit to Eminit Forest, Murua Ngisigerr Mountain, Turkana District*. Nairobi, East African Herbarium, National Museums of Kenya.

Bensted-Smith, R. 1992. *Let the Money Go where the Wildlife Goes.* Kenya Wildlife Service Public Briefing Document on Revenue Sharing. Nairobi, KWS: 10.

Bensted-Smith, R. 1993. *Case Study on Protected Areas and Wildlife Service Project.* Gland, Switzerland, IUCN Protected Areas Programme: 39.

Bensted-Smith, R. and B. Leaver 1996. *Report of Evaluation of Ngorongoro Conservation and Development Project Phase II: Management Plan Development.* Oxford, IUCN, the World Conservation Union: 71.

Berger, J. 1977. *Developing a Wildlife Management Extension Service*. Nairobi: 9.

Berger, J., Ed. 1988. *People, Parks and Wildlife. Guideline for Public Participation in Wildlife Conservation.* Case Studies in Kenya. Nairobi, UNEP and Wildlife Fund Trustees.

Berger, J. 1993. *Wildlife Extension, Participatory Conservation by the Maasai of Kenya.* Nairobi, ACTs Press.

Bergin, P. 1995. *Tanzania National Parks Community Conservation Service. Community-based Conservation in Tanzania.* Dar-es-Salaam, Tanzania, Department of Wildlife, with AWF and WWF.

Bergin, P. 1996. Conservation and Development: The Institutionalization of Community Conservation in Tanzania National Parks. School of Development Studies. Norwich, East Anglia: 198.

Bergin, P. 1998. *Reforming a Conservation Bureaucracy: TANAPA and Community Conservation.* Discussion Paper: 23. Manchester, Institute of Development Policy and Management, University of Manchester, England.

Bergin, P. and E. Dembe 1995. *Parks and People in Tanzania: An Overview of the Tanzania National Parks Community Conservation Service.* Proceedings of a Participatory Wildlife Management Workshop, Addis Ababa, Ministry of Natural Resources Development and Environmental Protection and FARM Africa.

Borrini-Feyerabend, G. 1996. Co-management - a new approach to conserving Uganda's forests. *Plant Talk*, July 1996: 22-25.

Borrini-Feyerabend, G., Ed. 1997. *Beyond Fences - Seeking Social Sustainability in Conservation. Volume 1: A Process Companion.* Gland, Switzerland, IUCN - The World Conservation Union.

Boshe, J. 1996. *Models of Wildlife Management: Tanzania. African Wildlife Policy Consultation.* Final Report of the Consultation. London, Overseas Development Administration: 73-94.

Brockington, D. and K. Homewood 1996. Debates concerning Mkomazi Game Reserve, Tanzania. In: M. Leach and R. Mearns (eds). *The Lie of the Land: Challenging Received Wisdom on the African Environment.* Oxford, James Currey: 91-104.

Brownrigg, L.A. 1985. Native cultures and protected areas: Management options. In: J. A. McNeely and D. Pitt (eds). *Culture and Conservation: The human dimension in environmental planning*. London, Crom Helm.

Butynski, T.M. 1984. *Ecological Survey of the Impenetrable (Bwindi) Forest, Uganda and Recommendations for its Conservation and Management.* Report to the Uganda Government. New York, Wildlife Conservation International.

Chambers, R. 1983. *Rural Development: Putting the Last First.* London, Longman.

Chambers, R., A. Pacey, and L. Thrupp. (Eds.) 1989. *Farmer First: Farmer Innovation and Agricultural Research.* London, Intermediate Technology Publications.

Chengullah, E. L. 1998. *TANAPA Community Conservation Service: The Case of Udzungwa Mountains National Park.* Proceedings of Regional Workshop: Experiences in Local and Community Integrated Coastal Zone Management, Lessons to Date. Zanzibar, SEACAM and WIOMSA.

Church, J. 1998. *Kiunga Marine and Dodori National Reserves.* Proceedings Regional Workshop: Experiences in Local and Community Integrated Coastal Zone Management, Lessons to Date. Zanzibar, SEACAM and WIOMSA.

CIRAD, IUCN, and IFRA. 1996. *Pan African Symposium on Sustainable Use of Natural Resources and Community Participation.* Harare, Zimbabwe.

COBRA Contract Team 1994. *COBRA - Interim Contract Report*. Nairobi. COBRA project: 41.

Collet, G., Chetri, R., Jackson, W. and K. Shepherd. 1996. *Nepal Australia Community Forestry Project - Socio-Economic Impact Study.* Canberra ACT, Australia, Anutech. Technical Note No. 1/96: 186.

Cooke, A. and A. S. Hamid 1998. *Misali Island Conservation Area, Pemba - An Analysis of Activities and Lessons Learnt.* Proceedings Regional Workshop: Experiences in Local and Community Integrated Coastal Zone Management, Lessons to Date, Zanzibar 4-6 March 1998, SEACAM and WIOMSA.

Cowie, M. 1952. *Annual Report, 1951*. Nairobi, Royal National Parks of Kenya.

Cunningham, A.B. 1996. *People, Park and Plant use. Recommendations for multiple-use zones and development alternatives around Bwindi Impenetrable National Park, Uganda.* Paris, UNESCO.

Dasmann, R.F. 1985. The relationship between protected areas and indigenous peoples. In: J. A. McNeely and K. R. Miller (eds). *National Parks, Conservation and Development: The role of protected areas in sustaining society*. Washington D.C., Smithsonian Press.

Dembe, E. and P. Bergin 1996. Tanzania: strategic planning for action. How Tanzania National Parks' Community Conservation Service works towards park-specific action plans. *Rural Extension Bulletin*, 10: 23-26. Reading University.

Department of Resource Surveys and Remote Sensing 1996. *Data summary Report, Kenyan Rangelands, 1977-1994.* National Rangelands report. Nairobi, Department of Resource Surveys and Remote Sensing. Doornbos, M. R. 1978. *Not All the King's Men: Inequality as a Political Instrument in Ankole, Uganda.* The Hague, Paris, New York, Mouton Publishers.

Douglas-Hamilton, I. 1988. *Identification Study for the Conservation and Sustainable Use of the Natural Resources in the Kenyan Portion of the Mara-Serengeti Ecosystem.* Nairobi, Report Prepared for the European Development fund of the European Economic Community.

Doute, R., Epp, H. and Ochenda, N. 1981. *Monitoring Recent Changes in Selected Natural Forests in Kenya.* Nairobi, Kenya Rangeland Ecological Monitoring Unit (KREMU). Technical Report Series No. 30.

Dudley, N. and S. Stolton 1998. *Protected Areas for a New Millenium - The Implications of IUCN's Protected Area Categories for Forest Conservation.* Gland, Switzerland, WWF - World Wide Fund for Nature and IUCN - The World Conservation Union: 15.

East African. 1995. Report in *East African,* 17th July 1995. Nairobi, Kenya.

East African Wildlife Society 1997. *Strategic Monitoring and Intervention: Case Study of Taita Hills Biodiversity Conservation Project.* Nairobi, EAWLS. Draft Case Study Report to Biodiversity Support programme: 33.

Ecosystems, Ltd. 1985. *Turkana District Resources survey 1982-1984.* Nairobi, Report for Republic of Kenya, Ministry of Energy and Regional Development, Turkana Rehabilitation Project: 261.

Elliott, J. and M. Mwangi 1997. *Making Wildlife Pay in Laikipia, Kenya.* Nairobi, AWF, Laikipia Wildlife Economics Study Discussion Paper: 13.

Ellis, J. E., K. Galvin, et al. 1988. *Pastoralism and Drought in Turkana District, Kenya.* Bellvue, Colorado, A Report to Norad. Development Systems Consultants, Inc.

Emerton, L. 1992. *Socio-Economic Findings from a District Profile of Kenya's Gazetteer Forests.* Nairobi, Kenya Indigenous Forest Conservation Programme.

Emerton, L. 1996a. *Maasai Livelihoods, Forest Use Values and Conservation in Oldonyo Orok, Kenya.* Nairobi, African Wildlife Foundation. Applied Conservation Economics Discussion Paper Series: 10.

Emerton, L. 1996b. *Participatory Environmental Valuation: Subsistence forest use around the Aberdares, Kenya.* Nairobi, AWF. Applied Conservation Economics Discussion Paper Series: 8.

Emerton, L. 1997a. *The Economics of Tourism, and Wildlife Conservation in Africa*. Nairobi, African Wildlife Foundation. Applied Conservation Economics Discussion Paper.

Emerton, L. 1997b. *Mount Kenya: The Economics of Community Conservation.* Discussion Paper: 20. Manchester, Institute of Development Policy and Management, University of Manchester, England.

Emerton, L. 1997c. *SAWC Manual: Using Economic for Wildlife Conservation.* Hoedsprit, South Africa, Southern African Wildlife College.

Emerton, L. 1998a. *Balancing the Opportunity Costs of Wildlife Conservation for Communities Around Lake Mburo National Park, Uganda.* Discussion Paper: 30. Manchester, Institute of Development Policy and Management, University of Manchester, England.

Emerton, L. 1998b. *Innovations for Financing Wildlife Conservation in Kenya.* Financial Innovations for Biodiveristy Workshop. 10th Global Biodiversity Forum, Bratislava.

Emerton, L. 1998c. *The Nature of Benefits and the Benefits of Nature. Why Wildlife Conservation has not Economically Benefited Communities in Africa.* Discussion Paper: 20. Manchester, Institute of Development Policy and Management, University of Manchester, England.

Emerton, L. and I. Mfunda. 1999. *Making Wildlife Economics Viable for Communities Living Around the North West Serengeti, Tanzania.* London and Nairobi, IIED Evaluating Eden and IUCN-EARO Biodiversity and Economics Working Paper.

Emerton, L. and H. Mogaka 1996. Participatory environmental evaluation: subsistence forest use around the Aberdares, Kenya. *Participatory Learning and Actions Notes* 26: 6-10, IIED, London.

FAO 1997. *State of the World's Forests 1997*. Rome, Italy, Food and Agriculture Organization of the United Nations.

FAO 1988. *An Interim Report on the State of Forest Resources in Developing Countries.* Rome, FAO.

Feldmann, F. 1994. Community environmental action: the national policy context. In: D. Western and R. M. Wright (eds.). *Natural Connections in Community Based Conservation.* Washington, Island Press.

Ferguson, W. 1993. *National Profile of Indigenous forest: Mangrove Forest.* Nairobi, Kenya Indigenous Forest Conservation Project (KIFCON).

Fisher, R. J. 1995. *Collaborative Management of Forests for Conservation and Development.* Gland, IUCN and WWF.

Ford, R. and F. Lelo. 1991. Evaluating Participatory Rural Appraisal: listening to village leaders in Kakuyeni Location. *Forest, Trees and People Newsletter* 13: 7-13.

Fortmann, L. 1987. *Tree Tenure: An analytical framework for agroforestry projects.* Land, Trees and Tenure. Proceedings. Int. Workshop on Tenure issues in Agroforestry, Nairobi, Kenya, ICRAF and Land Tenure Centre.

Fotso, R.C. 1996. Two models for biodiveristy conservation and community development integrated projects in Cameroon. Paper Presented to *Pan African Symposium on Sustainable Use of Natural Resources and Community Participation*, June 1996. CIRAD, IUCN, and IFRA. Harare, Zimbabwe.

Galaty, J.G. 1992. Social and economic factors in the privatization, sub-division and sale of Maasai ranches. *Nomadic Peoples* 30: 26-40.

Gillingham, S. 1998. *Giving Wildlife Value: A Case Study of Community Wildlife Management Around the Selous Game Reserve, Tanzania.* Dept. Biological Anthropology. Cambridge, University of Cambridge: 290.

Global Environment Facility. 1992. *Guidelines for Monitoring and Evaluation of Biodiversity Projects.* Washington D.C., The World Bank.

Goodwin, H., Kent, I., Parker, K. and M. Walpole. 1998. *Tourism, Conservation and Sustainable Development: Case Studies from Asia and Africa.* Wildlife and Development Series: 88. London, IIED.

Gorman, M., Uronu, G., Semtaga, S., Mfuko, A., Kabamba, J., Mfuko, M., Challange, L., Mosha, R., Kwalloh, M., Mahanyu, A., and A. Seumbe. 1996. *Assessment of Participation and Village Support for Pilot Environmental Committees.* Internal Report. Tanga, Tanzania, Tanga Coastal Zone Conservation and Development Programme.

Groombridge, B. (Ed.) 1992. *Global Biodiversity - Status of the Earth's Living Resources.* A Report compiled by the World Conservation Monitoring Centre. London, Chapman and Hall.

Grunblatt, J., M. Said, et al. 1995. *DRSRS Data Summary Report, Mean and Standard Error Analysis, Trend and Regression Analysis. Kenyan Rangelands 1977-1994.* Ministry of Planning and National Development, Department of Resource Surveys and Remote Sensing (DRSRS). Department of Resource Surveys and Remote Sensing (DRSRS). Nairobi, Kenya.

GTZ and Department of Wildlife. 1994. *Selous Conservation Project - Project Brief.* Dar-es-Salaam, Selous Conservation Project.

Halffter, G. 1981. The Mapini Biosphere Reserve: Local participation in conservation and development. *Ambio* 10(2-3): 93-96.

Harcourt, C.S. and N.M. Collins 1992. Uganda. In: J. A. Sayer, C. S. Harcourt and N. M. Collins (eds.) *The Conservation Atlas of Tropical Forests: Africa*. Macmillan: 262-269.

Harris, L. D. and N. K. Fowler 1975. Ecosystem analysis and simulation of the Mkomazi Reserve, Tanzania. *East Africa Wildlife Journal* 13: 325-346.

Hartley, D. 1995. *Ruaha Ecosystem Wildlife Management Project: The first steps.* Community-based Conservation in Tanzania, Dar-es-Salaam, Tanzania, Department of Wildlife, with AWF and WWF.

Hartley, D. 1997. *Community Wildlife Management: A Review of the ODA's Experience in Tanzania.* London, Report to the Overseas Development Administration.

Heath, B. 1995. *Wildlife Utilization Study Report No. 3: Technical.* A study conducted by the Conservation of Biodiverse Resource Areas Project. Nairobi, Kenya Wildlife Service with the African Wildlife Foundation.

Heath, B. 1996. *Wildlife Utilization Study. Report No. 7 Implementation Strategy*. A study conducted by the Conservation of Biodiverse Resource Areas Project. Nairobi, KWS and AWF.

Hinchley, D. 1997a. *Participatory Field Work for Sustainable Development and Conservation.* Training Workshop Report. Technical Report No. 19. Mbale, Uganda, Mount Elgon Conservation and Development Project.

Hinchley, D. 1997b. *Participatory Fieldwork Approaches and Tool for Community Conservation.* Training Workshop Report, Summary of Procedures and Outcomes. Technical Report No. 18. Mbale, Uganda, Mount Elgon Conservation and Development Project.

Hinchley, D. and L. Turyomurugyendo 1998. *Review of Collaborative Management Arrangements for Mt. Elgon National Park*. Technical paper, Mbale, Mt. Elgon Conservation and Development Project.

Hitchcock, L. 1995a. *Legal Issues in Community Forest Management in Lushoto District: Case Studies and Recommendations.* Washington DC, World Resources Institute.

Hitchcock, L. and V. Shauri 1995b. *Technical Legal Report on Cooperative Forest Management in High Canopy Forests of Tanzania: Legal and Policy Issues and Recommendations.* Washington DC, World Resources Institute.

Hobley, M. 1996. *Participatory Forestry: The process of change in India and Nepal.* Rural Development Study Guide. London, Rural Development Network, Overseas Development Institute.

Hoefsloot, H. 1997. Collaborative management on Mount Elgon: an account of first experiences. Nairobi, Kenya, IUCN Eastern Africa Programme. *Issues in Conservation*: 59.

Hogg, R. S. 1986. *Building Pastoral Institutions. A strategy for Turkana District.* Report to Oxfam. Nairobi, Kenya.

Homewood, K., Kiwasila, H. and D. Brockington. 1997. *Conservation with Development? The Case of Mkomazi, Tanzania.* Report to ESCOR of the Department of International Development. London, University College London.

Homewood, K. M. and W. A. Rodgers 1991. *Maasailand Ecology: Pastoral Development and Wildlife Conservation in Ngorongoro, Tanzania.* Cambridge, Cambridge University Press.

Howard, G. W. 1995. *Two Examples of Community Involvement with Wildlife and Natural Resource Conservation.* Proceedings of a Participatory Wildlife Management Workshop, Addis Ababa, Ministry of Natural Resources Development and Environmental Protection and FARM Africa.

Howard, P. C. 1991. *Nature Conservation in Uganda's Tropical Forest Reserves.* Gland, Switzerland and Cambridge, UK, IUCN.

IIED. 1994. *Whose Eden? An Overview of Community Approaches to Wildlife Management.* London, International Institute for Environment and Development.

Ibo, J. and E. Leonard 1996. *The Structure, Subsistence and the Forest Theory and Practise of Participatory Forest Management in Cote D'Ivoire.* Paper presented to Pan African Symposium on Sustainable Use of Natural Resources and Community Participation, June 1996. CIRAD, IUCN, and IFRA. Harare, Zimbabwe.

Infield, M. 1986. *Improving Local Support for African Conservation Areas.* Pietermaritzburg, Institute of Natural Resources, University of Natal.

Infield, M. 1989a. *The Importance of Hunting in the Conservation of Large Mammals: a case study in Korup National Park, Cameroon.* Fifth Theriological Congress, Rome, Norwegian Centre for International Agricultural Development.

Infield, M. 1989b. *Socio-economic Survey in the Queen Elizabeth National Park, Uganda.* Kampala, Uganda Institute of Ecology.

Infield, M. and W. M. Adams 1999. Institutional sustainability and community conservation: a case study from Uganda. *J. Int. Dev.* 11: 305-315.

Infield, M., Marquardt, M. and A. Naamara. 1994. *Socio-Economy Survey of Communities in the Buffer Zone of Lake Mburo National Park.* Kampala, Makarere Institute of Social Research.

IUCN. 1986. *Towards a Regional Conservation Strategy for Serengeti: Report of a Workshop held at Serengeti Wildlife Research Centre, 2-4 December 1985.* Nairobi, IUCN-Eastern Africa Regional Office.

IUCN. 1990 *United Nations List of National Parks and Protected Areas.* Gland, Switzerland and Cambridge, UK, IUCN.

IUCN. 1991. *Caring for the Earth: A Strategy for Sustainable Living.* Gland, Switzerland, IUCN - The World Conservation Union, UNEP - United Nations Environment Programme, and WWF - World Wide Fund for Nature.

IUCN. 1992. *Protected Areas of the World: A review of national systems. Volume 3: Afrotropical.* Gland, Switzerland and Cambridge, UK, IUCN.

IUCN 1996. Forest cover and forest reserves in Kenya: policy and practice. Nairobi, IUCN. IUCN Eastern Africa Programme, *Issues in Conservation*: 24.

IUCN, KWS and the Forestry Department. 1997. *Mt. Elgon Integrated Conservation and Development Project Formulation Document 1998-2000.* Nairobi, IUCN and Royal Netherlands Embassy.

IUCN and UNEP 1986. *Review of the Protected Areas System in the Afrotropical Realm.* Gland, Switzerland, IUCN.

Jackson, A. J. H. and P. J. Carter 1994. *A Profile of the Mau Forest Complex.* Nairobi, Kenya Indigenous Forest Conservation Programme.

Jackson, W. J., Malla, Y. B., Ingles, A., Singh, H. and D. Bond (Eds.). 1996. *Community Forestry for Rural Development in Nepal - A Manual for Field Workers*. Nepal Australia Community Forestry Project. Canberra, Australia, Anutech.

Johansson, L. and W. Mlenge 1993. Empowering customary community institutions to manage natural resources in Tanzania: case study in Bariadi District. *Forest Trees and People Newsletter* 22: 36-42.

Jones, B. T. B. 1997. *Community-based Natural Resource Management in Botswana and Namibia - an Inventory and Preliminary Analysis of Progress.* Review for IIED study on *Evaluating Eden: Factors Affecting Community Wildlife Management.* IIED, London.

Kabushenga, R. 1998. *Main Issues in the Land Bill.* The New Vision. Kampala: 4, 21.

Kamugisha, J. R. 1993a. *Management of Natural Resources and Environment in Uganda; Policy and Legislation Landmarks, 1890 - 1990.* Nairobi, SIDA's Regional Soil Conservation Unit, RSCU.

Kamugisha, J. R. 1993b. *The Study of Water for Livestock and Domestic Use and the Related Socio-economic and Environmental Issues in Lake Mburo National Park and Environs.* Nairobi, Swedish International Development Agency.

Kamugisha, J. R. and M. Stahl (Eds.). 1993. *Parks and People, Pastoralists and Wildlife.* Proceedings from a seminar on environmental degradation in and around Lake Mburo National Park, Uganda. Nairobi, SIDA's Regional Soil conservation Unit, RSCU.

Kangwana, K. F. 1993. *Elephants and Maasai: Conflict and Conservation in Amboseli, Kenya.* Department of Zoology. Cambridge, University of Cambridge.

Kangwana, K. 1995. Elephant-Maasai interactions in Amboseli, Kenya. Integrating people and wildlife for a sustainable future. In: J. A. Bissonette and P. R. Krausman (eds.). *Proceedings of the First International Wildlife Management Congress.* Bethesda, Md., USA, The Wildlife Society.

Kangwana, K. 1998. *Meeting the Conservation Agenda through Community Conservation.* Manchester, Institute of Development Policy and Management, University of Manchester, England. Discussion Paper: 20.

Kangwana, K. and S. O. Mako 1998. *The Impact of Community Conservation Initiatives around Tarangire National Park, Tanzania.* Manchester, Institute of Development Policy and Management, University of Manchester, England. Discussion Paper: 20.

Kenya, Government of. 1948. *The Forests Act, CAP 176.* Nairobi, Government Printer.

Kenya, Government of. 1994. *Kenya National Environment Action Plan.* Nairobi, Ministry of Environment and Natural Resources.

Kenya, Government of. 1968. *A Forestry Policy for Kenya.* Nairobi, Government Printer. Session Paper No. 1 of 1968.

Kenya, Government of. 1992. *The Forest Act, CAP 385, Revised Edition 1992 (1982).* Nairobi, Government Printer.

Kenya, Government of. 1994. *Kenya Forestry Master Plan: Development Programmes.* Nairobi, Ministry of Environment and Natural Resources.

Kenya, Republic of. 1948. *The Forests Act, CAP 176.* Nairobi, Government Printer.

Kenya, Republic of. 1969. *Land Group Representatives Act. Laws of Kenya, CAP 287.* Nairobi, Government Printer.

Kenya, Republic of. 1970. *The Trust Land Act. Laws of Kenya, CAP 288, revised edition.* Nairobi, Government Printer.

Kenya, Republic of. 1975. *Statement on Future Wildlife Management Policy in Kenya.* Nairobi, Government Printer.

Kenya, Republic of. 1976. *The Wildlife (Conservation and Management) Act CAP. 376, Laws of Kenya.* Nairobi, Government Printer.

Kenya, Republic of. 1985. *The Registered Land Act. Laws of Kenya CAP 300.* Revised Edition. Nairobi, Government Printer.

Kenya, Republic of. 1986. *Economic Management for Renewed Growth.* Sessional Paper No. 1 of 1986. Nairobi, Ministry of National Planning and Development Nairobi: Government Printer.

Kenya, Republic of. 1987. *Office of the President. District Focus for Rural Development*. Revised edition. Nairobi, Government Printer.

Kenya, Republic of. 1989. *The Wildlife (Conservation and Management)(Amendment) Bill.* Nairobi, Government Printers. Kenya Gazette Supplement, special Issue No. 83 (Bill No. 15): 1361-1376.

Kenya, Republic of. 1991. *Statistical Abstract 1991.* Nairobi, Central Bureau of Statistics.

Kenya, Republic of. 1996. *Kenya Forest Development Policy (Draft).* Nairobi, Ministry of Environment and Natural Resources.

Kijazi, A. J. 1995. *Approaches to Community-based Conservation in the Ngorongoro Conservation Area*. Community-based Conservation in Tanzania, Dar-es-Salaam, Tanzania, Department of Wildlife, with AWF and WWF.

Kilahama, F. B. 1994. Indigenous technical knowledge: a vital tool for rural extension strategies. A case study from Shinyanga Region, Tanzania. *Forest Trees and People Newsletter* 24: 30-35.

Kiss, A. 1990. *Living with Wildlife. Wildlife Resource Management with Local Participation in Africa.* Washington D.C. World Bank Technical Paper 130, Africa Technical Department Series.

Kothari, A., Singh, N. and S. Suri, (Eds.). 1996. *People and Protected Areas - Towards Participatory Conservation in India.* New Delhi, Sage.

Krischke, H. and V. Lyamuya 1991. *Strategy for the Implementation of the Community Wildlife Management and Conservation in a Zone Bordering the Selous Game Reserve (SGR).* Dar-es-Salaam, Selous Conservation Programme. Discussion Paper 12.

Krishke, H., V. Lyamuya, et al. 1995. *The Development of Community-based Conservation around Selous Game Reserve.* Community-based Conservation in Tanzania, Dar-es-Salaam, Tanzania, Department of Wildlife, with AWF and WWF.

KWS 1990a. *A Policy Framework and Development Progamme 1991-1996*. Nairobi, Kenya, Kenya Wildlife Service.

KWS 1990b. *A Policy Framework and Development Programme 1991-1996. Annex 6 - Community Conservation and Wildlife Management Outside Parks and Reserves.* Nairobi, Kenya Wildlife Service.

KWS 1992. *First Kenya Wildlife Service Workshop on Revenue Sharing.* Nairobi, KWS.

KWS 1993. *Guidelines for Revenue Sharing and the Wildlife for Development Fund (WDF).* Nairobi, Kenya Wildlife Service.

KWS. 1994. *Wildlife-Human Conflicts in Kenya.* Report of the Five Person Review Group. Nairobi, Kenya Wildlife Service.

KWS 1994. *Guidelines for Revenue Sharing and the Wildlife for Development Fund (WDF). Operational Summary.* Nairobi, Kenya Wildlife Service.

Kenya Wildlife Service. 1996. G*uidelines for Revenue Sharing and the Wildlife for Development Fund (WDF).* Nairobi, Kenya Wildlife Service.

KWS 1996. *Policy Statement and Operational Summary for Benefit Sharing and the Wildlife For Development Fund (WDF)*. Nairobi, Kenya Wildlife Service.

KWS 1997a. *Partnership News.* A Newsletter of the Partnership Department of the Kenya Wildlife Service. Nairobi, KWS.

KWS 1997b. *Wildlife Associations.* Partnership News, A Newsletter of the Partnership Department of the Kenya Wildlife Service. Nairobi, KWS.

KWS and Forestry Department. 1991. *Memorandum of Understanding for the Joint Management of Selected Forests.* Kenya Wildlife Service and Forestry Department, Nairobi.

Lamprey, H. 1990. Challenges facing protected area management in sub-Saharan Africa. *Parks* 1(1): 27-31.

Lamprey, R. H. and F. Mitchelmore 1996. *A Survey of the Wildlife Protected Areas of Uganda: Preliminary Aerial survey results and their assessment plus initial recommendations.* Kampala, Ministry of Tourism, Wildlife and Antiquities.

Lane, C. 1996. *Ngorongoro Voices: Indigenous Residents of the Ngorongoro Conservation Areas in Tanzania Give their Views on the Proposed General Management Plan.* Uppsala, Sweden, Forest Trees and People Programme. Working paper: 29.

Leach, A. 1996. *The Case for Land Reform in Kenya: Legal and socio-economic aspects of land tenure since independence.* In: proceedings of conference on *Experiences, Perspectives and Strategies on Land Reform and land Rights in Urban and Rural Settings.* Eastern and Southern Africa Regional Conference. Johannesburg, Centre for Applied Legal Studies, University of Witwatersrand.

Leader-Williams, N. 1996. *Wildlife Utilization in Tanzania.* Costs and Benefits of Wildlife in Africa, Lewa Downs, Kenya.

Leader-Williams, N., Kayera, JA. and G. Overton (Eds.). 1995. *Community-based Conservation in Tanzania*. Proceedings of workshop on Planning and Assessment for Wildlife Management Project. Dar-es-Salaam, Tanzania, Department of Wildlife.

Leader-Williams, N., Kayera, JA. and G. Overton (Eds.) 1995. *Tourist Hunting in Tanzania.* Proceedings of workshop on Planning and Assessment for Wildlife Management Project. Dar-es-Salaam, Tanzania, Department of Wildlife.

Lichtenfeld, L. 1998. *Local Participation and Conservation in Kenya: A Case Study of the Kimana Community Wildlife Sanctuary.* 12th Annual Meeting of the Society for Conservation Biology.

Lindsay, W. K. 1987. Integrating parks and people. In: D. Anderson and R. Grove. (eds.). *Conservation in Africa: Peoples, policies and practices.* Cambridge, Cambridge University Press.

Loita Naimina Enkiyia Conservation Trust Company 1994a. *Forest of the Lost child - Entim e Naimina enkiyio: A Maasai conservation success threatened by greed.* Nairobi, Kenya.

Loita Naimina Enkiyia Conservation Trust Company 1994b. Statement by the Loita Naimina enkiyia Conservation Trust to the second session on the Intergovernmental committee on the Convention of Biodiversity. *Forest , Trees and People Newsletter* 25: 45.

Lovatt-Smith, D. 1986. *Nothing Short of a Miracle*. Nairobi, East African Publishing House Ltd.

Luwum, P. and F. Ucuba 1998. *Review of Project Sites.* Kampala, National Wetlands Programme.

Mackinnon, J., G. Mackinnon, et al. 1986. Local people and protected areas. In: J. Mackinnon, G. Mackinnon, G. Child and J. Thorsell. (eds). *Managing Protected Areas in the Tropics.* Gland, Switzerland, IUCN.

Makilya, J. 1995. *Kimana Wildlife Sanctuary - Business Plan.* Nairobi, KWS and Conservation of Biodiverse Resource Areas Project.

Makilya, J., Lembuya, P. and P. Ntiati. 1996. Kenya: Linking enterprise to conservation. How the Kenya Wildlife Service is aiming to put in place incentives for community conservation. Reading University *Rural Extension Bulletin*, 10: 56-60.

Makoloweka, S., M. Gorman, M., Horrill, J., Kalombo, H., Kawau, C., Lugazo, Z., Shurcliff, K., Uronu, G. and T. van Ingen. 1997. Establishing coastal management in Tanga Region, Tanzania, an experimental approach. In: S. Humphrey and J. Francis (eds.) *Sharing Coastal Management Experience in the Western Indian Ocean. Proceedings of the Experts and Practitioners Workshop on Integrated Coastal Area Management for Eastern African and the Island States.* Zanzibar, WIOMSA.

Makoloweka, S., M. Gorman, M., Horrill, J., Kalombo, H., Kawau, C., Lugazo, Z., Shurcliff, K., Uronu, G. and T. van Ingen. 1996. Establishing coastal management in Tanga Region, Tanzania. In: O. Linden and C. G. Lundin. (eds.). *The Journey from Arusha to Seychelles. Successes and Failures of Integrated Coastal Zone Management in Eastern Africa and Island States.* Proceedings of Second Policy Conference on Integrated Coastal Zone Management in Eastern Africa and Island States, 23-25 October 1996. Washington and Uppsala, The World Bank and SIDA.

Malcolm, D. W. 1953. *Sukumaland, An African People and Their Country: A Study of Land Use in Tanzania.* London, Oxford University Press.

Marquadt, M., Infield, M. and A. Naamara 1994. *Socio-economic Survey of Communities in the Buffer Zone of Lake Mburo National Park.* Kampala, African Wildlife Foundation: 124.

Martin, R. G. 1986. Wildlife-human interaction. In: R. H. V. Bell and E. McShane-Caluzi. (eds.) *Conservation and Wildlife Management in Africa.* Washington, U.S. Peace Corps.

Masika, A. 1995. *People's Participation in Wildlife Management in Kenya: A Case Study.* Proceedings of a Participatory Wildlife Management Workshop, Addis Ababa, Ministry of Natural Resources Development and Environmental Protection and FARM Africa.

McNeely, J. A. 1984. Introduction: Protected areas are adapting to new realities. In: J. A. McNeely and K. R. Miller (eds.) National Parks, *Conservation and Development: The role of protected areas in sustaining society.* Washington D.C., Smithsonian Press.

McNeely, J. A. 1989. Protected areas and human ecology: how national parks can contribute to sustaining societies of the twenty-first century. In: D. Western and M. C. Pearl. (eds.) *Conservation for the Twenty-First Century.* New York, Oxford University Press.

McNeely, J. A. and D. Pitt 1985. Culture: the missing element in conservation and development. In: J. A. McNeely and D. Pitt. (eds.). *Culture and Conservation: The human dimension in environmental planning.* London, Croom Helm.

Melamari, L. 1995. *The Need for a Community-based Conservation Policy in Tanzania: TANAPA's perspective.* Community-based Conservation in Tanzania, Dar-es-Salaam, Tanzania, Department of Wildlife, with AWF and WWF.

Messerli, B. and J. D. Ives, Eds. 1997. *Mountains of the World, A Global Priority: A Contribution to Chapter 13 of Agenda 21*. New York, Parthenon Publishing.

Metcalfe, S. 1994. The Zimbabwe Communal Areas Management Programme for Indigenous Resources (CAMPFIRE). In: D. Western and R. M. Wright. (eds.) *Natural Connections. Perspectives in Community-Based Conservation.* Washington, Island Press.

Metcalfe, S. 1996. Whose resources are at stake? community-based conservation and community self governance. *Rural Extension Bulletin,* 10: 14-18. Reading University, UK.

Ministry of Environment and Natural Resources. 1994. *Kenya Forest Policy (draft), 6th June 1994.* Nairobi, Ministry of Environment and Natural Resources.

Mishra, H. R. 1984. A delicate balance: tigers, rhinoceros, tourists and park management vs. the needs of local people in Royal Chitwan National Park. In: J. A. McNeely and K. R. Miller. (eds.) *National Parks, Conservation and Development: The role of protected areas in sustaining society.* Washington D.C., Smithsonian Press.

Moffat, D. 1998. *Summary Paper.* Proc. Regional Workshop: Experiences in Local and Community Integrated Coastal Zone Management, Lessons to Date, Zanzibar, SEACAM and WIOMSA.

Moss, C. 1988. *Elephant Memories: Thirteen Years in the Life of an Elephant Family.* New York, William Morrow.

Mountain Agenda. 1997. *Mountains of the World: Challenges for the 21st Century.* London, New York, Parthenon Publishing.

Mugisha, A. R. and M. Infield 1995. *Confrontation or Cooperation: A case of Lake Mburo National Park.* Community-based Conservation in Tanzania, Dar-es-Salaam, Tanzania, Department of Wildlife with AWF and WWF.

Murombedzi, J. 1997. *Community Wildlife Management in Southern Africa: Malawi, Zambia and Zimbabwe.* Paper Prepared for IIED study on Evaluating Eden: Factors affecting community Wildlife Management. IIED, London and Southern Africa Sustainable Use Specialist Group, Harare.

Murombedzi, J. 1998. *Household and Wildlife Utilization in CAMPFIRE.* Manchester, Institute of Development Policy and Management, University of Manchester, England.

Murphree, M. W. 1991. *Communities as Institutions for Resource Management.* National Conference on Environment and Development, Maputo, Mozambique.

Murphree, M. W. 1994. The role of institutions in community-based conservation. In: D. Western and R. M. Wright. (eds.) *Natural Connections. Perspectives in Community-Based Conservation.* Washington, Island Press.

Murphree, M. W. 1995. *The Evolution of Zimbabwe's Community-based Wildlife Use and Management Programme*. Community-based Conservation in Tanzania, Dar-es-Salaam, Tanzania, Department of Wildlife, with AWF and WWF.

Murphree, M.W. 1996a. *"Ex Africa semper aliquid novi?" Considerations in Linking Environmental Scholarship, Policy and Practice.* Paper presented to the Pan African Symposium on the Sustainable Use of Natural Resources and Community Participation, Harare, Zimbabwe. CIRAD, IUCN, and IFRA. Harare, Zimbabwe.

Murphree, M.W. 1996b. *Approaches to Community Participation.* African Policy Wildlife Policy Consultation. Final Report of the Consultation. Overseas Development Administration. London, Overseas Development Administration.

Museveni President Yoweri 1998. *What Museveni Said About Land*. The New Vision. Kampala: 4, 20, 24.

Mustafa, K. 1998. Eviction of pastoralists from Mkomazi Game Reserve in Tanzania: a historical review. London, IIED. *Pastoral Land Tenure Series*: 33.

Mwakisyala, J. 1998. An East African comparison: government revenue and expenditure. *The East Africa.* Nairobi: 17.

Mwale, S. M. 1998. *Integrating Food and Environmental Security in the Greater Horn of Africa: A preliminary institutional stakeholder analysis.* Stakeholder Analysis and Dialogue on Food Security and the Environment in the Greater Horn of Africa, Nairobi, Kenya, World Resources Institute and IUCN - The World Conservation Union Eastern African Office.

Mwau. 1996. *Wildlife Utilization Study: Report No. 2 - Economic Analysis.* Nairobi, Kenya Wildlife Services and the African Wildlife Foundation.

Mwenya, A. N. 1990. *ADMADE: Policy, Background and Future: National Parks and Wildlife Service's new Administrative Management Design for Game Management Areas.* Lusaka, Republic of Zambia.

Namara, A. and M. Infield 1997. *The Influence of the Community Conservation Programme at Lake Mburo National Park on Neighbouring Farmers and Pastoralists.* Kampala, The Community Conservation for Uganda Wildlife Authority Project.

Namara, A. and M. Infield 1998. *The Influence of a Community Conservation Programme on Farmers and Pastoralist Communities: Lake Mburo National Park, Uganda.* Report of a socio-economic survey carried out under the Community Conservation for Uganda Wildlife Authority Project. D. Sumba. Kampala, UWA and AWF.

Ngorongoro Conservation Area Authority 1995. *Ngorongoro Conservation Area General Management Plan.* Arusha, Tanzania, Ngorongoro Conservation Area Authority.

Norton-Griffiths, M. 1996. Property rights and the marginal Wildebeest: an economic analysis of wildlife conservation options in Kenya. *Biodiversity and Conservation* 5: 1557-1577.

Norton-Griffiths, M. 1997. Why Kenya conservation is failing. *Swara* 20: 6-8.

Norton-Griffiths, M. and C. Southby 1995. The opportunity costs of biodiversity conservation in Kenya. *Ecological Economics* 12: 125-139.

Nsamba-Gayiiya, E. 1999. *Implementing Land Tenure Reform in Uganda: A complex Task Ahead.* London, IIED Drylands Programme.

Nurse, M. and J. Kabamba 1998. *Defining Institutions for Collaborative Mangrove Management: A Case Study from Tanga, Tanzania.* Workshop on Participatory Resource Management in Developing Countries, Mansfield College, Oxford.

Nyerere, J. 1973. *Freedom and Development: A Selection from Writings and Speeches.* Dar-es-Salaam, Oxford University Press.

Oakerson, R. J. 1992. Analyzing the commons: a framework. In: D. W. Bromley. (ed). *Making the Commons Work: Theory, practise and policy*. San Francisco, ICS Press.

Ogwang, D. O. and P. A. DeGeorge 1992. *Community Participation in Interactive Park Planning and the Privatization Process in Uganda's National Parks.* Kampala, USAID and Uganda National Parks.

Okoth-Owiro, A. 1988. Land tenure and land use legislation issues in agroforestry development. agroforestry development in Kenya. In: A. M. Kilewe, K. M. Kealey and K. K. Kebaara (eds.). *Proceedings of the Second Kenya National Seminar on Agroforestry.* Nairobi Kenya 7-16 November 1988. Nairobi, ICRAF.

Oliver, P. and J. Howit 1994. *Oliver's Camp and Community Conservation*. Community-based Conservation in Tanzania, Dar-es-Salaam, Planning and Assessment for Wildlife Management, Department of Wildlife.

Olivier, R. C. D. 1990. *The Queen Elizabeth National Park Management Plan.* Kampala, Uganda National Parks.

Overseas Development Administration 1996. *African Wildlife Policy Consultation.* Final Report of the Consultation. London, Overseas Development Administration.

Parkipuny, M.O. and D. Berger 1993. Maasai rangelands: links between social justice and wildlife conservation. In: D. Lewis and N. Carter. (eds.). *Voices from Africa, Local Perspectives on Conservation.* Washington, WWF.

Parkipuny, M. S. 1989. Pastoralism, conservation, and development in the Greater Serengeti Region. Nairobi, IUCN Eastern Africa Regional Office. *Ngorongoro Conservation and Development Project Occasional Paper* No.1.

Parsunkul, E. 1980. *Letter to Assistant Director, Education Training and Extension Services of Ministry of Environment of Natural Resources.* Nairobi.

Perkin, S. L. and P. J. Mshanga 1992. Ngorongoro: Striking a Balance between Conservation and Development. In: J. Thorsell and J. Sawyer (eds.). *World Heritage Twenty Years Later.* Gland, IUCN and UNESCO.

Pimbert, M. P. and J. N. Pretty 1996. Parks, people and professionals: putting 'participation' into protected area management. In: B. K. Ghimire and M. P. Pimbert (eds). *Social Change and Conservation.* London, Earthscan.

Pitkin, B. 1995. *Protected Area Conservation Strategy (PARCS): Training Needs and Opportunities Among Protected Area Managers in Eastern, Central and Southern Africa.* Washington DC, Biodiversity Support Program (BSP).

Poffenberger, M. 1990. *Joint Management of Forest Land: Experiences from South Asia.* New Delhi, India, Ford Foundation.

Pomeroy, D. E. and A. D. Lewis 1987. Bird species richness in tropical Africa: some comparisons. *Biological Conservation* 40: 11-28.

Presidential Commission of Inquiry into Land Matters 1991. *Report of the Presidential Commission of Inquiry in Land Matters. Volume 1. Land policy and Land Tenure Structure.* Dar-es-Salaam, United Republic of Tanzania.

Rainy, M. E. and J. S. Worden 1997. *Summary of Wildlife and Domestic Herbivore Populations Trends in Kenya's Rangeland Districts, 1977-1994, based on Data from the Department of Resource Surveys and Remote Sensing.* Nairobi, unpublished report.

Robin Hurt Safaris. 1995. The Cullman Wildlife Project. In: N. Leader-Williams, J. A. Kayera and G. L. Overton (eds.) *Community-based Conservation in Tanzania.* Dar-es-Salaam, Tanzania, Department of Wildlife, with AWF and WWF.

Rudge, J., Hurst, F. and N. Hunter 1997. *Literature Review of Wildlife Policy and Legislation.* London, Natural Resources Institute.

Sarkar, S., Suri, S., Singh, N. and A. Kothari (eds.). 1995. *Joint Management of Protected Areas in India.* Report of a Workshop. New Delhi, Indian Institute of Public Administration.

Scherr, S. J. 1989. *The Legislative Context for Agroforestry Development in Kenya.* Zurich, Fachbereich forstokonomie und forstpolitik. Institut fur Wald und Holzforschung, Arbitsberichte des fachbereichs, Nr. 89/7.

Scott, P. 1992. *Fringe Benefits: National Park boundaries as areas for local community utilization: the case of the Impenetrable (Bwindi) Forest*. As, Agricultural University of Norway.
Scott, P. 1994. *Bamboo: Potential for Utilization by the Communities Surrounding Mount Elgon National Park.* Kampala, IUCN.
Scott, P. 1996a. *Collaborative Management in Rwenzori Mountains National Park.* Kampala, IUCN (draft).
Scott, P. 1996b. Different folk, different strokes. *World Conservation* 2/96: 15.
Scott, P. 1997a. *Training Workshop on Collaborative Management for Community Conservation Staff from Kibale National Park and Semuliki National Park. Part 1.* Fort Portal, Uganda, Kibale and Semuliki Conservation and Development Project.
Scott, P. 1997b. *Training Workshop on Collaborative Management for Community Conservation Staff from Kibale National Park and Semuliki National Park. Part 2.* Fort Portal, Uganda, Kibale and Semuliki Conservation and Development Project.
Snelson, D. 1993. *PARCS Country Report: Uganda.* Nairobi, African Wildlife Foundation.
Snelson, D. 1995a. Neighbours as partners of protected areas - the African Wildlife Foundation's Community Conservation Programme. In: J. A. McNeely (ed.). *Partnerships for Conservation*. Gland, IUCN.
Snelson, D. 1995b. *Protected Area Conservation Strategy (PARCS) - Training Needs and Opportunities.* Proceedings of a Participatory Wildlife Management Workshop, Addis Ababa, Ministry of Natural Resources Development and Environmental Protection and FARM Africa.
Snelson, D. 1996. Community conservation training initiatives in East Africa. *Rural Extension Bulletin*, 10: 63-65. Reading University, UK.
Songea, A. and J. Nyanchuwa 1995. *Traditional Hunting in Tanzania.* Community-based Conservation in Tanzania, Dar-es-Salaam, Tanzania, Department of Wildlife, with AWF and WWF.
Southgate, C. and D. Hulme. 1996. Environmental management in Kenya's arid and semi-arid lands: an overview. Manchester, Institute Development Policy and Management, University of Manchester. Rural Resources, *Rural Livelihoods Working Paper Series* No.2: 37.
Stuart, S. N. and Adams R.J. 1990. Biodiversity in sub-Saharan Africa and its islands: conservation, management and sustainable use. Gland, Switzerland, IUCN. *Occasional Papers of the IUCN Species Survival Commission* No. 6: 242.
TACK, I. 1996. *Wildlife Utilization Study Report No. 1: Marketing.* Nairobi, Conservation of Biodiverse Resource Areas Project, KWS and AWF.
TANAPA 1994. *National Policies for National Parks.* Arusha, Tanzania National Parks.
Tanzania, Government of. 1957. *The Forest Ordinance (No. 30 of 1957), CAP 389.* Dar-es-Salaam, Government Printer.
Tanzania, Government of. 1975. *Villages and Ujamaa Villages (Registration, Designation and Administration) Act, No. 21 of 1975, CAP 588.* Dar-es-Salaam, Government Printer.
Tanzania, Government of. 1990. *Tanzania Forestry Action Plan 1990/1-2007/8.* Dar-es-Salaam, Ministry of Lands, Natural Resources and Tourism:.
Tanzania, Government of. 1992. *Regulation of Land Tenure (Established Villages) Act, No. 22 of 1992.* Dar-es-Salaam, Government Printer.
Tanzania, Government of. 1995. *National Land Policy.* Dar-es-Salaam, Ministry of Lands, Housing and Urban Development.
Tanzania National Parks, C. C. S. 1994. *Tarangire National Park CCS Strategic Action Plan*. Proc. of a Workshop held in Tarangire 1994. Arusha, Tanzania National Parks.
Tanzania, United Republic of. 1991. *Proceedings of the Arusha Workshop on Land Policy*. Arusha, Ministry of Lands, Housing and Urban Development, Institute of Resource Assessment University of Dar-es-Salaam.
Tanzania, United Republic of. 1994a. *The Marine Parks and Reserves Act, 1994.* Dar-es-Salaam, Tanzania, Government Printer.

Tanzania, United Republic of. 1994b. *Report of the Presidential Commission of Inquiry into Land Matters. Volume 1 - Land Policy and Land Tenure Structure.* Uddevalla, Sweden, Ministry of Lands, Housing and Urban Development.

Tanzania, United Republic of. 1997. *Tanzania Forest Policy, Final Draft.* Dar-es-Salaam, Ministry of Natural Resources and Tourism.

Tanzania, United Republic of. 1998. *The Wildlife Policy of Tanzania.* Dar-es-Salaam, Ministry of Natural Resources and Tourism.

Tanzania, United Republic of. 1999. *Land Act, No. 6 of 1999.* Dar-es-Salaam, Government Printer.

Taylor, G. and L. Johannson 1996. Our voices, our words and our pictures. Plans, truths and videotapes from Ngorongoro Conservation Area. *Forests, Trees and People* 30: 28-39.

Temu, A. B. 1976. *Sampling Methods and Millable Timber Assessment in a Miombo Woodland Forest.* Division of Forests. Dar-es-Salaam, Univ. Dar-es-Salaam.

Thompson, D. M. 1997a. *Integrating Conservation and Development. Multiple Land-Use: The experience of the Ngorongoro Conservation Area, Tanzania.* Gland, Switzerland and Cambridge, England, IUCN.

Thompson, D. M. (Ed.) 1997b. *Multiple Land-Use: The experience of the Ngorongoro Conservation Area Tanzania.* Gland, Switzerland and Cambridge, IUCN.

Tibenyenda, R. K. 1996. *Wildlife and Sustainable Development: Approaches to community participation.* African Policy Wildlife Policy Consultation. Final report of the consultation. London, Overseas Development Administration.

Turnbull, C. M. 1972. *The Mountain People*. New York, Simon and Schuster.

Turyaho, M. and M. Infield 1996. Uganda: From conflict to partnership - The work of the Lake Mburo Community Conservation Project with pastoralists, fishermen and farmers. *Rural Extension Bulletin*, 10: 42-45. Reading University, UK.

Uganda, F. D., Forest Research Institute, et al. 1996. *An Assessment of Opportunities and Constraints for Collaborative Management in the Operations of the Forest Department in Uganda.* Kampala, Uganda Forest Department, Forest Research Institute, and IUCN - The World Conservation Union.

Uganda, Government of. 1964. *Forest Act (CAP.246), amended 1964.* Kampala, Government Printer.

Uganda, Government of. 1994. *National Policy for the Conservation and Management of Wetland Resources.* Kampala, Ministry of Natural Resources.

Uganda, Government of. 1995. *Uganda Wildlife Policy.* Ministry of Tourism. Kampala, UWA.

Uganda, Government of. 1996a. National Wetlands Conservation and Management Programme Fact Sheet. Kampala, Department of Environment, Ministry of Natural Resources and IUCN.

Uganda, Government of. 1996b. *Uganda Wildlife Statute.* Entebbe, Government Printers.

Uganda Land Alliance. 1996. *Position Statement of the Uganda Land Alliance on the Proposed Land Bill of 1996 to the Technical Committee and Agricultural Policy Committee.* Kampala, Uganda Land Alliance.

Uganda National Parks 1994a. *First Revenue Sharing Workshop.* Kampala, Uganda National Parks.

Uganda National Parks 1994b. *First Revenue-Sharing Workshop Report. Volume II.* Kampala, Uganda National Parks.

Uganda National Parks Restructuring Committee. 1997. *Recommended UWA Staffing Levels.* Kampala, Ministry of Tourism, Wildlife and Antiquities.

Uganda, Republic of. 1993. *The Local Governments (Resistance Councils) Statute.* Statutes Supplement No. 8. Kampala, Government Printers.

Uganda, Republic of. 1995. *The National Environment Statute.* Statutes Supplement No. 3. Kampala, Government Printers.

Uganda, Republic of. 1996a. *Statute No. 14 Uganda Wildlife Statute; Statutes Supplement No. 8.* Kampala, Government Printers.

Uganda, Republic of. 1996b. *The Tenure and Control of Land Bill.* Kampala, Government Printers.

Uganda, Republic of. 1998. *A Bill for an Act entitled THE LAND ACT 1998*. Kampala, Ministry of Water, Lands and Environment.

UNDP 1997. *Human Development Report 1997*. UNDP, New York.

USAID 1996. *Country Strategic Plan for Uganda: FY 1997-2001.* Kampala, USAID.

USAID 1997. *Ushirikiano Kwa Maendeleo Yetu - Partnership for Development: Strategic Plan.* Dar-es-Salaam, USAID - Tanzania.

UWA 1997. *Community Involvement in Natural Resource Management in Nepal.* Study Tour Report to Nepal 26/7/97 to 6/8/97. Kampala, UWA, IUCN, AWF, CARE.

UWA 1997. *Community/Protected Area Institutions Development Program: Proceedings of the 'Community Institutions' Workshop*. Kampala, Uganda Wildlife Authority.

Van Ingen, T. and S. Makoloweka 1998. Tanga Coastal Zone Conservation and Development Programme. Proc. Regional Workshop: *Experiences in Local and Community Integrated Coastal Zone Management, Lessons to Date.* Zanzibar, 4-6 March 1998, SEACAM and WIOMSA.

Venter, A. K. and C. M. Breen 1996. partnership forum framework: a conceptual framework for the development of integrated conservation and development programmes. Paper Presented to *Pan African Symposium on Sustainable Use of Natural Resources and Community Participation*, June 1996. CIRAD, IUCN, and IFRA. Harare, Zimbabwe.

Wanjala, S. 1990. *Land Law and Disputes in Kenya.* Nairobi, Oxford University Press.

Wass, P. (ed). 1995. *Kenya's Indigenous Forests - Status, Management and Conservation.* IUCN Forest Conservation Programme. Gland, Switzerland and Cambridge, UK, IUCN and ODA.

Wells, M., Brandon, K. and L. Hannah. 1992. *Parks and People: Linking Protected Area Management with Local Communities.* Washington DC, World Bank.

Western, D. 1982. Amboseli National Park: enlisting landowners to conserve migratory wildlife. *Ambio* 11(5).

Western, D. and P. Thresher. 1973. *Development Plans for Amboseli.* Washington, International Bank for Reconstruction and Development.

Western, D. and R. M. Wright. (Eds.) 1994. *Natural Connections in Community-based Conservation*. Washington DC, Island Press.

White, F. 1983. *The Vegetation of Africa: A Descriptive Memoir to Accompany the UNESCO/AETFAT/UNSO Vegetation Map of Africa.* Paris, France, UNESCO.

Wild, R. G. and J. Mutebi. 1996. *Conservation Through Community Use of Plant Resources. Establishing collaborative management at Bwindi Impenetrable and Mgahinga National Parks, Uganda.* Paris, UNESCO.

Wildlife Sector Review Task Force 1995. *A Review of the Wildlife Sector in Tanzania. Vol.1 Assessment of the current situation.* Dar-es-Salaam, Ministry of Tourism, Natural Resources and Environment.

Wildlife Sector Review Task Force 1995. *A Review of the Wildlife Sector in Tanzania. Vol. 2 Possible future options.* Dar-es-Salaam, Ministry of Tourism, Natural Resources and Environment.

Wily, L. 1995. Collaborative forest management, villagers and government - the case of Mgori Forest, Tanzania. Rome, Italy, Forestry Policy and Planning Division, FAO. *Forest, Trees and People Working Paper*: 44.

Wily, L. 1997a. *New Land Law and the Poor. Implications for the Draft Uganda Land Bill with Comparative reference to the Tanzania Bill for the Land Act.* Land Tenure Seminar, Kampala, Economic Policy Research Centre in Collaboration with the Ministry of Lands, Housing and Planning.

Wily, L. 1997b. *Finding the Right Institutional and Legal Framework for Community-Based Natural Forest Management. The Tanzanian Case.* Jakarta, CIFOR.

Wily, L. 1997c. *An Appraisal of the Draft Bill (1996) for the Land Act of Tanzania. A Practitioner's View.* Nairobi, British Development Division in Eastern Africa.

Wily, L. A. 1999. *Evolution and Process in Community Forest Management in Tanzania.* International Workshop on Community Forestry in Africa, Banjul, The Gambia, FAO, Forest Trees and People, GTZ, and the Republic of Gambia Forestry Department.

Wily, L. and O. Haule. 1995. Good news from Tanzania. Village forest reserves in the making - the story of Duru-Haitemba. *Forest Trees and People Newsletter* 29: 28-37.

World Bank 1996. *World Debt Tables 1996.* Washington DC, The World Bank.

World Bank 1998. *African Development Indicators 1997.* Economic Management and Social Policy Findings. Washington DC, World Bank.

World Conservation Monitoring Centre. 1992. *Global Biodiversity: Status of the Earth's living resources.* London, Chapman and Hall.

World Conservation Monitoring Centre. 1996. *Assessing Biodiversity Status and Sustainability.* Cambridge, World Conservation Press.

World Conservation Union, E. A. R. O. 1996. forest cover and forest reserves in Kenya: policy and practice. Nairobi, Kenya, IUCN East Africa Regional Office. *Issues in Conservation*: 24.

Wright, R. M. 1994. Recommendations. In: D. Western and R. M. Wright. (eds.) *Natural Connections in Community Based Conservation.* Washington DC, Island Press

WTO 1992. *Yearbook of Tourism Statistics*. Madrid, World Tourism Organization.

WTO 1996. *Yearbook of Tourism Statistics.* Madrid, World Tourism Organization.

WWF 1997. *Coastal Forest Conservation Unit Fact Sheet.* Nairobi, WWF - Eastern Africa Regional Programme Office.

WWF 1997. *Measuring the Conservation Impacts of ICDPs. Final Report.* Workshop IV of the ICDP Review. Switzerland, WWF.

## Annex 1: Locus of Conservation Responsibility in Kenya, Uganda and Tanzania

| Area | Kenya | Uganda | |
|---|---|---|---|
| **Wildlife- fauna** | KWS - National Parks, wildlife outside protected areas<br>Council - Local Reserves and Parks | Ministry of Tourism, Wildlife and Antiquities<br>UWA - National Parks, Game Reserves and Wildlife in open areas | Wildlife D<br>Ngorongo<br>Corporati<br>(TWPF), |
| **Natural forest** | Ministry of Environment and Natural Resources - Forest Department, KWS | Ministry of Natural Resources - Forest Department - Central Forests<br>UWA - Forest National Parks<br>Local Government - Local Forest Reserves and village forests | Departme |
| **Marine** | Department of Fisheries, KWS | | Departme |
| **Freshwater** | | Ministry of Natural Resources<br>Fisheries Department (Ministry of Agriculture)<br>NEMA - Uganda Wetland Programme | Departme |
| **Soil conservation** | Ministry of Agriculture | Ministry of Agriculture | Ministry o<br>Forest De |
| **Food security (cash and subsistence)** | Ministry of Agriculture | Ministry of Agriculture | Ministry o |
| **Overall environmental concerns** | National Environment Secretariat | National Environment Management Agency (NEMA) - National Environment Action Plan | Departme<br>National E |

# Annex 2: List of Community Conservation Projects in East Africa[28]

**Kenya**

1. Abelekwa Development Organization, Butere - environmental education, reforestation, traditional medicine
2. Arawale Youth Wildlife Association
3. Chepkitale National Reserve/Sanctuary (Mt Elgon)
4. Clean Up Kisumu - waste management, fresh water resources
5. Coast Forest Conservation Union
6. Community Projects in East Mau forest - the Ogiek
7. Coral Reef Conservation- Malindi
8. Elangata Wuas ecosystem
9. Empakasi Landowners Association
10. Eselenkei Group Ranch - Loitokitok, Amboseli National Park
11. GTZ Forestry progammes - the mangrove forest in Arabuko Sokoke
12. GTZ Transmara Forest Conservation
13. Ikuywa Village Conservation Group - Kakamega Forest
14. Illngwesi Bandas
15. Integrated Forest Conservation and Management Project, Taita Hills Forests - EAWLS
16. Itemeini Organic Self Help Group, Nyeri - reforestation, agroforestry
17. Kaisagat Environmental Conservation Youth Group, Kipsaina-Kitale - organic farming and forestry
18. Kapronguo Water Project - Lake Bogoria
19. Kenya Rural Women Sanitation Group, Thika - soil conservation and tree planting
20. Kijabe Environment Volunteers - Kijabe
21. Kimana Community Wildlife Sanctuary
22. Kipepeo Butterfly Project
23. Kipini Community Conservation Progamme
24. Kipsaina Wetland Conservation Group, Kitale
25. Kirinyaga Afforestation Adventures and Tourism Attraction - Kerugoya
26. Koibatek Forest Sanctuary
27. Kuku Group Ranch - Loitokitok, Chyulu Reserve
28. Kuyunga project with WWF (Julie Church-contact)
29. KWS/Forest Department Birdlife Project - Arabuko Sokoke Forest
30. Lake Jipe Farming Community - Taita Taveta
31. Lake Magadi Area Conservation/ Ecotourism Development
32. Lake Victoria Wetlands - IUCN, Osienala
33. Lemek and Koyiaki Conservation Trusts - Narok
34. Leroghi-Kirisia Conservancy - Samburu
35. Lorubae Cultural Centre - Isiolo, Archers Post
36. Lualenyi Ranch Wildlife Sanctuary - Tsavo West National Park
37. Malindi Fishermen Association
38. Mbasa and Mwolo Islands Sanctuaries - L. Victoria
39. Mbirikani Group Ranch - Loitokitok, Amboseli National Park
40. Mombasa Boat Operators
41. Mpunguti Fishermen Association
42. Mramba Group Ranch and Proposed Wildlife Sanctuary - Tsavo West National Park

[28] The list was compiled by the African Conservation Centre under a project funded by the Ford Foundation and the Department for International Development.

43. Mt Kenya Forest Conservation Association AMKO (contact organization)
44. Muhonje Youth Group - Kakamega Forest
45. Mwaluganje Wildlife Sanctuary - Kwale
46. Naare Wildlife Association - Meru
47. Namunyak Wildlife Conservation Trust - Wamba
48. Ndaiga Wildlife Committee - Nanyuki
49. Ndeere Island National Park Conservation and Development Committee- Kisumu
50. Ndoto Conservancy
51. Nyambene National Reserve/ Sanctuary
52. Olchorro Oiroua Trust - Narok
53. Oldonyo Orok Group Ranch - Namanga
54. Olmomoi Sanctuary
55. Oza Sanctuary - Tsavo West National Park
56. Ramisi Crocodile Farm
57. Rombo Group Ranch - Tsavo West Game Reserve
58. Sacho Forest Community Sanctuary
59. Saiwa Wetlands Programme
60. Shimba Hills Project - Mwaluganje
61. Tana Delta Wetlands - EAWLS
62. The Dugong Programme in Mombasa
63. The Kayas in Mombasa
64. The Loita Maasai Forest of the Lost Child "Entim e Naimina Enkiyia"
65. Ugunja Community Resource Centre, Ugunja - sustainable agriculture, reforestation (tree nurseries)
66. Umoja Waso Women Group - Isiolo, Archers Post
67. Waso-Wamba Conservancy - Samburu

**Uganda**

1. Akaku Pastoralist Community - Mbarara, Lake Mburo National Park
2. Alimugonza Park Management and Advisory Committee - Masindi, Murchison Falls National Park
3. Budongo Forest Reserve Ecotourism Project funded by EU
4. Buhoma Community Camp Ground - Rukungiri, Bwindi Impenetrable National Park
5. Busingiro Ecotourism Advisory Committee - Masindi, Budongo Forest Reserve
6. Bwindi Trust specifically concerned with mountain gorillas
7. Community Conservation and Tourism - Differing Benefits - Bwindi, Mgahinga and Rwenzori National Parks
8. Development through Community Conservation Project Around Lake Mburo National Park, Uganda
9. Development through Conservation Project in Bwindi and Mgahinga National Parks funded by CARE
10. Fishing Village Conservation Project in Queen Elizabeth National Park funded by CARE
11. Jinja Urban Women Wetland Project
12. Kaberanyuma and Nyakagyezi Gravity Water Schemes - Kisoro, Mgahinga National Park
13. Kalinzu Forest Reserve tree planting on the forest boundaries funded by EU
14. Karamoja Wildlife Management Project funded by EU
15. Kasyoha/ Kitomi Forest Reserve - has a Conservation Education Centre and also deals in ecotourism funded by USAID
16. Katunguru Women's Group - Kasese, Queen Elizabeth National Park
17. Kazingo Parish Joint Forest Management Committee - Rwenzori National Park
18. Kibale Association for Rural Environment and Development (KAFRED) - Kibale National Park
19. Kiziba Bee Keepers Umbrella - Kibale National Park
20. Kyambura - An experiment in the privatization of Wildlife Management
21. Kyojja Wetland Management Association - Masaka
22. Mabira Forest Reserve Ecotourism Project funded by EU
23. Mabira Forest Tourism Committee - Mukono, Mabira Forest Reserve
24. Mpanga Forest Reserve - trying out Collaborative Forest Management as a pilot project funded by EU
25. Mt Elgon Tour Guides and Porters Association Committee - Mbale, Mt Elgon national Park

26. Mt. Elgon Conservation and Development Project funded by IUCN
27. Murchison Falls National Park DED Project funded by GTZ
28. Mutushet Forest Use Management Committee - Kapchorwa District, Mt Elgon National Park
29. Nyabubare Foundation for Rural Development Project - Kibale National Park
30. Nyamabare Bee Keepers Groups - Kabale, Bwindi Impenetrable National Park
31. Rubane Parish Joint Forest Management Committee - Kabarole, Rwenzori National Park
32. Rukirane Fish Trappers (Kendobo) - Mbarara, Lake Mburo national Park
33. Rutugunda Forest Society - Rukungiri, Bwindi Impenetrable National Park
34. Rwenshama Fishing Community - Rukungiri, Queen Elizabeth National Park
35. Rwenzori Mountains Conservation and Development Project funded by WWF
36. Semuliki and Kibale Conservation and Development Project funded by IUCN
37. Two SCIPs around Lake Mburo National Park in Uganda
38. Uganda Wetlands Programme - IUCN and NEMA (Paul Mufabi - contact)

**Tanzania**

1. AFRICA 2000 - 16 regions
2. Agroforestry Demonstration Centre ADC - Musoma
3. Amani Nature Reserve - East Usambara Catchment Project
4. Arusha Soil Conservation and Agroforestry/ WADEC
5. Catchment Forestry Project - Kilimanjaro, Arusha, Tanga, Morogoro
6. Community-based conservation among pastoral communities adjacent to protected areas in northern Tanzania.
7. Community Conservation Service Centre - Arusha
8. Community Project Activities - Iringa, Mufindi, Ludewa
9. Conservation and Management of the Selous Game Reserve
10. Conservation of Lowland Coastal Forests - Lindi and Tanga
11. Conservation programmes in Sadani Game Reserve - Sadani Reserve
12. Coral Reef Project - Zanzibar
13. Cullman Wildlife Project - Lakilalei - Arusha
14. Dodoma Land-use Management Project
15. East Usambara - Lushoto Tanga region
16. East Usambara Catchment Forest Project
17. Gombe Streams National Park - Kigoma region
18. Habitat Conservation, Reforestation and Education in Lake Tanganyika Catchment - Kigoma
19. Handeni Integrated Agroforestry Programme
20. Jozani Advisory Committee - Zanzibar
21. Jozani-Chwaka Bay Nature Conservation Project - Zanzibar
22. Jukumu Community-based Organisation - Morogoro
23. Jumuiya ya Mazingira Zanzibar JMZ (Zanzibar Environmental Society)
24. Kambai Forest Conservation Programme - Tanga, Muheza in East Usambaras
25. Katavi Rukwa Conservation and Development Project
26. Kilimanjaro Village Afforestation Project - Kilimanjaro region
27. Kipumwi Village - collaborative management on mangrove forests, coral reef fishery
28. Lake Manyara National Park Participatory Park Planning - Arusha region
29. Lake Nyanza Environmental Sanitation Organization (LANESO) - Musoma
30. Lake Victoria Environmental Management Project - Mwanza
31. Lake Victoria Environmental Network - Mwanza
32. Land Management Project LAMP - Babati, Kiteto, Simanjiro, Singida

33. Lukuyu Wildlife School - Songea
34. Lulanda Forest Conservation Project - Iringa, Mufindi in Udzungwa Mountains
35. Mafia Island Marine Park
36. Mahale Mountains - Kigoma
37. Malihai Clubs of Tanzania - Arusha
38. Mangrove Initiatives - Zanzibar
39. MBOMIPA - Iringa Ruaha
40. Musoma District TPP - Mara region
41. Ngorongoro Conservation Area Authority
42. Ngulwi Afforestation Project - Tanga, Lushoto in West Usambaras
43. Nyegezi Fisheries - Mwanza region
44. Outreach Programme for the Mkomazi Game Reserve - Tanga region
45. Participatory Park Planning And Lake Manyara National Park, Tanzania
46. Prawn Fisheries - Zanzibar
47. Ruaha Ecosystem Wildlife Management (Iringa region)
48. Rufiji Prawns Project
49. Ruvu Fuelwood Feasibility Study - Ruvu
50. Selous Conservation Programme - Selous Game Reserve
51. Serengeti Conservation and Development Project (SCDP)
52. Serengeti Regional Conservation Strategy
53. Small Project Management around Arusha National Park
54. SNV Cultural Tourism Programme
55. Soil Conservation and Agroforestry Project (SCAPA) - Arusha
56. Soil Erosion Control and Agroforestry SECAP - West Usambaras
57. Sukuma Agro Pastoralists and their "Ngitiri"
58. Tabora Project - Tabora
59. Tanga Coastal Zone Conservation and Development Programme
60. Tanga Mangrove Management Project
61. TAZAMA Trust - Simanjiro - Arusha region - Public Education and Environment
62. The Conservation and Management of the Udzungwa Mountains National Park
63. TIP - Lushoto - West Usambara Traditional Irrigation Improvement Programme
64. Wami-Mbiki Community-based Protection and Utilisation - Dar es Salaam
65. West Kilimanjaro - Kilimanjaro region
66. Zonal Irrigation Scheme - Moshi