

IUCN - THE WORLD CONSERVATION UNION
EASTERN AFRICA REGIONAL PROGRAMME

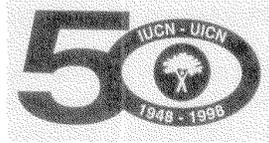
"PROTECTED AREAS AND
BIODIVERSITY CONSERVATION
IN THE NEW MILLENIUM":

A Regional Symposium

PROCEEDINGS OF THE 50TH ANNIVERSARY CELEBRATIONS IN
EASTERN AFRICA



IUCN
The World Conservation Union



PROCEEDINGS OF THE 50TH ANNIVERSARY CELEBRATIONS IN
EASTERN AFRICA

*"Protected Areas and Biodiversity Conservation in the
New Millennium": A Regional Symposium*
(LENANA HOUSE, NAIROBI, 16TH - 17TH September, 1998)

*"Protected Areas and Biodiversity Conservation in the
New Millennium": The Ngo Perspective*
(LENANA HOUSE, NAIROBI, 15TH September, 1998)

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LIST OF ACRONYMS AND ABBREVIATIONS

BR	Biosphere Reserves
CITES	Convention on International Trade in Endangered Species
CBD	Convention on Biological Diversity
CBO	Community Based Organisations
CBNRM	Community Based Natural Resource Management
CNPPA	Commission on National Parks and Protected Areas
DFID	Department for International Development
EARO	Eastern Africa Regional Office (of IUCN)
EAWLS	East Africa Wild Life Society
EIA	Environmental Impact Assessment
FSC	Forest Stewardship Council
GEF	Global Environmental Facility
GIS	Geographic Information Systems
GTZ	German Technical Co-operation Agency
IIED	International Institute on Environment and Development
IMF	International Monetary Fund
NBSAP	National Biodiversity Strategy and Action Plans
NEMA	National Environment Management Authority (Uganda)
MOU	Memorandum of Understanding
NGO	Non Governmental Organisations
PA	Protected Areas
PRA	Participatory Rural Appraisal
RAC	Regional Advisory Committee
RRA	Rapid Rural Appraisal
SSC	Species Survival Commission
UCO	IUCN - Uganda Country Office
UNESCO	United Nations Education, Scientific and Cultural Organisation
UNEP	United Nations Environment Programme
WCC	World Conservation Congress
WCMC	World Conservation Monitoring Centre
WCPA	World Commission on Protected Areas
WHS	World Heritage Sites

PREFACE

We live at a time of rapid economic and social change, and no matter what we may wish, such changes also affect the societal outlook to conservation, including the values of protected areas.

In the past, and, to a large extent, presently in Eastern Africa, the management of protected areas has been the preserve of national governments; governments whose management approaches have tended to remain protectionist. To a large extent, communities living near protected areas have remained excluded from using or otherwise benefiting from resources inside the protected areas, even though, in many cases, such communities had traditionally relied on those resources. It is no wonder therefore, that we have situations of perennial conflicts between local communities and protected areas institutions in many countries in the region.

As Eastern Africa's economic and social order continues to shift, and in light of the region's unprecedented strains arising from sheer population growth with its attendant demands for more farmland, protected areas will increasingly be scrutinised more for their values and efficiency to deliver the goods and services that are expected of them. It is reasonable to expect a precarious situation for those protected areas for which no strong case will have been made. The existence of conflicts with local communities will not help. The future survival of protected areas will depend on their demonstrated ability to deliver economic and social goods. Yet information on these aspects is not always available.

There is need for intensified research into geophysical and biological characteristics of existing protected areas to demonstrate their ecosystem functions and their economic benefits, and to "discover" their cultural values. But in addition to research, it will be imperative for protected area authorities to forge partnerships with local communities not only to broaden their perspectives to conservation, but also to afford them greater stakes in these conservation areas.

Whilst it is easy to talk about policy shifts that are necessary for better management of protected areas, there is no doubt that the detailed design and implementation of such policy changes is a difficult endeavour. It is difficult partly because there is no consensus about the nature of such changes, and partly because the pace of the changes has not been defined.

The Technical Programme Group of IUCN-EARO examined all these issues and agreed that they are sufficiently important and urgent to merit forming the basis of discussions for the region's IUCN 50th Anniversary symposium.

As the proceedings of the IUCN 50th Anniversary conference show, the participants were able to generate some good ideas which we hope will be developed further in other fora to eventually constitute action plans for policy shifts that will meet societal demands of Protected Areas in Eastern Africa and beyond. I pray that these proceedings stimulate all the readers to think more deeply about these issues for the sake of the most important conservation areas of today and tomorrow.

Eldad Tukahirwa, Ph.D
Regional Director
IUCN Eastern Africa Regional Office

ACKNOWLEDGEMENTS

We wish to acknowledge with thanks all those individuals and organizations who in one way or another contributed to the planning and implementation of a very successful Regional Symposium. While it is not possible to mention everyone by name, I wish to pay particular tribute to the "Core Team" at EARO who oversaw the development of the programme, planning and actual implementation of the symposium. The team providing logistical support did a marvellous job in making sure that everything ran smoothly.

Many thanks to all those who spared their valuable time to be with us in the symposium and made invaluable contributions both in the working groups and in the plenary sessions. The keynote speakers, especially Prof. Fred Kayanja, Dr Paul Siegel and Dr Steve Cobb gave wonderful presentations that stimulated lively debate on protected areas and their future. Those who chaired or facilitated the various sessions helped the participants to focus on key issues and to keep time.

Some organizations offered material and financial support to the symposium or its participants. Kenya Airways provided return air tickets to two of the keynote speakers. The Department for International Development (DFID) sponsored nine participants, three from each of the three East African countries (Kenya, Uganda and Tanzania). Bwindi Trust and GTZ sponsored a number of participants from Uganda. We thank them all for their contribution and look forward to similar support in future.

Last but not least, the owners and management of Lenana House for wonderful facilities and services, and very congenial working atmosphere.

Humphrey Kisioh,
Co-ordinator, Protected Areas Programme
IUCN - Eastern Africa

IUCN – THE WORLD CONSERVATION UNION

IUCN- The World Conservation Union is an international membership organisation that brings together governmental and non-governmental organizations in the conservation of nature and natural resources. IUCN's mission is to ***"influence, encourage, and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable"***.

The Union was founded in [Fontainebleau](#), France, in 1948. By 1998, it was composed of 75 states, 115 government agencies, 667 national NGOs, 62 international NGOs and 39 affiliates in a unique membership of 958 institutional members spread over 133 countries world wide. In addition to the institutional members, IUCN has six Commissions comprising networks of technical, scientific and policy volunteer experts from some 180 countries who contribute to the development and execution of IUCN programmes world wide.

The 50th anniversary celebrations started with national and regional events during August and September 1998 and culminated in a global event at Fontainebleau in November 1998. In addition to further raising the profile of conservation and protected areas, the event provided the Union and its members and partners, an opportunity to review the achievements and lessons learned from conservation and protected area management over the years. On the basis of this review, we can begin to chart the future of conservation and, IUCN's role, in the new millennium.

IUCN 50TH ANNIVERSARY CELEBRATIONS IN EASTERN AFRICA

The global anniversary theme was ***"Imagine Tomorrow's World"*** and had the sub-themes ***Conservation, Communities and Consumption***. Each IUCN region was encouraged to address the theme and sub-themes in the context of its own conservation concerns. This provided flexibility, allowing people to focus discussions on issues that are priority concerns to IUCN's members and partners in each region.

In Eastern Africa, the establishment and management of protected areas has been, for many years, the principal means for biodiversity conservation. This approach has served us well in the past. However, more recently, protected areas have faced serious challenges, bringing to the fore the question of their relevance, sustainability, and their very survival.

Some of the major challenges faced at the beginning of the new millennium are as follows:

- Increasing populations, resulting in increased demand for land and natural resources, both inside and outside protected areas
- The declining economies of some African countries in recent decades, resulting in fewer resources available for management of protected areas and for conservation in general
- Unsustainable use of land and natural resources, resulting in degradation of the environment, and loss of biodiversity and critical habitats

These are all major issues that are critical for the future of protected areas in Eastern Africa. They need to be addressed urgently, and a new course charted for conservation. In this context, it was agreed that IUCN in Eastern Africa should address this broad theme of ***Protected Areas***. The focus of IUCN's work in the region has been in this field and its oldest members are management agencies of protected areas, the oldest one being the Ethiopia Wildlife Conservation Organisation, which joined in 1948. The management of protected areas is a subject in which this region has wide and long experience, about which it can contribute to the wider conservation debate and, hopefully, also contribute to charting new directions for protected areas.

The anniversary celebrations in Eastern Africa began with a forum in Nairobi, Kenya on 15 September, attended by representatives of national, regional and international NGOs in Eastern Africa. The main objective of the symposium was to give NGOs an opportunity to discuss their perspectives and contribute to a regional statement on the conservation of protected areas in the next millennium. The proceedings of this forum appears towards the end of this volume.

This was then followed by a regional symposium also held in Nairobi on 16 and 17 September. The symposium theme was Protected Areas and Biodiversity Conservation in the New Millennium. This event was the climax of anniversary celebrations in the region.

The main objectives of the symposium were to:

- Develop consensus on a common vision for the future of protected areas in Eastern Africa
- Bring together key individuals from different countries and institutions in the region to exchange views on different approaches and practices in protected areas management, and allow comparison of experiences and results
- Strengthen the process of regional co-operation as a vital tool of sharing experience and lessons and in developing processes for collaboration in conservation and management of protected areas
- Develop mechanisms and institutional arrangements that would allow and facilitate such exchanges on a regular basis and lead to a more unified and integrated approach to the management of protected areas and ecosystems

Over 90 participants with a wide range of experience and perspectives attended the symposium. The participants included protected area managers and policy makers, and representatives of NGOs, communities, the private sector and donors. During the symposium, four speakers gave keynote addresses. After working group discussions on five key areas pertaining to protected areas, the participants drafted a regional vision statement on the future of protected areas. The symposium statement as presented at the global anniversary event in Fontainebleau, also appears in Annex 2.

"PROTECTED AREAS AND BIODIVERSITY CONSERVATION IN THE NEW MILLENIUM": *Regional Symposium*

Lenana House, Nairobi
16-17 September, 1998

DAY ONE

Opening statements

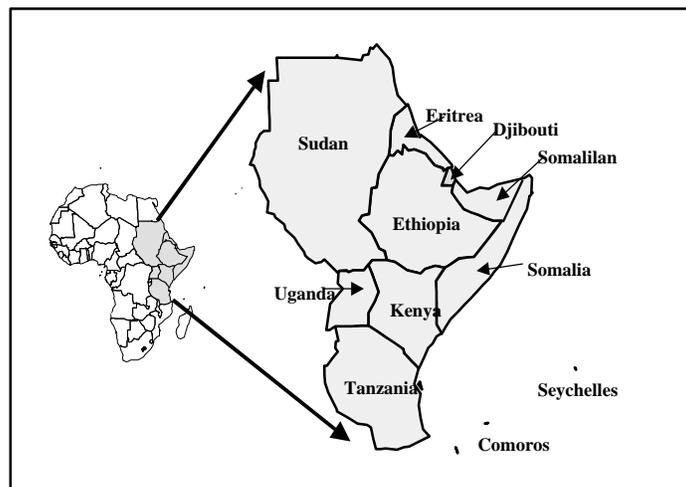
The Regional Representative, IUCN Eastern Africa, Dr Eldad Tukahirwa started the symposium by welcoming the participants, thanking them for their continued interest and support for the work of IUCN in general and that on Protected Areas in particular. He stated the mission of IUCN and elaborated on the Union's desire to integrate socio-economic and developmental concerns of people in its conservation efforts.

Dr Tukahirwa presented a brief history of IUCN and developments in the global conservation movement since 1948; illustrating how IUCN has adapted to changing social, political, technological and ecological circumstances in order to remain at the forefront of conservation efforts. He expressed optimism that IUCN's attributes of adaptability and innovative thinking would be applied in the development of programmes aimed at sustaining protected areas in the new millennium. Acknowledging the contribution of members and partners towards the fulfilment of IUCN's mission, he stated the need to increase the number of members in the region and for more experts to join IUCN commissions.

In a second welcoming address, the IUCN Regional Councillor for Africa, Dr Eric Edroma described further how the Union's membership structure and emphasis on partnership have enabled it to become one of the largest and most influential conservation organisations in the world. IUCN's work is driven by the needs of its members, and it works with them to accomplish their individual missions. To do this IUCN provides information, and technical expertise based on the latest science. It promotes common approaches to the World's environmental problems, ensuring that lessons learnt in one area are available in another. As a global advocate for the environment, it represents the views of its members on the world stage.

Regrettably, membership is too low in Eastern Africa and other regions on the continent. The institutions that are already active partners with IUCN, including government agencies, NGOs, and academic institutions that have conservation as one of their objectives, should be persuaded to apply for membership. If membership in Eastern Africa was doubled, and members were able to pay their dues as required, the regional conservation agenda would be well represented at the global level. Dr Edroma advised members who faced difficulties in settling their dues to seek assistance from the IUCN Secretariat. Members should also consider forming IUCN National Committees and play a role in recruiting professionals to join the commissions of IUCN. The Commissions provide excellent opportunities for networking, information exchange and for individuals to contribute to global conservation thinking.

Dr Edroma concluded his address by paying tribute to all those who, individually and collectively, committed time and energy towards the development and growth of IUCN during the past 50 years, particularly those from Eastern Africa. He also expressed gratitude to the organisers and sponsors of the events held to commemorate the anniversary within the region and to the people who attended.



HISTORICAL PERSPECTIVES OF PROTECTED AREAS

Prof. F. Kayanja, Vice-Chancellor, Mbarara University of Science and Technology, and former Councillor of IUCN (Guest Speaker)

INTRODUCTION

Africa is a vast continent having a diversity of ecological zones containing very many centres of high biodiversity (Pomeroy, 1993). The major biomes of Africa consist of closed forest, moist savannah (Guinea type), dry savannah and steppe (Sudan and Sahel types), desert and subdesert xerophyllous scrub (macchica), and montane and Afro-alpine vegetation (Moreau, 1966). The largest scale biomes are determined largely by climate, and the vital aspects of this are temperature and rainfall (Ewer and Hall 1978).

It is said, with some justification, that precipitation was more predictable by way of amount and season in the past than now. While it is true that drought is not a new phenomenon in Africa, it is also true that its recent widespread appearance has caused widespread misery, death and despair. No meaningful discussion of conservation in Africa can ignore the impact that drought has had on the future of ecosystems on the continent.

It has been reported that, like humankind, international wildlife conservation began in Africa (Fitter and Scott, 1978). In 1900, the United Kingdom, Germany, Spain, the Congo, France, Italy and Portugal signed a Convention of the Preservation of Animals, Birds and Fish in Africa at a ceremony of wild game in Africa. During these early times, naturalists in Europe, especially in the United Kingdom, showed surprising interest and commitment to African wildlife.

Historically, wildlife protection has always begun as an attempt to preserve game animals from overshooting or overhunting (Fitter and Scott, 1978). Nobody initially seemed interested in non-game animals and plants as it was presumed they were in no danger because nobody wanted to hunt or collect them. The human desire to preserve wildlife as a conservation strategy came much later and appears to have been very slow to grow.

The earliest Game Reserve in Africa was probably the Ukamba Game Reserve declared in 1899, which paved the way for the present Amboseli National Park. A gorilla sanctuary was created in 1925 in Zaire (now Democratic Republic of Congo) which has since developed into the Virunga National Park. Belgium followed this move with the creation of the Parc des Volcans in Rwanda. Gorongosa Strict Nature Reserve was created in Mozambique in 1935. Preservation of the unique Malagasy fauna started in 1927, when a vital series of strict nature reserves were created in Madagascar.

After the Second World War, there was timely establishment and consolidation of the World National Park Movement. This movement was associated with the creation of the great constellation of national parks in Eastern Africa: Nairobi (1946) and Tsavo (1948) in Kenya, Kafue in Zambia, Wankie in Zimbabwe (1950), Serengeti in Tanzania (1951), and Murchison Falls and Queen Elizabeth in Uganda (1952).

THE PROTECTED AREA CONCEPT

A protected area should be considered as a conservation unit. It consists of an area of known size, and having defined borders in which wildlife is accorded protection by the law of the land. The law forbids varying forms of interference with the wildlife within the area and those who fail to abide by the law take the risk of prosecution and punishment through the courts.

It is necessary, at the very outset, to admit that the concept of protected areas was totally alien to Africa. It is a concept that was introduced to the continent by colonial administrators. While we can claim to have successfully adopted the concept and even improved upon it in some cases, we can never claim that it was an African idea. It is therefore the more remarkable that it has gone down so well across the continent.

THE PRE-INDEPENDENCE PHASE

Having accepted the fact that the conservation concept was alien to Africa, we note that many, if not most, of the African protected areas were established during the colonial phase. Africa was ruled by the British, French, Belgians, Portuguese and others. This diverse group of colonising nations originally viewed Africa as a continent of large mammals, forests and primitive people. Perhaps this explains why most protected areas in Africa were established on the 'game park' concept. This approach recognised large animals such as elephants, lions, rhinoceros, and crocodiles as the main attraction. The protected game park was constructed around a system which met the demands of the 'game'.

There has been some lively debate on what motivated the colonial governments to gazette protected areas. Many Africans believe that protected areas were created for the recreation and enjoyment of the colonisers. They argue that, when the protected areas were established, the local people had no interest in places where they could not hunt or that they could not afford to visit. The struggle for independence was already in progress. Political scientists and anthropologists have debated this issue at great length. Some have suggested that moving people to make way for protected areas, and forbidding them from hunting in their traditional hunting grounds, were unfortunate and typical of colonial administrations (Turnbull, 1984). These points have been debated with considerable skill and emotion.

It is likely that the idea of Protected Area had more humble beginnings. The colonial masters enjoyed hunting as a sport, while the indigenous people hunted for the pot. It is almost certain that the fear of hunting to extinction paved the way for African Protected Areas. Although the local people may not have supported the idea in the short run, there is little doubt that the advantages and benefits that we have reaped from protected areas in the long run are more than adequate rewards for the initial loss of hunting rights.

THE INITIAL PHASE OF SUCCESS

In Africa, the concept of protected areas was accepted with few challenges or complications. States under colonial administration, almost without reservations, inherited national parks, game reserves and forest reserves at independence as national assets. This phase is even the more remarkable because the basic aims of the concept were largely achieved. There was effective conservation and nations, especially in eastern and central Africa, derived considerable financial benefits from tourism. It is also true that this phase was associated with economic and political stability in most nations emerging from colonial rule. The colonial governments were appreciative of the value of natural resources and, in effect, established a conservation strategy with little variation between states.

The conservation strategy was based on the establishment of national parks, an idealistic concept in which the protection of wildlife was paramount, and game reserves and forest reserves where the degree of protection varied and other forms of human use were tolerated. Outside the national parks, game laws restricted legal hunting to those who could pay for licences. This needs to be seen in its true perspective. The local people strongly objected to paying for licences to hunt where their forefathers had hunted since time immemorial. They believed that they had a right to hunt one for the pot in traditional hunting grounds but, surprisingly, they were willing to accept that national parks were sacrosanct.

The national parks were established as strong institutions, largely self-sufficient, with high standards of management and discipline (Willock, 1964). The protection afforded to animals was so effective that, for instance, all national parks in Uganda suffered from extremely high elephant density (Laws *et al.*, 1970).

THE ERA OF DIFFICULTY

The best plans are often upset by unexpected events. In the field of conservation, sudden changes may imperil species and ecosystems (Kayanja and Douglas Hamilton, 1982). The most significant events on the continent during the last decade include severe economic problems, breakdowns in political stability, drought, the proliferation of automatic weapons and their use on wildlife and mass migration of populations. Unexpected problems of island zoogeography have sometimes arisen as protected areas have become surrounded by ever-increasing human populations.

The problem of population growth has deepened the crisis of competition for rangelands between man and wildlife. Africa is a continent of vast distances and at one time it was sparsely populated. Events like the progressive desiccation of the Sahelian Zone, other forms of land degradation and deforestation, have all contributed to the crisis. In relatively well off African states, such as Kenya, the population grows by between 3 and 4% every year. It is difficult to imagine that this trend will change in the near future. Protected areas, by virtue of being vast areas of unpopulated wilderness, are in serious danger of being over-run by the increasing population in pursuit of natural resources.

Drought has recently brought death to everything living in many parts of Africa. The problem remains uncontrolled, as was witnessed recently in Somalia, Sudan, Chad and other countries. While it is true that drought has decimated humans and wildlife, it is the death of humans which causes the most concern. Difficulties of the availability of food have led to uncontrolled poaching from protected areas.

POACHING

According to the law, poaching is equivalent to illegal hunting. From the very beginning, it proved difficult to enforce the law because hunting is part of African tradition (Kayanja, 1983). The authorities are therefore hard-pressed to eliminate a process which is more or less a part or way of life. It is unfortunate that this traditional hunter, using primitive implements has not been a serious threat to African wildlife. This hunter remains a nuisance rather than a disaster.

The past twenty years or so have been a period of serious intensification of commercial poaching. This type of poacher uses sophisticated equipment including automatic weapons that have become readily available. Commercial poaching can be subdivided into several categories. The newest category is that of individuals who trade in plants and animal products

and trophies on a commercial scale. The trophy trade has a complicated network with centres in the United States of America, Europe, the Middle and Far East and Asia, and with tentacles in Africa. International control measures are not very effective. Where returns are so lucrative, the risks for such high stakes appear irresistible.

Totalitarian regimes, such as that of the infamous Idi Amin, have condoned poaching even by senior government officials and the security forces (Kayanja, 1933). Political turmoil, and war, have often been periods of a 'free for all'. Soldiers facing a shortage of rations have been known to shoot wild animals inside protected areas. During the 1987 war in Uganda, hippopotamus, buffalo, topi, Uganda kob and other species, were slaughtered in large numbers within national parks.

THE MAGNITUDE OF THE PROBLEM

Africa's black rhinoceros (*Diceros bicornis*) population has slumped to under 9,000 animals, 40 percent down on the 1981 figure (Western, 1985). It looks as though the extinction of four of the seven races of black rhinoceros is now imminent. In Southern Africa the picture is more encouraging. The state of affairs regarding the white rhinoceros (*Ceratotherium simum*) is also grave. The northern white rhinoceros is almost surviving, populations of Africa elephant are in decline, some dramatically. Elephants, although not in imminent danger of extinction, have been eliminated in certain areas of former abundance. Such areas include Chad, the Sudan, the Central African Republic and West Africa. The situation regarding forests is too well known for repetition here.

CONCLUSION

Africa readily imbibed the conservation concept although it was introduced largely by colonial governments (Kayanja, 1990). Even when independence came, the existing protected areas were not abandoned. In fact, in most countries this acceptance produced well-ordered networks of conservation units with firm political support (Kayanja and Douglas-Hamilton 1982).

In spite of the observation that Africa governments appreciate the prestige value of well-managed protected areas, the value they place on them varies according to the amount of promotion and the number of tourists involved (du Toit, 1985). The commitment is no longer total. The favourable beginnings are failing to stand up to the test of time.

There has been some evolution from the "game park" concept to the current spectrum of types of protected areas. The concept has been successful, but will not continue to be so unless innovative ideas are devised to help overcome the pressures now confronting most protected areas.

REFERENCES

- du Toit, R (1985) A middle way for wildlife parks. *New Scientist* No. 144, 31 Jan.
- Ewer, D.W. and Hall, J.B. (1978) *The Penitent Butchers*, The Fauna Preservation Society 1903 - 1978. Collins, St. James Place, London.
- Kayanja, F. and Douglas-Hamilton, I. (1982). The Impact of the unexpected. The case history of Uganda National Parks, World National Parks Congress, Bali, Indonesia. Oct. 1982.
- Kayanja, F. (1983) Conservation of African Mammals in the aftermath of commercial poaching. Third int. Theriol. Cong. Helsinki. *Proc. Acta Zool. Fenn.*
- Laws, R.M. Parker, I.S.C. and Johnstone, R.C.B. (1970) Elephants and habitats in North Bunyoro, Uganda, *E. Afri Wildl. J.* 8:163-180.
- Moreau, R.E. (1966) *The Bird Faunas of Africa and its Islands*. Academic Press.
- Pomeroy, D. (1993) Centres of High Biodiversity in Africa. *Conservation Biology* 8(4): 901-907.
- Turnbull, C. (1984) *The Mountain People*, Triad/Paladin Books Granada. Publi. Ltd. London.
- Western, D. (1985) Comment *Swara* 8(2) March/April 1985.
- Willock, C. (1964) *The Enormous Zoo*. A profile of the Uganda National Parks. Collins. London.

BIODIVERSITY PLANNING AND PROTECTED AREAS

Dr. P. Siegel, WWF Country Representative, Tanzania (Guest Speaker)

The purpose of this paper is to examine biodiversity planning and protected areas with the intention of stimulating discussion on the future face of protected areas as we begin the new millennium.

Most of us would agree that protected areas have played a key role in efforts to protect biodiversity. Historically, however, protected areas were more often established to protect game animals or areas of particular natural beauty. The protected areas of today continue to fulfil those original objectives but as our environmental understanding has evolved so too have the roles of protected areas. Today, protected areas are used as tools to ensure the sustainability of important ecosystem functions like water catchments or erosion control. They are designed to ensure the survival of representative habitats, features of particular social and cultural importance, and of course, biodiversity. As our approaches to conservation have evolved so too have our protected areas and as we move into the future, this evolution must continue.

In the perfect world, we might not even need protected areas to protect biodiversity. People would live in balance with the rest of nature and we would rejoice in the richness of the planet and respect the needs of other species. Unfortunately, reality has a nasty way of colliding with ideals. We have mouths to feed, children to educate and the sick to heal and everything needs to be done urgently. Conservation, it seems, is competing for resources and when compared to health, education and economic growth, biodiversity protection does not, at first glance, appear to be able to compete successfully. One theme of this paper is to suggest that biodiversity can be a successful competitor given a better approach to planning.

If we are to protect biodiversity in the future, we must understand the fundamental relationship between protecting biodiversity and promoting economic growth. Conservation must continue to adapt to the challenges of population growth and increasing demand. It is interesting to note that biodiversity considerations are often not the driving force leading to the establishment of protected areas. In many cases, economic development concerns have provided the impetus to save the critical habitats. For example, Udzungwa Mountains National Park in Tanzania's Eastern Arc Mountains, contains some of the most spectacular forest biodiversity in the world. However, if it were not for the mountain's critical watershed function which feeds a major hydroelectric facility, it is questionable if the park would ever have received the attention of government and been gazetted. In contrast, the park has been able to draw on significant international support because of its globally important biodiversity. Udzungwa has been successful because it meets the needs of biodiversity and society.

Similarly, the Menai Bay Conservation Area of Zanzibar won local and international support because of the area's fabulous marine biodiversity, but also because it addresses the needs of local communities for sustainable fishing. Once again, the conservation and development objectives have generated stronger support together than either would have raised separately. Along similar lines, we often hear that this or that protected area is critically important to the national economy because of the tourist revenues it generates. As the above examples illustrate, protecting biodiversity can support economic development and economic development can serve to protect biodiversity. In short, many development and conservation objectives are not only compatible but also synergistic.

How successful have we been in protecting biodiversity through the establishment of traditional protected areas? At one level, we have had some indisputable successes. We can only imagine what state the planet's biodiversity would be in if there had never been protected areas. On the larger scale, however, we have to admit that we appear to be losing the battle on many fronts and risk seeing protected areas as islands of biodiversity surrounded by desert. What makes some PAs successful and others fail? Why are some protected areas stillborn "paper parks?" Certainly there are several reasons but amongst the most important is that those that flourish have broad financial and political support whereas those that do not often lack one or the other.

A good way to ensure that protected areas of the future get enough support is to make sure that it is both a conservation and a development priority. This is one reason why, over the past two decades, conservation strategies have slowly evolved from exclusive protectionism towards the inclusive integrated conservation and development (ICDP) model which addresses the needs of local communities and threatened biodiversity. Recognizing the linkage between conservation and development by sharing benefits and responsibilities with local communities, generates support from a very broad and heterogeneous constituency. In Tanzania, innovative ideas like the development of community managed wildlife areas in which some local hunting is permitted, have been particularly successful in changing the way in which wildlife is perceived. Rather than a crop-raiding liability, people are beginning to see value in their wildlife resources. Similarly, the Tanzania National Parks has a programme to share park revenues with communities to support locally identified development projects. Both of these initiatives have generated enormous support amongst local communities. Sustainable development has become a catch phrase in the vocabulary of conservationists. Isn't it interesting that "sustainable conservation" has not found a similar place in the development glossary? After all, sustainable development depends on renewable natural resources and in order to be sustainable, conservation needs renewable financial resources.

We live in a world of limited resources and so, wherever possible, conservation and development sectors must work together to ensure that the establishment of protected areas is in the interests of both. This may mean that, in order to build a broad consensus, the model of protected areas needs to expand. It may mean that the decision as to where to establish protected areas and how those areas will function, will be based on economic and biodiversity considerations.

Where does this leave those important biodiversity sites for which there is apparently little development attraction? On the one hand, if a protected area is established with only short term funding, the long term prognosis is not good because its integrity will depend upon perpetual subvention which is, as we have seen time and time again, dangerously undependable. On the other hand, sometimes this is the best that can be done on short notice; some needs are so urgent that the short-term fix is all that is available. Eventually, however, long-term funding must be identified and creative funding mechanisms like endowments, trust funds, or debt for nature swaps may hold the key. Another important consideration is that the biodiversity found within a country may represent a global treasure and so it is not unreasonable to expect the global community to provide the long term funding. The key here is "long term"; not five years or 10, but 30 to 50 years. Regardless of the source of funding, the hard and cold fact is that if the economics are not sustainable, then the conservation is most likely not sustainable either.

This opens up another important area for discussion. Who will pay for conservation in the future? The environment isn't free and those who profit from it should help defray conservation costs. Would it be out of line to suggest the establishment of an energy tax to help pay for Udzungwa Mountains National Park? After all, energy producers and consumers are benefiting from having the park conserved. Let's identify all the users, direct and indirect, and ensure that costs are shared equitably.

How can we optimize our chances of saving the most biodiversity? We need to identify those sites with important biodiversity and high conservation-compatible development potential. GIS technology can help. National surveys can identify areas of high biodiversity as one data layer. This information can be superimposed on key "ecological functions" areas as a second layer, which in turn can be layered with national, regional, and local development strategies, and in consultation with renewable natural resource-based industries like forestry and fisheries. What comes out of this set of filters will, by definition, be important to all the sectors involved. The development of cross-sectoral coalitions or strategic alliances will be an increasingly important conservation tool as we move into the next millennium.

We are already seeing examples of how fruitful such cross-sectoral collaboration can be with the recent birth of the Forestry Stewardship Council (FSC) and Marine Stewardship Council (MSC). The FSC, as its name implies, is concerned with sustainable exploitation of timber resources. FSC is an independent certifying agency that is supported by both conservationists and the timber industry and the FSC stamp indicates to consumers that timber products have come from sustainably managed forests. Timber products which have been certified by the FSC can be sold for a higher price in many countries because consumers are becoming progressively more aware of the impact of improper forestry practices and are willing to pay a bit more to ensure that their purchase is not contributing to the destruction of the world's forests. There are also several retail outlets, like the huge UK chain B&Q, which will only purchase FSC certified timber. The benefit for biodiversity is clear. As more and more timber consumers insist on products from well-managed forests, commercial pressure on natural forests will be reduced.

Similarly, the Marine Stewardship Council, an independent certifier of fisheries products, is beginning to influence the fishing industry. Unilever, the world's largest fish processing company, has recently announced that in the very near future it will not buy any products which are not MSC certified. The collapse of some of the world's most important fisheries has sent shock waves throughout the industry and industry leaders are beginning to see that conservation is good for business.

A third example of large scale conservation and development synergy is the recent World Bank-WWF Alliance for Forest Conservation and Sustainable Use which aims to establish an additional 50 million hectares of new forest protected areas and an additional 200 million hectares of independently certified forests by the year 2005. In both of these cases, economic development and biodiversity protection are served.

Ensuring the long-term survival of biological diversity depends on adapting successfully to the political and socio-economic environment of the day. As that reality evolves, so too must our approach to conserving the planet's biodiversity. Protected areas will continue to have a crucial role to play as we move into the next millennium and the face of those protected areas must constantly evolve or go the way of the dinosaurs.

Partnerships between conservationists, industry, national development agencies, and local communities represent an emerging trend of holistic conservation. In the future, many successful protected areas will be based on the different sectors planning together; not retrofitting development or local needs to the biodiversity model. By addressing the common needs, protected areas can be assured of broad support and perhaps, more importantly, the fundamental relationship between sustainable economic growth and sustainable environmental protection will be clear for all to see.

AFRICA'S PROTECTED AREAS: HOW TO HAVE INSTITUTIONS TO BE PROUD OF AT IUCN'S 75TH BIRTHDAY

Dr. S. Cobb, Environment and Development Group, Oxford, England (Guest Speaker)

Introduction

The purpose of this paper is to take stock of what has happened during the last 25 years and consider what needs to be done to get through the next 25 years in better shape, with a focus on three issues: institutions, land and money.

An alternative title for the paper could be *Non-traditional Protected Areas*. Most of the traditions of the past are open to question. To develop new approaches, we can usefully seek inspiration from elsewhere in Africa and from other parts of the world. However, the main factor for success will be our ability to acknowledge and respond to the challenges that are staring us in the face.

The Background

Financial

The chart (page 13) shows the percentage of the land surface area of 11 east African countries that are devoted to IUCN's Category 1 to 5 protected areas.

There is subtle peer pressure from around the world for nations to aspire to the 10% target. This pressure arises in the innocent and idealistic circumstances of meetings such as this. One country, Mongolia, has declared a target of 30% in its national environment action plan (NEAP). Meanwhile, there has been a decline in the real budgets available for conservation in most, but perhaps not all, African countries.

Zambia represents as extreme a case as any, but there are parallels elsewhere. In the last 25 years, there has been an almost 20-fold reduction in the effective budget available from the state for wildlife conservation, through the state agency, the National Parks and Wildlife Service. This is due primarily to the collapse of Zambia's copper-based economy and as a consequence, to a shift in Government's priorities.

WCMC conducted a review of government commitments to protected areas (in 1992, mainly). This review found as little as \$1-5 per sq. km. in many cases; woefully short of the targets for effective conservation of \$200 per sq. km. set in the mid 80s (at the height of the elephant and rhino poaching years).

There probably is not a single state protected area institution in Africa that is financially stable, financially viable and meeting its conservation objectives. Botswana is close to financial stability and could be viable, if that were policy. The South African agencies (provincial and state Parks Boards) have been both, but the weakening of the economy certainly threatens its stability.

Legislative

New laws have been enacted in a number of African countries, notably Zimbabwe, Botswana, Uganda and Zambia, which have a common thread of trying to transfer ownership and use rights over non-endangered wild animal and plant species to land-owners or traditional users of communal land. Some of these laws also create new institutions, which are conceived in the spirit of making the management of the wildlife estate more accountable, and more flexible. Most of these exercises have been preceded by a national policy debate, which may or may not have been adequately considered at local level. Similar processes are under way in a number of other countries.

Social

The biggest change to overtake PA institutions in Africa in the last decade has arisen from the recognition that the PAs had hitherto been managed in isolation, and that they would only meet their objectives if they took account of the wishes, aspirations and livelihoods of the people surrounding them.

By means of RRAs, PRAs and PLA, CBNRM and CBC were born; co-management, benefit-sharing and other approaches are on trial, both in the neighbourhood of protected areas and in the country at large (whichever country). There are so many active practitioners of this new discipline present here today, that I will not say more, other than to comment that there is still a lot to be learned.

Both through its own impetus and that applied from without by the Convention on Biological Diversity (which has been ratified by every country represented here), the job of the protected area manager has become more complex, that of the agency more onerous. Which is not to say we should not be doing it, just that new skills are required, new challenges posed, new jobs need to be done, and paid for. This is non-traditional, if ever anything was.

Institutional

Despite various efforts at reform, wildlife agencies in many African countries are either overstaffed and unwieldy or overstretched and thinly spread. Many of the staff may be in dire need of professional training, or overtrained in spheres that are of diminishing relevance. The low level of government salaries saps morale. The loss of colleagues going to work in better-paid (but similar) jobs in NGOs saps it still further. Lack of political support from government (and from the judiciary) makes wildlife conservation seem a thankless task. At times when tourism is booming, it is demoralising to see how the exploiters of wildlife, the tourism professionals, seem to prosper while the wildlife managers of it languish for lack of money and support. This is unfair and unnecessary.

Another feature of the institutions is that they are characterised often by strong leadership but weak management. In a culture of government service that does not reward the fruits of good management, this is none too surprising. So the institutions have needed to change, but this is a complex and temporarily unsettling. In several countries, this has been timed to coincide with major programmes of external support and the double burden of this has been too much to bear.

In short, our government wildlife institutions are generally not in good shape: if there are some that are, that I have failed to single out, I apologise; and if I receive invitations to come and see for myself, I shall accept.

Conclusion

It was relatively easy to legislate to create the protected areas in the first place. There is still plenty of scope for using the law to create more favourable circumstances for biodiversity conservation. It has proved hard, if not impossible, for governments to find the means to manage the PA estate properly, and this situation is getting worse.

The Context

Demography

During the past 25 years, commercial and industrial sectors have diversified and expanded, and cities have grown bigger and more sophisticated. Africa's cities are growing faster than those of any other continent. On the face of it, in many countries' assets appear to be booming.

But below the surface, there is plenty of statistical evidence to show signs of great strain. During this time, the continent's population has doubled. In most countries, government has been unable to keep pace with this growth: in the delivery of social services (education and health, in particular) and basic infrastructure, such as roads and railways, and the urban environment. Meanwhile, despite research, innovation and outreach, per capita food production has declined, particularly in the last decade.

The Land

All this translates into pressure on the land: people want more of it, more rights over it, more freedom to acquire it and to dispose of it. The State owns, or holds in trust, over 90% of rural land in most African countries.

There is mounting pressure for reform throughout the continent. The pressure is particularly strong in southern Africa, not least because of the relatively high proportion of the land that is owned, rightly or wrongly, by large commercial farmers (this is a euphemism for white farmers). Indeed, since there are at present active processes at work to reform the land tenure laws in half the countries of sub-Saharan Africa, it is undoubtedly one of the major issues of the day.

As the custodians of a substantial proportion of that land (5% and more), the managers of the protected area estate have to be at the centre of the land debate. They have to be there to demonstrate that protected area management is a legitimate form of land-use that needs to be integrated with other forms and intensities of land-use. The manager has to be there to ensure that existing or intended legislation about rights to use living natural resources are properly accounted for in the drafting of legislation about rights to use land.

Rural livelihoods

Protected area agencies have been increasing their understanding the livelihoods of their rural neighbours through participatory research and planning approaches. It is less obvious that they have yet made inroads in improving them. Increasing demographic pressure, and the understandable wish (if not legitimate desire) to improve standards of living, often from a pitifully low base, is putting an increasing burden on natural resources. In these circumstances, sustainability

may be elusive. The consequences include the decline in area of natural ecosystems, as well as their fragmentation and isolation.

And the rest

In addition, there are the persistent worries of national economies which continue to underperform, with all the knock-on effects of budgets for biodiversity conservation; of civil unrest which, in the last few months, has affected one third of the countries of sub-Saharan Africa, in a period that has not been specially unusual.

Conclusion

The institutions are in perilously weak state. There is enormous competing pressure on the land and to reform access and rights to land. And there is not enough money to do anything really well. If the wildlife agencies were businesses, they would be insolvent, and heading for take-over or receivership. All these things make it hard to plan and manage Africa's protected areas in a strategic and objective way. But do this we must, in a non-traditional way, or things will get much worse in the next quarter century.

Approaches in other parts of the world

NGOs as statutory protected area management agencies

Two NGOs, the National Trust in the UK and the Nature Conservancy in the US, are hugely rich with enormous memberships, and responsible for the ownership and management of vast areas of private land, in the national interest, for conservation and recreation. It is generally felt that they make very few mistakes. The Nature Conservancy has had an ambitious programme in the last two decades, of acquiring land outside the US (in Latin America and the Caribbean) in order to manage it for conservation.

Taking their cue from these organisations, there have been a number of attempts, notably in the Caribbean, to establish an NGO as the sole custodian of protected natural areas in the national interest.

One such is the Bahamas National Trust, established as an NGO by an Act of Parliament in 1959. The trust board is part appointed, part elected, by the Trust's 3000 members. Its income is derived from an endowment, from its members, from donations, from sales and visitor fees, and lastly, but very much least, from a government grant (2% of income). The Bahamas are relatively affluent, its protected areas rather small and the social and economic problems simple by comparison with Africa. However, the model works and it does so because there was the collective will to make it do so; because it is well managed; and because the figures add up.

International Foundations

One of the most ambitious of these is at Iwokrama, in Guyana. The management of Guyana's economy in the last two decades has been pretty desperate, to say the least. Forest conservation and management is not all it might be, yet Guyana remains one of the three most forested nations on earth (the others are Gabon and New Guinea). At the Commonwealth Heads of State Conference in 1989, the 3600 sq. km. Iwokrama Forest was offered to the global community.

Since that time, a foundation has been set up and it holds the forest on long lease from the Guyana Government. An endowment fund has been established, and plans have been developed to manage the forest and its finances through sustainable extraction of timber and other products, bioprospecting licences, the grant of research licences, and grants from the GEF, the British and German governments, and the European Union. The Guyana government does not bear any costs, only provides the land, yet it meets its conservation objectives.

Although Guyana has not yet ratified the CBD, this approach conforms well to the kind of outcome that the CBD aspires to achieve. The initiative is too young for it to be possible to pronounce on its success, but it is bold and imaginative. Sovereignty is lost but partnership and commitment from the international community are gained.

Similar foundations have been established in Belize, Costa Rica, the Central Caribbean and in Ecuador (the Galapagos). Common features are international partnership, shared responsibility, and relinquishing of degrees of control in return for varying gains in financial stability.

Trust Funds

Over 50 of these have been set up around the world over the last ten years or so. The best funded of them have worked through the re-negotiation of debt, though capitalisation has been possible through a number of other means, including the GEF.

At first sight, trust funds are extremely attractive because the income stream they guarantee, if the capital sum is properly invested and wisely managed, should do precisely what aid funds seem so bad at doing: providing a stable income. However, donors are wary of trust funds, either because they judge that their money is better spent now, trying to create new and improved circumstances, or because parting with funds over which the donor has no subsequent control is an infringement of the rules of accounting under which they operate.

Whatever the obstacles, there is a strong case for the establishment of trust or endowment funds, by whatever means possible. The funds may be quite difficult and costly to administer and, therefore, those with a national remit are going to be more cost-effective than trust funds established for individual protected areas.

Private land ownership

Models for private land ownership in Latin America and the Caribbean have already been described. In South Africa, the majority of land whose stated land-use objective is wildlife conservation is under private ownership. There is ample evidence from other countries in both southern and Eastern Africa, that the model of private land-ownership for conservation is able to make financially competitive use of land, while also contributing to conservation objectives.

In a number of countries, if not most, the conservation objectives are so loosely stated that it is not clear whether the conservation gains thus achieved are to be interpreted as additional to the obligations of the state, or could be interpreted as exonerating government of a part of its duties to the nation. Once the latter is accepted, tax incentives or other forms of subsidy (devices to which the agricultural sector is no stranger) could be used to consolidate the relationship. This might provide a buffer against the claims on the land that are a likely outcome of the reform process discussed earlier.

The role of the GEF

Whilst the GEF of itself provides no particular guidance as to how to run protected area institutions, it is certainly providing the opportunity for a wide range of innovative programmes around the world. But through its funding of the preparation of [BSAPs](#) world wide, it is also creating expectations of a funding bonanza that is unlikely to take place. In a paper presented to the Skukuza meeting of IUCN's Commission on National Parks and Protected Areas (CNPPA) by Leif Christoffersen of the World Bank, it was predicted that the GEF will always be sparsely funded so long as its voting rights follow the principles of the UN, not those of the development banks. Put bluntly, if nations want more money in the fund, they will have to concede some authority over deciding how it is spent to those who put it there in the first place. Other mechanisms include the role of carbon sequestration offsets in forest conservation and restoration.

Conclusion

The innovations tried out elsewhere for the management of land for biodiversity conservation have two things in common:

- sound management of money
- flexible institutional mechanisms

Some suggestions for East Africa: getting to 2023

Legislation

Countries need to equip themselves with the laws that both empower local communities and other rightful land users, to derive economic benefit from wildlife. Laws need to enable, not just restrict; they should empower the wildlife agencies, whether they are closely linked to government or independent to some degree, and delegate responsibility for wildlife conservation to other bodies. In some countries in Eastern Africa, many of the protected areas that seem to have existed for years, have not been legally gazetted. Without proper legislation, other types of reform may be pointless.

Change the institutions

There is a strong case for reforming institutions, and for changing the ways they are managed and held accountable (to government or to the public). If institutions are to change, such processes can be long, costly and painful, and would benefit from professional guidance. A degree of independence from government is likely to be desirable in most cases, though total separation is an unrealistic wish.

Develop clearer strategies

Some countries have developed clear policy and mission statements for their wildlife agencies. Enough is known about the processes involved for it to be possible to attach numbers and limits to policy statements, so that it becomes possible to stop doing certain things, start doing others, and delegate responsibility.

Engage in land reform

The ship of land reform is leaving port in many African countries and the managers of the wildlife estate need to hop on quickly.

Increase income (and hang on to it)

For the institution that has the right legislation behind it, and which thus has the right freedom and incentives for proper financial management, there is little alternative but to close the finance gap by increasing income and reducing expenditure. Political and economic circumstances may make this virtually impossible to control in some countries. Unfortunately, those are probably the same countries that fail to provide adequate government support to protected area management.

Strategies for increasing income are fairly self-evident, but they need to be pursued energetically or they won't work. It is easier if there is a tourist industry but, as recent experience has painfully shown in this part of the world, even that can be unreliable. The strategies include:

- raise revenue from outside users (especially tourists)
- boost alternative sources of income, such as concessions
- create trust funds
- establish friends organisations
- capture existence values (charge premium for special places)
- stop leaks
- seek compensation for incompatible use
- negotiate charges for ecosystem services (such as water source protection)
- seek business partnerships and sponsorship
- engage in business planning, not just management planning

Reduce responsibility

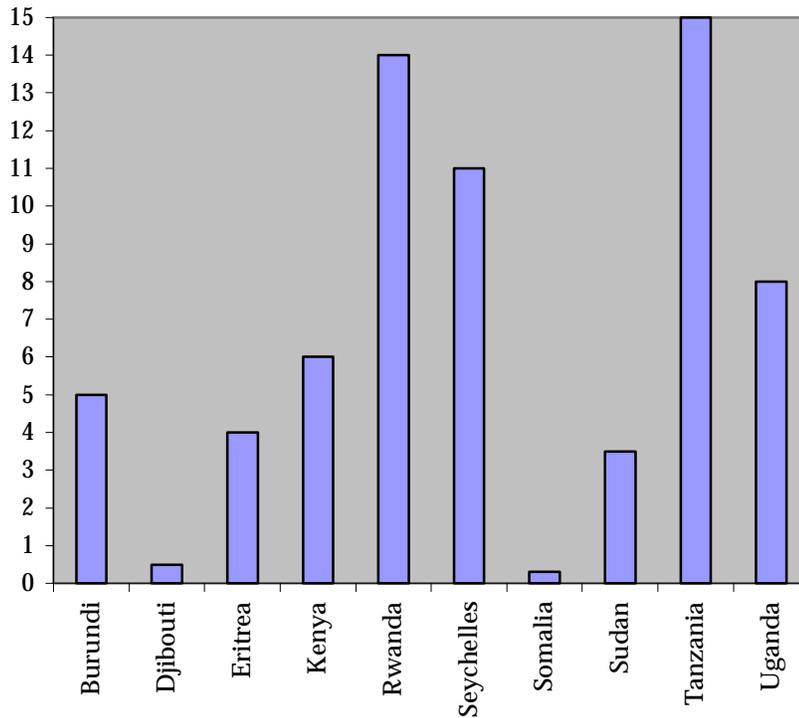
Cost can be reduced through any of the following means:

- Leasing out areas, or parts of systems, primarily for non-conservation purposes, such as seasonal grazing rights
- Leasing out areas or functions, for primarily conservation purposes (effectively lowering the salary bill)
- Through participation of local communities in co-management schemes (provision of free labour; effectively reducing the number of paid staff). There are still far too few people engaged in conservation, but far too many on the payroll.
- Sharing responsibility with neighbours (e.g. on security issues) such as private landowners, who may be able to achieve the same ends with their own means.

Prepare for tough decisions

The first painful time comes with staff reductions. The second is that, inevitably, some protected areas are going to prove too large; others no longer worth the cost of pretending that useful conservation gains can be made by keeping them. Degazettement may be the answer, when other avenues have failed. In other words, the protected area network will have to undergo a process of rationalisation and prioritization. Also, there is a need for institutions to evolve towards wildlife regulators, not wildlife managers.

Proportion of East African States Designated as Protected Areas % Land Area



USING PROTECTED AREAS MORE EFFECTIVELY FOR CONSERVING BIODIVERSITY

Humphrey Kisioh, Co-ordinator, Protected Areas Programme, IUCN - EARO (Guest Speaker)

INTRODUCTION

Background

For many years, protected areas have played a central role in conservation of natural resources. Worldwide recognition that conservation is an integral part of sustainable development has given them an added value. Protected areas are crucial for the safeguarding of species and ecosystems and, therefore, vital for human survival. However, the implementation of the concept has not been without controversies and, despite the growing need to protect the world's biodiversity, protected areas everywhere are under growing pressure.

From Yellowstone

The "modern" conservation movement started sometime in the 19th century in the United States, in reaction to rapid environmental changes and deterioration of nature caused by industrialisation. Initially, conservation activities focused on the protection of areas with scenic value, and safeguarding of species of animals and plants, including the land they inhabited. Areas of wild nature were set aside for enjoyment, mainly by visitors. Any other activities within these areas were strictly forbidden.

This movement culminated with the establishment of Yellowstone National Park in 1872, which is credited with being the first modern national park in the world. Since then, no less than 30,000 protected areas of various sizes and categories have been established throughout the world, all of them based on this model. Selous Game Reserve in Tanzania has an area of 5million ha, Saiwa National Park in Kenya has 2,600 ha. To underscore the importance of Yellowstone, the Second World Parks Congress was held there in 1972, to both celebrate the park's centenary and affirm the model.

The Concept

Since Yellowstone, other categories of protected areas have evolved, but the essence has remained. The concept of national parks included provisions to:

- ◆ prevent human exploitation in order to preserve the ecosystems, or create areas of outstanding natural beauty
- ◆ enable visitors to benefit at different levels (recreational, educational, cultural, spiritual), from wild nature
- ◆ promote scientific research related to conservation

ESTABLISHMENT OF PROTECTED AREAS IN EASTERN AFRICA.¹

In Eastern Africa, as in the rest of the developing countries, it is the colonisers who transposed the Yellowstone model in the late 19th to early 20th century period. Large areas were turned into national parks or given other protected areas status, limiting resource use in this region. In Africa, the concept of national parks was greatly influenced by the London Convention of 1933, which emphasised that "as far as possible, the total exclusion of human activity would keep the parks intact and substantially unchanged".

Some of the better known parks and reserves in Eastern Africa, and their respective management agencies were established in the first half of this century (e.g. Selous in 1921, Tsavo, 1948; Serengeti, 1951; Queen Elizabeth, 1952; Awash and Simen, 1969). Although some additions have been made, the most important areas were gazetted in the middle of this century.

After independence in the 60s and 70s, the new governments continued this policy for various reasons: economic and monetary advantages of tourism, encouragement by "conservation" oriented development aid and the insistence on international standards that went with it. Desire for international recognition made governments ignore negative impacts of policies and implementation on people living in or around protected areas.

Initially, protected areas were set aside in order to regulate resource utilisation. Later protected areas were also established to ensure security of environmental services such as watershed protection. Motives of public enjoyment and appreciation of wildlife other than for hunting followed later, and led to the recognition of protected areas as important destinations for tourists. More recently, concerns for conservation of biodiversity in its broadest sense as distinct from wildlife has emerged. Consistent with the trends was the early emphasis on conservation of terrestrial wildlife systems, followed by the later addition of wetlands, lakes, coastal and marine protected areas.

OBJECTIVES OF PROTECTED AREAS

Conservation of biodiversity is one of the main objectives of protected areas. Other objectives are as follows:

Protection of biodiversity: Biodiversity is taken as diversity of living things - plants and animals. It implies the variety of the species, the variety within species and the variety of habitats and ecosystems in which they live, including marine and aquatic. It is therefore not limited to spectacular wildlife.

Conservation of natural resources: The earliest protected areas in Eastern Africa were established for regulating the harvest of large mammals and forest products. More recently, many reserves have been established to regulate environmental services, in particular the maintenance of water flows and watershed protection.

Preservation of cultural and heritage features: Protected areas, have been established to protect cultural features, such as spectacular or interesting wildlife, noteworthy land forms (such as mountains/craters) or unusual scenery. An important feature of national parks is provision of human access and enjoyment of the preserved features.

The Role and Importance of Protected Areas. See Table 2 (page 23)

LIMITATIONS OF PROTECTED AREAS IN CONSERVING BIODIVERSITY

Protected areas as the principal means of conserving and slowing down the loss of biodiversity has had varying degrees of success. However, the many years of experience with managing Protected areas have exposed several important limitations that need to be addressed:

Protected areas alone are no longer adequate

Protected areas have and continue to serve vital conservation functions in the foreseeable future but, on their own, they are not adequate for conserving biodiversity on the required scale. Protected areas cover only a relatively small proportion of

¹ A protected Area is defined as "Areas of land or sea especially dedicated to the protection of biodiversity and of natural and associated cultural resources and managed through legal or other effective means"

the landscape (about 10% in this region; see Table 1). This means that the vast majority of biodiversity is located in agricultural, pastoral, and other managed ecosystems outside these areas. As a result, biodiversity has continued to be lost and ecosystems degraded; subjected to phenomena such as deforestation. It is imperative for conservation to extend beyond national parks and reserves.

Centralised government control

Until very recently, protected areas have been dominated by state administered systems of various types. As demand for greater democratic governance increases, this state of affairs is becoming increasingly untenable. The effectiveness of government management has also been negatively affected by declining budgets and worsening economic circumstances to an extent that many of these parks are really only "paper parks". The days of government control with "big bucks and a big stick" are gone for good. It is obvious that the old methods of management that were based mainly on law enforcement have had only limited success and need to be revised.

This decline in government capacity has had a silver lining; creating space for other players to play their role in conservation and in protected areas management.

Exclusion of People from Protected areas

One of the critical issues is the relationship between protected areas and people, especially local communities. As already stated above, protected areas have been the exclusive domain of governments. Establishment of protected areas has, in many cases, involved the exclusion and even eviction of people. Community involvement in management and in decision making was completely out of the question. This exclusion of people also led to their alienation from their sources of livelihood, including its cultural and spiritual aspects.

Forbidding habitation and any consumptive use have been the most controversial aspects of protected area management. In many ways, it has been responsible for the pressure and threats on protected areas and for unsustainable use of natural resources.

The following quotation from an Okiek hunter-gatherer from the Mau Forest in Kenya illustrates quite poignantly how far this alienation of people could go.

"When the white people first arrived in this area, they thought we were wild animals, so they chased us into the forest. Now that they know we are people, they are chasing us out again" (Quoted from *Whose Eden*, an IIED publication).

Many of biodiversity rich areas lie outside currently established protected areas. As local communities and other landowners were not enlisted in implementing conservation programmes, important ecosystems in these areas continued to be degraded through unsustainable use of resources. For effective conservation, it is important to work with communities and other landowners.

The existing protected areas systems are not representative

Although considerable areas have been set aside for conservation, the protected area system is still not representative of the countries' ecosystems and biomes. Some of the parks exist only on paper and play no useful role in conserving biodiversity. There are also other deficiencies in coverage which have been analyzed as follows:

- The extent to which different biogeographical regions and ecosystems are protected (marine and wetland ecosystems)
- The location of specific, rare, endangered or endemic species
- The areas where largely undisturbed blocks of original vegetation remain (wilderness areas)
- Areas where there is a high level of species diversity or 'hotspots'
- The degree to which particular systems are threatened and therefore need additional protection (lakes, forests and coastal ecosystems such as mangroves and wetlands)

Efforts are required to rationalise protected area systems in order to make them more effective in conserving biodiversity.

The Protected Islands

In the past, protected areas have existed as 'islands' surrounded by degraded habitats that limit gene flow, alter nutrient and water cycles, and produce regional/global climatic change that may lead to the disappearance of species and protected areas. Protected areas systems should therefore not continue to be considered in isolation. The planning and management of the systems should be addressed in the context of broader approaches to land use planning and management - bioregions, and the surrounding political, social and economic systems.

Some of the largest ecosystems lie across international boundaries. Management systems, including establishment of trans-boundary protected areas, should be established through bilateral co-operation.

Under-valuation of natural resources and ecosystem services

Biodiversity and ecosystems make important economic contributions through helping maintain clean air, pure water, green earth and a balance of creatures. Many of these benefits are unquantifiable and relatively few of these systems, including those established as protected areas, are able to capture all the profits due to them.

Two major economic problems for protected areas are apparent:

- The full benefits of biodiversity and ecosystems are seldom recognised and, therefore, an appropriate balance between benefits and costs is not easily apparent
- Many of these benefits are still outside the current concepts of economics

This under valuation has been partly responsible for the destruction of ecosystems, or their conversion to other land uses that are deemed to be more profitable. Approaches which optimise generation of benefits need to be developed, but it is important that these are in harmony with conservation objectives. This, to a large extent, depends on proper economic valuation of natural resources and ecosystems for environmental services and the goods they provide.

WHAT CHALLENGES DO WE FACE?

While protected areas will continue to play an important role, in their present coverage and manner of management, they are no longer adequate for effective conservation. Furthermore, expansion of protected areas is limited by many factors; under-valuation of natural resources and ecosystem services, increased demand for land due to rising populations, and opposition to old methods of establishing and managing them.

We are challenged not only to ensure that the existing protected areas survive, but also to establish strategies that aim at conserving species and ecosystems outside these areas and reducing further loss of unique or critical ecosystems and valuable habitats. This will only be achieved if biodiversity concerns are incorporated into development and land-use planning.

Promoting new models and innovative approaches to biodiversity conservation

To achieve both conservation and development goals, new models and management systems for conserving biodiversity and managing protected areas are required. Biodiversity planners need to understand the existing methods as well as develop and implement several new approaches. These new approaches should be based on:

- integrating biodiversity conservation in all land use planning
- developing innovative combinations of traditional and modern production and conservation systems based on requirements of government and desires of other stakeholders
- strengthening the role and capacity of the private sector and local communities to sustainably manage natural resources.

Biodiversity conservation should involve long term and more comprehensive and proactive measures rather than fragmented, uncoordinated responses to loss of species and habitats. There should also be change of focus from concern primarily for conspicuous animals (the Big Five) and plants, to conserving all kinds of living organisms, as well as the ecosystems in which they have evolved.

Where new protected areas must be established, this must be carried out in a manner that is sensitive to the needs and concerns of local people. In particular, new ownership patterns for protected or 'conservation areas' should be established.

The following are some examples of alternative approaches to ownership of protected areas:

- ◆ Areas set aside within land owned and managed by commercial companies
- ◆ A proportion of community owned land and commons
- ◆ Land under the control of regional or local authorities
- ◆ Land owned by religious groups, including sacred groves and forests (e.g. the kayas)
- ◆ Areas within indigenous people's reserves e.g. Loita Forest
- ◆ Land owned by NGOs and private trusts
- ◆ Individual land holdings
- ◆ Trans-boundary protected areas

- ◆ International protected areas established under various Conventions (506 World Heritage Sites in 108 countries; 324 Biosphere Reserves in 82 countries)

Reaching Out to Others - Building a United Front for conservation

Biodiversity is manifest at diverse scales and there is need for broadening the scope for biodiversity conservation to cover all these scales on public, communal, corporate and private lands. This would mean involving many players and stakeholders as well as developing multiple approaches to conservation. Successful conservation will then depend on active partnership among stakeholders, as a basis upon which to build dynamic and effective management systems.

The coming years will see an historic transition in public protected areas management, with the focus shifting from individual governmental agencies to the whole of the conservation sector, in response to the need for a broader and more comprehensive approach to management of natural resources. This will lead to natural resources being administered in ways that equitably distribute both the burdens of maintaining healthy ecosystems as well as the goods and services they provide.

Effective partnership, requires co-ordination among stakeholders in order to reconcile the complex web of interests from a wide range of actors: governments and their agencies; regional, national and local NGOs; communities and their institutions; private individuals, enterprises and association; the global community, multi-lateral and bilateral organisations, and other interest groups.

By building a more intensive process of interaction between key stakeholders and their networks, those problems and issues of conservation and sustainable development that are major concerns in the region can be addressed more effectively.

Community Participation in Conservation

Attitudes towards the role of people in protected areas have undergone dramatic change, so that local communities are increasingly seen as part of the solution rather than the problem. Exclusion of people is being increasingly regarded as unethical and unworkable. Experience from around the world indicates that community participation is crucial if these areas are to meet the challenges that face them. It is therefore urgent that conventional approaches are reviewed, and roles of different stakeholders recognised and defined.

Collaborative management is one such new approach that is gaining ground around the world, in seeking to build participatory structures for effectively involving communities in the management of protected areas. Giving members of local communities a stake and a voice in decision-making for matters vital for their livelihoods, and giving them a share of the benefits, had gone a long way in reducing the pressures and hostilities facing protected areas.

Customary tenure systems, traditional knowledge and practices must be respected and enlisted during the design and implementation of conservation plans. Through the participatory management processes, more opportunities and equitable access to natural resources will be promoted.

Opportunities exist to do innovative work with communities and other stakeholders to restore and maintain reproductive, healthy and diverse ecological systems as a foundation for human survival and quality of life as well as for conserving biodiversity.

Strengthening International Co-operation

International conventions provide an important framework for international co-operation, and for linking local and national action to international conservation processes. There are also a number of regional conventions on which collaboration in managing trans-boundary resources can be based.

The World Heritage and the Ramsar Conventions, offer numerous opportunities for international co-operation, as does the Man and Biosphere Reserve programme of UNESCO. The Convention on Biodiversity also explicitly recognises protected areas as crucial means of conserving biodiversity, and calls for international funding to support biodiversity conservation and protected area management. It also establishes a mechanism to provide financial resources to developing country parties to help implement the convention.

An international network of protected areas is already emerging as a result of these conventions. These include World Heritage Sites, Biosphere Reserves, and Ramsar Sites. This network is likely to expand in the future, but even more important is the strict application of the management systems intended for them.

PROTECTED AREAS IN THE BROADER CONTEXT

Linking Conservation and Development

Initially, conservation activities focused on the protection of individual species, for example, rhinos and elephants. It was not until the 60s that the ecologically based approach became established, as a result of growing concern about developments and activities outside protected areas that threatened conservation.

The theory that conservation and development were incompatible was finally abandoned in the seventies. Conservation was then accepted as a key factor in land use planning and sustainable development, rather than an isolated movement. For survival and success, a park or reserve must be consistent with national development goals and promise economic and social benefits to people. Besides protection, conservation should aim at rational or wise use of natural resources.

This new thinking was reinforced by the World Conservation Strategy (WWF, UNEP, IUCN; 1980), which also gave currency to the term **sustainable development**. According to the Strategy, ***“Protected areas are an important tool for conserving biodiversity, which is a matter of both an insurance and investment, necessary to sustain agriculture, forestry and fisheries production, keep open future options, as buffer against environmental change, and as a matter of moral principle”***.

The term sustainable development was coined to link conservation and sustainable development as common goals of human kind. Development processes have to take place within the earth's carrying capacity. Conservation is therefore a crucial element in sustainable development as it is aimed at safeguarding the earth's natural systems, not only for their intrinsic values, but also because they are essential life supporting systems.

EMERGING TRENDS AND OPPORTUNITIES FOR PROTECTED AREAS IN THE NEXT MILLENNIUM

In this paper, an attempt has been made to outline the limitations of protected areas as they currently exist, and the challenges that we might face in future. Further to this, there is a shared vision of the next millennium as a 'biological' or 'conservation' one, in which natural systems will receive greater attention at all levels of society. This will go far beyond the current microbiological systems to address whole ecological systems.

Protected areas have been a great piloting process, and a learning experience in the functioning of parts of ecosystems. We are now in a better position to apply our knowledge and experience to the management of whole ecological systems.

Central to this is the reconciliation of conservation with people. The needs of people and nature must be reconciled for the survival of both. The people, especially the local communities who “own” these resources, and have borne the cost of modern conservation strategies without benefiting very much, will increasingly reclaim their rightful role.

A more comprehensive “conservation system” in next the millennium will comprise the following major elements:

Rational, National Protected Area Systems

In Eastern Africa, the number of sites and the area under protection have increased substantially over the years. However, gaps still exist in the representation of biomes and ecosystems, and in the application of appropriate planning and management. Terrestrial, freshwater and marine ecosystems dominate the system. Wetlands are under-represented.

National protected area systems planning is an important tool for rationalisation. A system plan is a total reserve system sampling the full range of ecosystems and communities found in a particular country. A system plan is a valuable tool in building a system of protected areas that fully reflects the spectacular landscapes and seascapes, biological diversity and diverse cultures of a country. The plans also serve to guide those directly involved in the growth of the system, and provide all other interested parties with a common understanding of the direction in which protected areas can be expected to grow in future.

A protected areas systems plan:

- identifies the range of purposes for protected areas
- redefines the status of “paper parks”
- provides clear rationale to achieve a balance between different conservation objectives
- identifies relationships between different system components, sites; and land use activities; and different sectors and levels of affected societies/communities

- identifies how different parties interact to support sustainable management
- serves as a vehicle for establishing priorities among competing factors in land use

The first step in national system planning is carrying out biodiversity surveys. Through the surveys, coverage of species and habitats are evaluated, existing gaps in the system identified, and means of filling them addressed. This is followed by the preparation of systems plans, and the systematic setting of criteria and priorities for establishment of new protected areas and the various management categories. Emphasis should be given to establishing protected areas in biomes and ecosystems that are under-represented in the existing system.

Establishment of the full range of IUCN - WCPA protected area categories

The World Conservation Union - IUCN and WCPA, have drawn up a list of six categories of protected areas, each of which allows different degrees of human intervention depending on management objectives (Table 3). Plans for national protected area networks need a balanced use of the different categories to meet the range of desired ecological and socio-economic objectives.

A number of countries around the world are already establishing and managing the full range of these categories of protected areas. One of the objectives of the Eastern Africa Programme of IUCN is to facilitate the synthesis of global experience in the establishment and management of these categories, and their application by the countries in the region in their own national protected area systems.

Integrating Conservation into Economic Planning - Bioregional Planning²: From Islands to Networks

Many protected areas exist in islands surrounded by incompatible uses and, therefore, they cannot adequately conserve biodiversity and provide other essential environmental services. A new strategy is needed to ensure that terrestrial and marine protected areas can play their most effective roles of ensuring human well being and survival of nature into the 21st century.

Bioregional planning is the basis for a new strategy and is also referred to as ecoregional, or ecosystem, planning and management. The vision is one of core protected areas surrounded by buffer zones and connected by corridors, all set within a programme which links conservation and ecologically sustainable development at an ecosystem or landscape level.

Bioregional planning is a useful model, which can be applied in different ways depending on scale, habitats, species and land use. The critical issue is to place protected areas in a wider network for dynamic management and in an environment that can support them. Conservation of biodiversity and maintenance of ecological processes cannot be achieved without compatible land uses around the target areas. Ecological and economic planning should be done in a way that will result in a network of production systems that will be sensitive to biodiversity in the long term, as well as provide adequate levels of sustainable production.

Building and Strengthening Capacity for Biodiversity Conservation

Effective conservation depends upon an informed public and trained professionals working within effective organisations. Capacity building in organisations implementing conservation programmes is therefore an essential element for effective and comprehensive management and conservation of biodiversity. Achieving enhanced capacity in the new millennium will require the following.

- ◆ Establishing and/or strengthening in-country skills and frameworks for biodiversity conservation, and developing mechanisms for mainstreaming conservation into countries' sustainable development programmes
- ◆ Institutional strengthening which seeks to improve the structure of management authorities, harmonise their procedures and operations, review and redefine their mandates
- ◆ Conservation policy and legal reform: The policy and legal environment in which institutions operate are crucial for effective conservation. Countries should incorporate cross-sectoral issues into a policy and legal framework that harmonises and sets the broad directions for the sustainable management of natural resources. This framework will shape subsequent policy, strategy and programme formulation and implementation.

Investing More in Conservation and Protected Areas

Funding is a critical issue for effective protected area management and more comprehensive conservation. Conservation and protected area management have traditionally relied on public funding. Across Eastern Africa, available resources

² An Ecoregion or Bioregion is defined as "an area containing a geographically distinct assemblage of natural communities, sharing species, ecological dynamics, and environmental conditions which interact in ways that are vital for their survival"

continue to decline in relation to management needs, due to declining budgets, low priority assigned to conservation, and more urgent demands by other sectors. However, international commitment to support biodiversity conservation has remained high, thus providing alternative sources of funding. Nevertheless, all those with a stake in conservation need to work more closely with governments and multilateral and bilateral donors to mobilise more resources for conservation, from traditional as well as from new sources.

Proposed measures include:

- ◆ advocating for increased government and private sector funding for conservation
- ◆ developing long-term funding mechanisms for conservation (e.g. setting up trust funds)
- ◆ assisting some countries in the region to gain access to new sources of funding for conservation (e.g. debt for nature swaps)
- ◆ sharing the cost of management with the international community since biodiversity resources are increasingly viewed as a global heritage. Donors have obligations through various conventions to provide funding for conservation and such funds should be tapped
- ◆ broader application of the principle of "the user pays" so that those who directly or indirectly benefit from protected areas can pay for their management. For example, hydro-power generating companies and water boards use water that comes from watershed areas in protected areas, but rarely contribute to their management

Networking and Information Sharing

Conservation and sustainable utilisation of biological resources requires that accurate baseline information on the extent and distribution of such resources is available. This information contributes to formulation of national policies, strategies, plans and programmes. Proper information management is vital for increased credibility of policies and decisions and the public's understanding of the information on which the decisions are based.

There are wide disparities in the distribution and access to relevant information internationally, regionally, and nationally. These disparities mean that those working on the ground to protect and conserve the most vulnerable areas of our planet are least able to gain direct and timely access to essential information resources and services.

Three fundamental issues will need to be addressed.

- ◆ Knowing the extent to which ecosystems and current Protected areas conserve biodiversity and how sustainably they are being used
- ◆ Collecting and managing information in a way that supports timely and well informed decisions on conservation and national development
- ◆ Building partnerships with national, regional, and international organisations that are interested in supporting conservation for networking and information sharing and exchange

CONCLUSIONS

The "Yellowstone Model" has served us well. It has motivated and guided the finest of conservation work for well over 120 years. The vision of the forebearers of the conservation movement deserves praise and we should not renounce their vision. However, we should redefine it, to enable us apply the model on a much wider scale, and be better able to meet the conservation needs of the new millennium.

The parks of the new millennium must transcend the "island" mentality, and grow into networks that embrace their inhabitants and neighbours, and not exclude or expel them.

The future of protected areas and conservation will depend on strategies that will:

- ◆ ensure that the existing networks are effective through improved management that will combine the application of science, professional management, and greater local participation
- ◆ broaden the scope of protected areas to allow people at all levels of society to participate in the protection of biodiversity
- ◆ plan protected areas within a larger network that allows integration into wider land use planning and more dynamic management systems.

We must begin to focus on protected areas not as distinct entities, but as the centres of ecosystems. National parks must serve as gateways to the conservation effort, as parts of their surrounding ecological and cultural landscapes that play an important role in our understanding (baselines from which future environmental change can be monitored) and conservation of biodiversity.

In the new millennium, the Eastern African countries should move towards the development of National Conservation Systems, which comprise the following elements:

- ◆ National Protected Area Systems
- ◆ Networks of international conservation areas (WHS, BRs, Ramsar Sites, Important Bird Areas),
- ◆ Trans-frontier protected areas (owned/managed by neighbouring countries through some mutually agreed arrangements)
- ◆ Conservation areas (owned and/or managed by NGOs, CBOs, private trusts, companies and foundations and/or individual landowners)

The Road To Africa 2002

This symposium has provided an important opportunity for us to start developing a vision of our protected areas and how they might best serve the twin objectives of conserving biodiversity and sustainable development. There will be other opportunities for us to refine this vision. IUCN and WCPA convene a World Parks Congress every ten years. The last one, WPC IV, was held in Caracas, Venezuela in 1992. The Fifth Congress is scheduled to take place in Africa in the year 2002.

The Fifth Congress will focus on finding ways of promoting and consolidating the role of protected areas in ensuring conservation of biodiversity and ecologically sustainable development in this planet. The congress will be ushering in the new millennium, and should provide a special focus on conservation in Africa.

Bibliography

IUCN - CNPPA Report 1993, Protected Areas in Africa: Status, Roles and Issues.

Jan Kamstra , Protected Areas, Towards a Participatory Approach..

Mike Norton - Griffith in Swara, Nov. 96 / Feb 97, Why Kenyan Conservation is Failing.

H. Caballos - Lascrain, Tourism, Ecotourism and Protected Areas.

WCPA Symposium Report, Albany, Australia, 24 - 29 November 1997, Protected Areas in the 21st Century, From Islands to Networks.

Lucy Emerton, Economics of Wildlife for Communities Living Around the Serengeti, - Issue Paper.

IUCN / UNEP / WWF, 1980 , The World Conservation Strategy.

H.A. van der Linde & M.H. Danskin, Editors; Workshop Proceedings, WCC, October 1996, Montreal, Canada., Enhancing Sustainability, Resources for the Future.

IIED Publication, Whose Eden?

Jeff McNeely, Conservation and the Future, trends and Options Toward the Year 2025.

Patricia Halladay and G.A. Gilmour, Editors, Conserving Biodiversity Outside Protected areas, The Role of traditional Agro-ecosystems.

Table 1: Protected Areas in the Eastern Africa Region.

Adapted from "Parks for Biodiversity: *Policy Guidance based on experience in ACP countries*"; IUCN Document Prepared for the Commission of the European Union.

Country	Demographic Profile			Natural Resource Balance sheet					
	Estimated Population (Millions) 1992	Annual Population growth rate		Land area (Km2)	Population density people/km2 1992	Protected Areas (km2)			
		1960-1992	1992- 2000			Area in Categories I-V	Area in Categories VI-VIII	Total designated Area	%
KENYA	25.3	3.5	3.3	582,645	44	35,044	10,315	45,359	7.8
UGANDA	18.7	3.3	2.8	236,580	79	19,033	30,087	49,120	20.8
TANZANIA	27.9	3.2	3.2	939,760	30	138,164	124453	262,617	28
ETHIOPIA	53.1	2.5	3.0	1,104,300	43	57,175	131,823	186,998	16.9
SEYCHELLES	0.1	1.7	0.8	404	159	440	-	440	N/A
SUDAN	26.7	2.8	2.7	2,505,813	11	108,146	36,070	122,490	4.9
DJIBOUTI	0.5	5.7	2.9	23,000	20	100	0	100	0.4
SOMALIA	9.3	2.8	3.1	630,000	15	1,800	3,444	5,244	0.8
COMOROS	0.6	3.2	3.7	1,860	294	0	0	0	0.0
ERITREA	-	-	-	117,600		5006	0	5006	4.3
TOTAL	162.2			6,141,962		362,908	336,192	677,374	11.0

Table 2: The Role and Importance of Protected Areas

Protected Areas are of crucial and growing importance because they:

- ◆ Safeguard most of the world's most outstanding areas of living richness, natural beauty and cultural significance; they are a source of inspiration and are an irreplaceable asset for each country;
- ◆ Provide crucial resources in different ecosystems such as forests, savannahs, wetlands and coastal areas for food, in the form of meat, fruit, honey or fish. They are also important sources of fibres, fuel, medicines, and building materials;
- ◆ Maintain the diversity of ecosystems, species, genetic varieties and ecological processes (including the regulation of water flows, carbon sinks and climate), which are vital for the support of all life on earth and for the improvement of human social and economic conditions;
- ◆ Protect genetic varieties and species which meet vital human needs, for example in agriculture and medicine, they are the basis for human social and cultural adaptation in an uncertain and changing world;
- ◆ Are often home to communities of people with traditional cultures and irreplaceable knowledge of nature;
- ◆ Have immense scientific, educational, cultural, recreational and spiritual value, and;
- ◆ Provide major direct and indirect benefits to local and national economies and can provide models for sustainable conservation which may be applied elsewhere in the world;
- ◆ Provide safeguards against natural disasters such as storms and floods. The destruction of mangroves and the erosion of coral reefs have made some coastal areas more vulnerable to tropical storms;
- ◆ Forests stabilise the soil, serve as water reservoirs and are important in purifying and regulating water flow. Millions of people in Kenya and Tanzania derive their water for domestic agricultural and industrial use from the Kilimanjaro catchment area;
- ◆ Natural ecosystems provide services without which we could not survive; essential processes such as the production of oxygen, sequestration of carbon dioxide by green plants, and recycling of vital elements like nitrogen, sulphur and phosphorus within the ecosystem.

Different protected areas place different emphasis on each of the objectives and hence a number of different lands can be identified. IUCN recognised six different categories of protected areas which reflect a gradation of the level of human intervention in management and manipulation. The names assigned to protected areas by a particular country do not necessarily correspond, and often conflict with the title of the category to which sites are classified at an International level.

Category 1.	Strict nature reserve/wilderness area Managed mainly for scientific biodiversity conservation or wilderness heritage.
Category 2.	National Park Managed mainly for biodiversity conservation and enjoyment (by recreation) of natural heritage.
Category 3.	Natural Monument/Natural Land Mark Managed mainly for the preservation of specific cultural or natural feature.
Category 4.	Habitat and Species Management Managed mainly for biodiversity conservation through management intervention and manipulation to maintain particular species, habitats and ecosystems.
Category 5.	Protected Landscapes/Seascapes Managed mainly for the protection and enjoyment (through recreation) of visual scenery as a heritage feature.
Category 6.	Managed Resource Protected Area Managed for the sustainable use of natural resources and protection of environmental services.

Table 3: IUCN Protected Areas Categories

SUMMARY OF DAY'S PROCEEDINGS

THE MAIN THEMES EMERGING FROM DAY ONE OF THE SYMPOSIUM

Dr. R. Salm, Co-ordinator, Coastal and Marine Programme IUCN -EARO (Rapporteur)

There appeared to be consensus that the underlying challenge was to make protected areas (PAs) in the next millennium both sustainable and relevant, and innovation was seen to be the key in addressing this challenge. Five major themes seemed to emerge from the keynote speeches.

1) Form and function of protected areas in the new millennium

- the future roles of protected areas (broadening)
- rationalisation of PA networks (adopt a strategic, rather than *ad hoc* approach; strive for representativeness)
- ecoregional planning (corridors, linkages, minimum conservation areas)

2) Institutional change

- internal reforms – leaner and more effective
- appropriate legal and policy frameworks to support change/innovation/flexibility
- new models for PA management – delegation (NGOs, communities, private sector, local government/decentralisation), partnerships
- financing mechanisms – endowment funds, trust funds, business plans, plan and secure funding in perpetuity

3) Strategic partnerships for PA management

- private & public sectors, NGOs, local and international community
- partnership opportunities, types, mechanisms
- roles of stakeholders (government: enforcement, setting conservation policy; others: day to day management, habitat restoration, species recovery, tourism, revenue collection and disbursement)
- capitalise on traditional structures (management systems, sacred forests, etc.)
- strengthen the capacity of communities and the private sector to manage PAs

4) Incentives for conservation / PA management (closely linked to partnerships)

- revenue/benefit sharing mechanisms/compensation
- user-pays (“downstream” beneficiaries)
- tax breaks, incentives (waiver of duties/importation taxes, clear/transparent reinvestment of taxes into infrastructure), disincentives
- delegation of authority (within defined limits)
- resource or area access rights in exchange for management responsibility

5) Linking Protected areas with development

- integrating Protected areas into land use planning and land reform/tenure issues
- mainstreaming Protected areas into decision-making processes (direct links with Office of the President, national development, planning, treasury)
- valuation of PA (ecosystem) services, understanding the economics: the costs and the beneficiaries and how they can contribute to PA management

DAY TWO

WORKING GROUPS

Five working groups were formed to deliberate, and provide recommendations on, the main themes. The groups' findings as presented during the final plenary session, were as follows:

Presentation on Forms and Functions of Protected areas in the Next Millennium

Initially, game reserves and, later, national parks were established to protect species of specific interest, such as wildlife and natural forests. Protected areas will continue to be special places for conservation of biodiversity, ecosystem functions and services. Protected areas and other conservation areas will have diverse and flexible management systems to match the diversity of these areas and their values including aesthetics, habitat mosaic, biodiversity, cultural features, ecosystem services, education, people, economics and recreation.

It is important to rationalise the existing PA network to:

- make it more representative
- redefine the status of some of the existing "paper parks" (e.g. through degazettement)
- have a more systematic and consultative process of establishing new protected areas, instead of *ad hoc* and arbitrary methods
- monitor ecosystem changes and threats, and redefine management approaches accordingly

Protected areas should be retained as one category in a broad spectrum of conservation areas. For historical reasons, the term "protected area" has some negative connotations and resentment. Use of the term "conservation area" is more friendly and also gives more flexibility in management options.

The management of protected areas as islands isolated from surrounding ecosystems, land uses and communities does not work. Protected areas should be managed as part of a holistic approach to land management, encompassing a spectrum of human activities, and designed around an integrated consultation process amongst social sectors. This will lead to broadening the constituency on which conservation is based.

Ecosystems conserve values that are of international importance; for example, carbon sequestration and climate stabilisation. Therefore it is important to recognise the emerging network of international protected areas, for example World Heritage sites, Biosphere Reserves, Ramsar sites and IBA sites.

As populations increase, and resources become scarce, conflicts over natural resources and ecosystem services may increase. Cooperation and collaboration between states in management of Protected areas can contribute to international understanding and avert conflicts.

To incorporate a broader range of ecosystem functions and more compatible interaction between components, Protected areas should be planned and managed within larger systems or ecoregions. This should include the establishment of trans boundary protected areas, as well as action to:

- integrate PAs and land use planning/reform/tenure
- mainstream PA to decision making
- carry out economic valuations of PAs for better understanding of ecosystem services

It is important to recognize the linkages between conservation and other aspects of human development. While conservationists may not always be specialists in these fields, but they can strive to influence policies and programmes of those who are through partnerships and dialogue.

Presentation on Institutional Change

The highest possible political profile should be maintained for protected areas as a means of biodiversity conservation. The relationship between protected areas in natural resource management, rural development and tourism should be fully taken into account in defining appropriate ministerial affiliations. Those countries that have several existing protected area agencies should grant a mandate to each agency to establish the required linkages to attain the common goals of biodiversity conservation.

All countries need to ensure that they have a revised legal and policy framework which takes account of existing initiatives (such as NEAPs and BSAPs) that facilitate the establishment of appropriate institutions for national, regional, and international policy implementation, and enable innovation to address arising issues such as user rights and delegated

powers.

The gaps that exist in current policy include the following:

- Policies encouraging activities which degrade biodiversity (perverse incentives e.g. industry, agriculture, fisheries)
- Outdated/inadequate/uncoordinated/conflicting/sectoral/policies and laws
- Inadequate, or lack of, policy and legal support for stakeholders participation, access to resources and security of tenure
- Inadequate penalties and enforcement of laws
- Lack of political awareness and commitment
- Inadequate integration of biodiversity concerns (For example, EIAs into the planning of implementation of development activities)
- Lack of policies for reinvestment of revenue generated from biodiversity by government and private sector

Recognizing that protected area management objectives will change, there is need for a change in the structures and functions of the management agencies to enable them undertake roles for which they have a comparative advantage. Such roles include ensuring national interests, settling management objectives, providing regulatory oversight of other organizations involved in PA management and promoting the conservation vision developed with other stakeholders. Strategies for implementation should be discussed and developed with partner agencies, and regulated and facilitated by the national agency.

In order to meet these new challenges to respond to the new functions envisaged for national agencies for protected area management, substantial internal restructuring and reform will be required. For this to work effectively, organisations need to unite behind a common vision of their objectives. Broad political support must be built as part of developing this common vision and must be compatible with broader changes in governance, such as decentralization.

New functions will lead to new structures and it is expected that smaller, better-targeted, more professional and more efficient institutions will evolve. It must be noted that the management of such changes cannot be left to chance, and will need professional support and adequate researching.

There is need for the following types of reform within protected area agencies:

- Internal reforms: leaner, more effective conservation institutions, incorporating mechanisms for managing change
- Appropriate legal, policy framework in support of conservation
- Establish new models based on partnerships, consultation and devolution of authority
- New and innovative financing mechanisms for conservation

Legal and policy reforms need to take into account of:

- broad national reviews of policy and legal framework;
- legal means for meeting international commitments and obligations;
- regional harmonisation of conservation policies and laws; and
- revised legislative and policy framework to enable innovation, user rights, and appropriate institutions.

The financial realities of the conservation of biodiversity within Eastern Africa's protected areas network requires commitment and partnership between the national bodies concerned, and the international community. The global services performed by the region's protected areas should be recognized and can be offset by the world's donor nations undertaking vital processes of debt cancellation, providing adequate funds to the GEF and other mechanisms, and recognition of the enduring recurrent costs that must be incurred to manage those areas.

Crucial to sustainable financial management will be sound internal financial management by protected area authorities using a business planning approach. All opportunities for revenue generation to increase income and effective management of expenditure to reduce costs must be explored and implemented.

Once this is achieved, funding shortfalls can be identified and PA authorities will be in a stronger position to solicit funds from national and international sources to meet the shortfalls, using both economic and financial arguments. Some opportunities for funding which can be pursued are as follows.

- Raising revenue from outside users (especially tourists)
- Boosting alternative sources of income, such as concessions
- Creating trust funds
- Establishing friends organisations

- Capturing existence values (charge premium for special places)
- Stopping leaks in income
- Seeking compensation for incompatible use
- Negotiating changes for ecosystem services (such as water-source protection)
- Seeking business partnerships and sponsorship
- Engaging in business planning, not just management planning

Market prices should:

- reflect the full value of biodiversity and costs associated with its degradation, including social, cultural and ecological costs;
- establish and improve user fee prices
- develop sustainable markets for biodiversity products and shut down unsustainable ones;
- improve access to biodiversity markets by local community; and
- encourage investment in biodiversity conservation through tax breaks, soft loans, waiver of duties, etc.

Presentation on Strategic Partnerships

The following broad range of stakeholders was identified:

- Governments
- NGOs
- Local communities
- International organisations
- Media
- Private sector
- Regional organisations
- National organizations
- Public sector
- Resource user groups

The goal of establishing partnerships is to ensure sustainability of protected areas so that they are maintained and enhanced through improved management and representativeness.

There several opportunities for promoting partnership:

- Enabling/policies and legislation
- Willingness among stakeholders to cooperate (enter into partnership)
- Diverse and rich natural resources in the region
- Funding mechanisms for conservation
- Regional and international conventions
- Many potential partners
- Indigenous knowledge and traditional forms of management
- Emergence of innovative management approaches

To be successful, strategic partnerships for protected areas and biodiversity management needs to address both the potential partners and their respective roles. Mechanisms for this could include:

1. participatory approaches to policy formulation, development of management strategies
2. sharing roles, responsibilities, benefits, risks, information, etc.
3. devolving responsibilities to appropriate partners
4. reviewing, developing and rationalising policies
5. develop capacity for effective partnership

The following are types of partnerships that could emerge:

- Collaborative management agreements
- Memoranda of Understanding
- Concessions, leases, licences, etc.
- Contracts
- Developing capacity in information, skills, and appreciation of PAs

- Monitoring and evaluation

The potential roles of various players are summarized in the following table:

Player	Potential Roles
Media	Awareness, advocacy, networking, public education
Private Sector	Management, funding
Regional Organizations	Regional policy, C.B., research, funding, networking
National	Management, S.A.O.
GO's	Policy, management, funding, enforcement
NGO's and CBO's	Awareness, education, advocacy, research, management, funding
Local communities	Management, enforcement, information
International Organizations	Funding, technical assistance, advocacy, research

Presentation on Incentives for Conservation

Five areas of incentives were considered important:

- Revenue/benefit sharing mechanisms
- The user pays principle
- Tax breaks and other incentives and disincentives
- Delegation of authority
- Access rights for management strategies.

The issue of incentives is well articulated by Article 11 of the Convention on Biological Diversity (CBD) that urges states to put in place social and economically sound incentives to encourage protected areas management activities, communities, NGOs and the private sector to conserve biodiversity.

The specific actions proposed to institute incentives fall into two categories.

1. Policy and Legal Framework

- Develop and implement policies and laws that discourage activities which degrade biodiversity (e.g. agriculture, fisheries and industry)
- Update, improve, co-ordinate and make consistent sectoral policies and laws which touch on biodiversity and PAs
- Ensure policy and legal support for stakeholder participation, access to resources and security of tenure inside and outside PAs
- Impose realistic penalties and ensure enforcement of laws
- Improve political awareness and commitment
- Reward for good practices
- Integrate biodiversity into planning and implementations of development activities
- Promulgate policies for reinvestment of revenue and profit generated from biodiversity by governments and private sectors

2. Markets and Market Reform, what market prices should reflect

- Market prices should reflect full value of biodiversity and the costs associated with its degradation (including social, cultural ecological values)
- Establish and improve user fees, prices and sustainable markets for biodiversity products and close unsustainable ones
- Improve access to biodiversity markets for local communities
- Encourage private sector (local and international) investment in biodiversity Conservation and PAs, e.g. through tax waivers, soft loans

It is important to strengthen and work with local institutions (rights knowledge and management systems) in biodiversity and protected area conservation, and increase the autonomy of institutions dealing with biodiversity conservation and protected areas.

Linking protected areas to Sustainable Development

The following recommendations were made.

1. Sustainable conservation recognised as a legitimate and viable land use option
2. Economics values (goods, services, attributes) known and realised
3. People burdened should benefit first (policy, decision making equity, integration, exclusion, users pays)
4. Negotiable sacrifice for conservation development
5. Informed politicians, leaders and other stakeholders at all levels (information, guidelines)
6. Guidelines for developers available, development activities should not compromise conservation goals
7. Transparency at all levels (political, managerial, multinationals, NGOs)

SYMPOSIUM CONCLUSIONS

The climax of the symposium was the crafting of a vision statement on the future of protected areas in Eastern Africa. A draft statement was prepared and presented to the plenary and comments sought from the participants. The drafting committee was given the mandate to incorporate these comments and produce a final statement. This was done and the statement endorsed by the Regional Advisory Committee in its meeting on 18 September, 1998.

The *Statement on Protected Areas and Biodiversity Conservation in the New Millennium* was the main output of the forum. The conclusions of the symposium may also be summarised as follows:

- Protected areas will continue to serve as special places for conservation of biodiversity, ecosystem functions and services, scenic, cultural, spiritual and pristine values;
- Management of existing protected areas should be improved through concerted efforts at all levels of society;
- Protected areas are an important category in a wide range of conservation areas with different ownership and management patterns;
- The majority of biodiversity lies outside protected areas. To conserve it, broaden the scope of conservation by involving more stakeholders, and linking conservation to sustainable development;
- NGOs represent an important human resource close to people and should play a more important role in conservation in future: as owners/managers of conservation areas, or by playing other important roles such as advocacy and building bridges between different stakeholders; and
- To realize a new vision for protected areas, and to achieve more effective conservation, a new alliance is sought at local, national, regional and global levels, to pool talents, capacities and resources.

"PROTECTED AREAS AND BIODIVERSITY CONSERVATION IN THE NEW MILLENIUM"

The NGO Perspective

“PROTECTED AREAS AND BIODIVERSITY CONSERVATION IN THE NEW MILLENNIUM”: *The Ngo Perspective*

Lenana House, Nairobi,
15 September, 1998

Introduction

Previously, the focus of IUCN's work in protected areas in Eastern Africa has been with government management agencies. These agencies are among the Union's oldest members in the region and it was felt that they should be given an opportunity to consult with newer members to chart the future direction for management of protected areas.

Therefore, IUCN EARO organised a one-day meeting; an opportunity for NGO representatives from Ethiopia, Kenya, Tanzania and Uganda to discuss their perspectives and record a statement for presentation at the regional symposium scheduled for a later date.

Participants were welcomed to the forum by Dr E. Tukahirwa, the Regional Representative of IUCN in Eastern Africa. A keynote address was given by Mr Mengistu Wondafrash of the Ethiopia Wildlife and Natural History Society. The first plenary session concluded with general discussions on issues emerging from the participants' experiences in biodiversity conservation and protected area management.

Thereafter, participants held group discussions that covered two main issues:

- Biodiversity conservation and the role of protected areas
- The role of NGOs in biodiversity conservation

At the end of these discussions, participants drafted the *NGO Statement on Protected Areas*.

NGOS PERSPECTIVE IN PROTECTED AREAS MANAGEMENT: A GENERAL OVERVIEW

Mr Mengistu Wondafrash, Ethiopia Wildlife and Natural History Society, Ethiopia (Guest Speaker)

Introduction

The most important biodiversity sites of Ethiopia are threatened because of inadequate awareness of conservation goals and values; insufficient basic scientific information upon which to make sound management decisions, and a deficiency of economic and professional capacity and dependable infrastructure. The major forms of the threats are overgrazing and encroachment from nomadic pastoralists, shifting populations and permanent agriculture, uncontrolled fires, settlements and associated cutting of wood for construction and fuelwood, abuse of natural resources, poaching and illegal hunting. These problems are exacerbated by rapid population growth, civil unrest and famine in the drought stricken parts of the country.

Various government institutions have been set up to ensure the conservation and proper utilization of the rich biodiversity resources the country is endowed with. The conservation of biodiversity needs high inputs of resources and, therefore, the capacity of these institutions has to be strengthened by the involvement of several external governments, international donor agencies and conservation-oriented organizations based both in the country and abroad. For convenience, some of the critical sites for biodiversity conservation have been identified as protected areas and put under respective institutions set up for the purpose. As a matter of priority, most of the resources and efforts have been directed into the management of national parks, sanctuaries and national forest priorities. Yet, even these are currently threatened, and management is at its best, minimal in most areas. Moreover, most of these protected areas systems now exist on paper only and have practically ceased to exist as conservation sites.

This short paper does not try to go deep in detail to discourse on the current status of protected areas, the type of natural resources they are endowed with and the crucial threats they are suffering. Rather, it tries to summarize the type of protected areas network and the roles played by various external governments, NGOs, donor agencies and friends of nature in the conservation of protected areas systems and threatened species.

The Concept of Protected Areas Systems

The term "Protected Areas" has different meanings to different people. To those involved in the wildlife sectors, the word applies to four categories of land use: national parks, wildlife reserves, sanctuaries and controlled hunting areas. The term applies exclusively to areas that are of great importance for large mammals. Many people are not comfortable with this usage, as the term does not include important World Heritage Sites and biodiversity centres such as forests, wetlands (especially swamps, which are mostly considered to be *waste lands*) and other natural biomes.

Therefore, there are many biodiversity rich sites in the country which are not included in the existing protected areas system. This has resulted in a big gap in the conservation of the country's biodiversity resources. In the context of wildlife protected areas, although most of the resources have been directed into the management of national parks and sanctuaries, to date, only two of the country's protected areas -Awash and Simen Mountains National Parks -have been legally gazetted. Other areas still lack legal protection. The remaining conservation areas and national forest priority areas have been so declared, and are then managed as existing protected areas. However, as this is mostly theoretical, the long term future of the country's critical sites is in question.

LIST OF PROTECTED AREAS IN ETHIOPIA

1. NATIONAL RESERVES	4. CONTROLLED HUNTING AREAS
Abijata -Shalla Lakes	Afdem-gewane
Awash -Gazetted	Akobo
Bale Mountains	Arsi
Gambella	Awash West
Mago	Bale
Nechsar	Borena
Omo	Boyo Swamp
Simen Mountains -Gazetted	Chercher and Arba Gugu
Yangundi Rassa	Dabus Valley
2. WILDLIFE RESERVES	Eastern Haradghe (Harar-Wabi Shebelle)
Alldeghi	Erer-Gota
Awash West	Jikao
Bale	Maze
Chew Bahir	Mizan-Teferi
Gewane	Murle
Mille-Serdo	Omo West
Shire	Segan Valeey
Tama	Tedo
3. SANCTUARIES	5. NATIONAL FOREST PRIORITY AREAS
Babile (for elephant)	Demarcated forest -27
Senkelle (for Swayn's hartebeest	Undemarcated forests -38
Yabbello (for birds, Swayn's hartebeest, zebra and kudu)	
Kuni Muktar (for mountain nyala)	6. WETLANDS
	Boyo Swamp, Lakes Anijata and Shalla as part of Abijata-Shalla Lakes NP Lakes Abaya and Chamo as part of Nechsar NP
	7. Other biodiversity rich centers: Data not available

INSTITUTIONAL SET UP

Government offices:

- Ethiopian Wildlife Conservation Organization (EWCO): responsible for protected areas
- Natural Resources Management and Regulatory Department (NRMRD): for management of National Priority Forests
- Environment Protection Authority: responsible for Impact Assessment

Almost all the wildlife protected areas and national priority forests are managed by regional state institutions and receive some technical assistance from EWCO and NRMRD. Exceptions are Awash and Yangudi Rassa national reserves, and Senkelle and Babile sanctuaries that are under EWCO, and Mnagesha Forest which is managed by NRMRD.

Local NGOS

The Ethiopian Wildlife and Natural History Society (EWNHS)

The Ethiopian Heritage Trust: involved in management and protection of the nation's historic buildings, monuments, countryside, etc.

Collaboration with EWCO

- EWNHS: biodiversity research and environmental awareness
- GEF: development of the protected areas system and the Rift Valley lakes
- UNDP: rehabilitation of protected areas
- EU: rehabilitation of three national parks in the southern region
- CARE-AWASH: integrated development (parks and communities)
- Italian Cooperation (COOPI): Senkelle Swayn's hartebeest project
- United Nations Capital Development Fund (UNCDF): rural development at Simen Mountains National Park
- WWF: Bale Mountains National Park, conservation in high forest areas, capacity building, park/community development
- Japan International Cooperation Agency (JICA): technical assistance, volunteer services and consultancy at Awash NP, Senkelle Swayn's hartebeest sanctuary and other priority forests (studying *Tragelaphinae* and *Suidae*)
- Austrian Government: tourism development, Simen Mountains National Park
- Swiss Government: baseline Survey and Management Plan, Simen Mountains National Park

Collaboration with NRMRD

- German Technical Cooperation (GTZ): advisory assistance to the forest administration
- Japan International Cooperation Agency (JICA)
- Farm Africa: joint forest management at Bonga and Chilimo-Gaji National Priority Forests and ecotourism development at Lake Langano
- SOS Sahel International (UK): Borena Collaborative Forest Management Project

These collaborators are mainly involved in the conservation and development of the forestry sector and work in close contact with the Natural Resources Management and Regulatory Department of the Ministry of Agriculture at both federal Government and state levels.

Important Bird Area (IBA) Sites and Protected Areas

Declared Protected Areas	Number	Selected as IBA sites*
1. National Parks	9	9
2. Wildlife Reserves	8	3
3. Sanctuaries	4	2
4. Controlled hunting Areas	18	3
5. National Forest Priority Areas	65	11+
6. Wetlands	3	20+
7. Other biodiversity centers		see below

*Plus more than 10 Prospective IBA Sites awaiting confirmation

The Role of EWNHS in the Conservation of Protected Areas

It has been stressed earlier that there are extremely important sites in the country that need to be included in the protected area network. These sites have been denied conservation actions because there is inadequate data to justify their importance in terms of biodiversity. In some cases, the destruction is so critical that the sites, along with their important species will be totally devastated even before they are studied and their existence is known. For one to take appropriate conservation measures, adequate information on the rich biodiversity resource base is indispensable. This kind of information is lacking and EWNHS is trying to fill the gap.

Through its Important Bird Area (IBA) Programme, EWNHS (a partner of Birdlife International) has identified and compiled descriptions of 69 sites within Ethiopia that are important for biodiversity. The data has been collected and compiled for dissemination in a directory. The directory will assist governmental and non-government bodies in identifying priority sites for conservation and promote their protection. No doubt this information will also serve to pinpoint critical sites for individuals or groups and organizations actively involved in the conservation of Ethiopia's biodiversity.

Although the sites are selected using scientifically defensible criteria (using birds as indicators), most of the existing protected areas have been pragmatically considered as IBA sites. The search for new IBAs sites continues. Accordingly, 48.6% of the Ethiopia's wildlife protected areas and 29.2% of the national priority forests area already selected as IBA sites and it is expected that many more forests will be included in the final list.

In addition to supporting the conservation of protected areas through provision of data and consultancy services to the relevant institutions and authorities, EWNHS has also tried to assess the biodiversity resources of IBA sites that are excluded from the existing protected area network. These sites can be grouped under the following four categories.

i. Globally threatened species

- 50 sites host significant numbers of threatened species of global conservation interest

ii. Restricted-Range Species have been selected for they hold significant component

- 18 sites host a significant component of the restricted-range species whose breeding distribution define an Endemic Bird Area (EBA) or Secondary Area(SA)

iii. Biome-Restricted Assemblage

- 22 sites host species whose distributions are largely or wholly confined to the Afrotropical Highland biome
- 17 sites host species whose distributions are largely or wholly confined to the Somali-Masai biome
- 6 sites host species whose distributions are largely or wholly confined to the Sudan-Guinea Savannah biome

iv. Congregations

24 sites host, on a regular basis, either:

- more than 1% of a biogeographic population of a congregatory waterbird species
- more than 1% of the global population of a congregatory seabird or terrestrial species
- more than 20,000 waterbirds or more than 10,000 pairs of seabirds of one or more species
- the site is known or thought to exceed thresholds set for migratory species at bottleneck sites.

COMMENTS AND CONTRIBUTIONS

- ⇒ There are over 1,500 NGOs registered in Uganda. More than 75% of these have an environmental component and therefore, play a complementary role to government. Compared to government agencies, NGOs are in a better position to have an impact as they have little or no bureaucracy and little protocol.
- ⇒ Some NGOs, like the East Africa Natural History Society (EANHS), are involved in research and raising environmental awareness. The Kibale-based NGO, KAFRED, is a rural, conservation-oriented CBO that is running an ecotourism centre that attracts tourists who wish to view birds and primates that are found in a wetland adjacent to a national park. The CBO is making money and the benefits can be seen in the surrounding communities.
- ⇒ Management agencies should design protection programmes jointly with local communities. A major challenge will be to orient and motivate the general public to market the resources of protected areas.
- ⇒ Similar challenges are needed to broaden and increase the knowledge base on natural resources and protected areas and to increase the participation of the private sector in protected area management.
- ⇒ In Uganda, the gazettement of protected areas is inadequate, especially with respect to IBA sites. There are more than 15 IBAs located outside the protected area network (e.g. in Kyogga).
- ⇒ Biodiversity is not seen as a single component, there are other socio-economic factors that affect the well being of the community. Short-term actions may appear effective, but they must take into account changes and the dynamics of local communities. In order to understand changes, it is necessary to analyse facts and generate models supported by scientific data. From experiences with conservation in coastal areas, it is clear that NGOs have a role in research and recording information. In research and data collection, NGOs can be assisted by other networks and influential NGOs.
- ⇒ In the past, many NGOs have limited their role to creating awareness. Currently, in southern Africa, some large NGOs manage protected areas. There are no NGOs in Eastern Africa undertaking similar work and responsibilities. It is possible that the reasons lie in different histories and conditions between eastern and southern Africa. International NGOs (INGOS) cannot get involved under current legislation.
- ⇒ Management of protected areas is expensive and NGOs are unlikely to raise the funds required. We either need to develop new management methods and/or involve the richer private sector.

- ⇒ If it becomes involved in conservation, the private sector will be attracted by the most profitable deal. However, it is possible to devise a strategy whereby a private agency that manages a highly profitable protected area, must also manage another, less profitable, site.
- ⇒ Governments are reducing support to research and, in some areas, most of the research is conducted by foreigners.
- ⇒ When the Uganda National Parks did not have an internal environmental education department, it relied on the services of the Wildlife Clubs of Uganda. In a similar attempt at resource sharing, the Institute of Development Studies is starting an environmental study centre where information will be available to other organisations and individuals.
- ⇒ To be more effective, NGOs should be more organised, develop partnerships and target a wider range of donors. NGOs should aim at building alliances that make a difference without losing their individual identity. They also need to devise strategies and implement programmes that complement the governments' rather than being in constant conflict.
- ⇒ NGOs are trying to develop their own space. Governments in Africa and elsewhere are becoming less dominant. In this region, government capacity is also shrinking. This is an opportunity for NGOs to approach government proposals to "take up the slack", including the management of protected areas.
- ⇒ Many NGOs have a narrow focus in biodiversity conservation. Greater involvement is limited by the individual missions on which they focus. The nature of NGOs is that they are built on values and, therefore, pass through different levels of development.
- ⇒ Protected areas should be managed like business entities, with business plans and budgets that enable managers to run them sustainably.
- ⇒ There is need to increase awareness and knowledge of protected area management. This can be achieved through the establishment of partnerships between local communities and protected area managers.
- ⇒ A common experience of working with NGOs is that "today they are here and tomorrow they can not be located". Sometimes the NGOs are too small to be viable and it is unlikely that they will make a significant impression in this region if they do not build their capacity.
- ⇒ There are many experiences in the region and we should be learning from these experiences to influence policy. There is a need to share experience and to think in terms of partnerships.
- ⇒ In Tanzania, the government owns all the land, including some important bird areas. The government also determines the role of NGOs in different sectors. With respect to forest management, the government is involved in policy formulation, budgeting, collection of revenue and other functions. How can NGOs convince the government that they can do more? Whom, among the various departments that often manage a resource, does an NGO approach with its proposal?
- ⇒ Improve management of protected areas. Protected areas have been a model for conservation which is an end in itself. However, they represent only a small piece of what needs to be protected.
- ⇒ The NGOs represent a strong positive force for a change. They are more representative, and closer to the people. They can help the government to manage the parks. They are also seen as competitors of government, which does sometimes bring conflict.
- ⇒ Recommendations are made and not referred to thereafter. Therefore, it is not clear whether efforts are being made to learn from past experiences and activities.

GROUP DISCUSSIONS: ISSUES RAISED

BIODIVERSITY AND THE ROLE OF PROTECTED AREAS

Key issues are:

- policies and approaches to protected area management
- minimum sizes for conservation areas
- zoning for varying levels of protection
- the concept of protected areas within a wider range of conservation areas

One of the discussion groups proposed the following elements of a regional vision for biodiversity conservation and the management of protected areas

1. Emphasis should be given to the communities living around PAs
2. Social, economic and ecological values of biodiversity should be clearly defined and communicated
3. Benefits and costs of conservation should be equitably shared among users
4. Conservation efforts should be comprehensive and based on participatory processes and partnerships between stakeholders
5. The protected area system should be expanded to include other important sites
6. Management of existing protected areas should be based on the principles of sustainable use

THE ROLE OF NGOS IN BIODIVERSITY CONSERVATION

Benefits

- Unlike governments, they have greater opportunities to develop new ideas
- Have capacity to mobilise stakeholders
- Have close links with CBOs and other stakeholders
- The democratization process will strengthen NGOs because CBOs and other stakeholders will be more enlightened and increase demand for services that NGOs can provide
- Good mobilizers of community awareness raising and advocacy
- Less bureaucratic
- Clear vision, values and are issue-based
- Close to resource users - act as a bridge between community and government
- Have experience in fund raising
- Diversity of NGOs and hence diversity of issues
-

Weaknesses

- NGOs not always focused in objectives
- Lack of community involvement in project identification - evaluation therefore leading to lack of sustainability
- Identify projects to attract funding rather than to achieve conservation
- Donor dependent
- Personality-driven rather than institutional
- Inadequate capacity
- Government hostility and lack of good will
- Not well coordinated: conflict and duplication

Roles of NGOs

- Networking, research, generation and dissemination of information
- Managers of conservation areas
- Advocacy, policy analysis and influencing, partnerships and bridge forming between community and government
- Commercialisation
- "Socio-economic reality"
- Practical networking for conservation support
- Increasing NGO effectively
- NGO relations with the rest of society

Impact of NGOs

In order to assess the impact of NGOs, it is necessary to answer two questions:

- What difference have NGOs made?
- What are the comparative advantages and disadvantages of NGOs versus government agencies?

CONCLUSIONS

The forum came to the following understanding on the challenges, visions and roles of NGOs and CBOs in relation to conservation of biodiversity and protected areas the new millennium.

Challenges for conservation

1. Rising human population and all the implications: poverty, diseases, food security, etc.
2. Maintenance of ecosystem services
3. Inappropriate institutions, laws and policies
4. Differing values for biodiversity at global, national and local levels

Vision for the new millennium: "Conservation Areas for Society"

*Protected areas are one group within a range of **conservation areas**. Conservation areas can be as small as community resource areas or as large as a group of cross-boundary national parks.*

The following are key issues that must be taken into account:

1. Social, economic and ecological values of biodiversity should be clearly defined and communicated
2. Comprehensive conservation should be based on a participatory process and partnership between stakeholders
3. Benefits and costs of conservation should be equitably shared among users
4. Effective conservation should be based on appropriate/secure land tenure
5. Conservation areas should be zoned for different levels of utilisation and be subject to agreed management processes by stakeholders. This may mean that strict conservation areas can have people resident under agreed conditions
6. National and regional biodiversity objectives should be met through a system of connected conservation areas

Emerging roles of NGOs in biodiversity conservation

As we begin the new millennium, NGOs should:

1. devise innovative approaches to biodiversity conservation, including taking on the management of conservation areas
2. enhance their capacity to mobilise and work with various stakeholders
3. create opportunities to develop effective coalitions for addressing conservation issues which can be used further (e.g. in advocacy)
4. Understand and know how to work with other sectors of society

ANNEXES

ANNEX 1: PRESS RELEASE: IUCN - THE WORLD CONSERVATION UNION CELEBRATES 50 YEARS OF CONSERVATION

IUCN - The World Conservation Union this year celebrates fifty years since its birth in Fontainebleau, France, in 1948. IUCN is the world's largest conservation organisation with a membership of over 900 governmental and non-governmental organisations from 138 countries.

IUCN is active in the Eastern Africa region with conservation activities in all the ten countries of the region: Comores, Djibouti, Eritrea, Ethiopia, Kenya, Seychelles, Somalia, Sudan, Tanzania and Uganda. IUCN's mission in Eastern Africa is to " *promote conservation of Eastern Africa's biodiversity, natural features and processes and to reconcile nature conservation with the development aspirations of the region's peoples*".

To that end, IUCN works with members and partners in the region to implement a broad range of activities, including the conservation of ecosystems (wetland, marine and coastal, forests), management of protected areas, environmental planning, and community awareness and empowerment.

Over the past five decades, IUCN has launched many core environmental debates - such as that on sustainable living - and has been instrumental in the development of a range of global conventions, such as the Convention on Biological Diversity (CBD), Convention on International Trade in Endangered Species (CITES) and Convention on Wetlands of International Importance (Ramsar).

IUCN's global 50th anniversary celebrations will take place in Fontainebleau, France, 3-5 November 1998. In Nairobi, Kenya, the seat of the IUCN Regional Office in Eastern Africa, celebrations will kick off with a one day NGO forum on Tuesday 15th September, followed by a two-day symposium on 16-17th September, 1998. The theme of the symposium will be " *Protected Areas and Biodiversity Conservation in the new Millennium*". Over 70 members and partners of IUCN, including donors, will participate. It is expected that the symposium will come up with a vision (or visions) for the future of Protected Areas in the New Millennium.

As part of the global celebrations, IUCN together with Reuters, will launch the "Reuters-IUCN Media Awards", in Fontainebleau on November 5th. These awards will be competed for by environmental journalists worldwide. The top award, to be given annually will provide the winners with a three month fellowship at Green College, Oxford University, with all expenses paid.

Details on the media award, and programmes of activities for the Nairobi and Fontainebleau events are available from *the IUCN Regional Office in Nairobi, P. O. Box 68200, Nairobi; Phone: 02 - 890605/12; Fax: 02 - 890615.*

ANNEX 2: REGIONAL VISION STATEMENTS

IUCN EASTERN AFRICA STATEMENT ON PROTECTED AREAS AND BIODIVERSITY CONSERVATION IN THE NEW MILLENNIUM

Africa as a continent has the greatest remaining flora and fauna of earth's history. Eastern Africa has the best representative area of this flora and fauna, as well as a great diversity of human cultures as a living part of this landscape. Recognising this:

1. Protected areas will continue to exist, but become more relevant to biodiversity, land and resource use, and land- and seascape management. They will be part of a spectrum of conservation and land use planning regimes to optimize the benefits and mitigate costs. These will have local, national, regional and global importance. Relevant stakeholders will be involved and there will be appropriate institutional arrangements.
2. Statutory conservation bodies will be leaner, and need strengthening to cope with change, and will be informed from past lessons. They will be more effective and efficient as many of their present roles will be devolved or shared with other institutions to cope with the increasing conservation demands.
3. National Conservation Agencies should establish linkages amongst themselves and other relevant institutions, through appropriate national and regional policies, to attain the goals of biodiversity conservation, and its integration into land use. Potential conservation partnerships need to be explored fully between national conservation agencies, NGO's and the private sector which recognize and build on each other's comparative advantages and recognize the roles, rights and responsibilities of each. Effective and efficient conservation will be achieved by devolving operational control to an appropriate and functional level.
4. Countries need to ensure that they have appropriate and more integrated legal and policy frameworks which recognize the need for a higher political profile for Protected Areas and conservation, and the integration of biodiversity concerns with natural resource management, rural development, urbanization, and industrial development. This will need political, policy, legal and financial support.
5. The people burdened with conservation costs should benefit first. This needs policy support, integration and should be equitable so that economic values can be realized and that distant and indirect beneficiaries also pay.
6. Crucial to sustainable conservation will be sound internal financial management by Protected Area authorities using a business planning approach. All opportunities to broaden the income sources should be fully explored and will then place authorities in a stronger position to solicit funds using both economic and financial arguments.
7. The financial and economic market for conservation needs to be diversified, and recognize the variety and scale of evolving conservation business arrangements. Access to such markets should be made easier, especially at the local level.
8. The range of conservation goods, services and attributes must be better understood in terms of the realistic values and costs of conservation.
9. Some international conventions will be increasingly important as markets and borders open, and as an opportunity for the appropriate use of biodiversity within Conservation Areas. However influence will need to be brought to bear on other international instruments so that they do not legitimize activities that are damaging to conservation.
10. Political leaders and other stakeholders at all levels, and from different fields will need to be better informed, and empowered concerning conservation. Those working with conservation will do so in a more transparent and accountable manner.
11. Strategic trade-offs will be needed to rationalize conservation estates of different nations. Increasing population will create competing demands for other forms of land use and will need to be resolved.
12. To achieve this vision of biodiversity conservation in harmony with the development aspirations of Eastern Africa, IUCN and its conservation coalition will need to support its partners so that biodiversity management will become an increasingly important component of economic land use. Biodiversity values will be better understood and integrated into national planning. Conservation areas will continue to be an important national land use in rural landscapes providing valued goods, services and attributes both locally, nationally and more widely. The costs and benefits of these values will be more widely shared with those most burdened benefiting the greatest.

NGO STATEMENT ON PROTECTED AREAS

Representatives of regional, international and national non government organisations and community based organisations met on 15th September at Lenana House, Nairobi at the IUCN Eastern Africa NGO forum. The forum came to the following understanding on the challenges, visions and roles of NGOs and CBOs in relation to conservation of biodiversity and protected areas into the next millennium.

Challenges for conservation

1. Rising human population and all the implications - poverty, diseases, food security , etc.;
2. Maintenance of ecosystem services ;
3. Inappropriate institutions, laws and policies ; and
4. Differing values for biodiversity at global, national and local levels.

Vision: *Conservation Areas for Society*

Protected areas are one group within a range of **conservation areas**. **Conservation areas** can also be as small as community resource areas or as large as a group of cross-boundary national parks. The following are key issues to take into account:

1. Social, economic and ecological values of biodiversity should be clearly defined and communicated;
2. Comprehensive conservation should be based on a participatory process and partnership between stakeholders;
3. Benefits and costs of conservation should be equitably shared among users;
4. Effective conservation should be based on appropriate/secure land tenure;
5. Conservation areas should be zoned for different levels of utilisation and be subject to agreed management processes by stakeholders. This may mean that strict conservation areas can have people resident under agreed conditions; and
6. National and regional biodiversity objectives should be met through a system of connected conservation areas.

Emerging roles of NGOs in Biodiversity Conservation for the Next Millennium

NGOs should:

1. Devise innovative approaches to biodiversity conservation - including NGOs owning and/or managing conservation areas;
2. Enhance their capacity to mobilise and work with various stakeholders;
3. Make the opportunities to develop effective coalitions for addressing conservation issues which can be further used e.g. in advocacy; and
4. Understand and know how to work with other sectors of society.

ANNEX 3: SYMPOSIUM PROGRAMME

THEME: "PROTECTED AREAS AND BIODIVERSITY CONSERVATION IN THE NEW MILLENNIUM"

Wednesday 16 th	<i>The NGO Perspective</i>
8.15 - 8.45	Registration and Introductions
	1 st Plenary Session, Chair: Eric Edroma, IUCN Regional Councillor
8.45 - 9.00	Welcome Address, Eldad Tukahirwa, Regional Representative, IUCN EARO
9.00 - 9.45	"Historical perspectives of Protected areas" Fred Kayanja, Uganda
9.45 - 10.30	"Biodiversity Planning and Protected Areas" Paul Siegel, WWF, Tanzania
10.30 - 11.00	<i>TEA/COFFEE BREAK</i>
	2 nd Plenary Session, Chair: Lota Melamari, Regional Vice-Chair, IUCN - World Commission on Protected Areas
11.00 - 11.45	"Non-Traditional Protected Areas" Steven Cobb, Environment and Development Group, UK
11.45 - 12.30	"Using Protected Areas More Effectively for Conserving Biodiversity", Humphrey Kisioh, Co-ordinator, Protected Areas Programme, IUCN EARO
12.30 - 13.00	Presentation of NGO Forum Findings
13.00 - 14:00	<i>LUNCH</i>
	3 rd Plenary Session, Chair: Tesfaye Hundessa, General Manager, Ethiopia Wildlife Conservation Organisation Facilitator: Geoffrey Howard, Co-ordinator, IUCN E.A. Regional Programme
14.00 - 15.30	Brief overview of Keynote Papers, Geoffrey Howard Presentation of other perspectives and discussions
15.30 - 16.00	<i>TEA/COFFEE BREAK</i>
	4 th Plenary Session Chair: Selbie Remy; Ministry of Environment, Seychelles
16.00 - 17.15	Summary of Day's Proceedings, Rodney Salm; Co-ordinator, Marine and Coastal Programme, IUCN EARO Points of Clarification; Topics & Tasks for Groups; Formation of Groups
17.15 - 17.30	Closing Remarks, Eldad Tukahirwa
17.30 - 19.30	Cocktail at Lenana House, Hosted by IUCN EARO

Thursday 17 th	<i>A Regional Symposium</i>
8.45 - 9.00	Guidance on the day's work, Eldad Tukahirwa
9.00 - 10.30	Groups convene and start work
10.30 - 11.00	TEA / COFFEE BREAK
11.00 - 13.00	Group work continues
13.00 - 14.00	<i>LUNCH</i>
	5 th Plenary Session, Chair: Eric Edroma, IUCN Regional Councillor
14.00 - 15.15	Group Work Presentations and Points of Clarification
15.15 - 15.45	<i>TEA/COFFEE BREAK</i>
15.45 - 16.00	" Statement on Regional Perspectives and Visions on Protected Areas and Biodiversity Conservation in the New Millennium" Synopsis of Group Recommendations and Draft Visions on PAs and Biodiversity Conservation in Eastern Africa, By Drafting Committee and presented by Mr. Ed Barrow, Co-ordinator, Forest Conservation and Social Policy, IUCN EARO
16.00 - 17.00	Discussions and further contributions; Consensus building for the Regional Statement for Presentation at Fontainebleau ; Mandate for Drafting Committee to finalise The Statement
17.00 - 17.15	Preparations for Global Celebrations by Dr. Eric Edroma, IUCN Regional Councillor; Closing Remarks by Dr. Eldad Tukahirwa, Regional Representative, IUCN EARO

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