The Implementation of Biodiversity-Related Conventio
A Kenyan case study

Mita Manek
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Introduction

The following report consists of a study of the state of national implementation of international obligations under biodiversity conservation and use in Kenya. The study focuses on the legislative and a policy measure adopted i also includes some consideration of ground level implementation. The latter has been included as it provides valu difficulties experienced in implementation. The study includes analysis of both the implementation of internatio only incidentally addresses questions relating to the state of biodiversity in Kenya.

The study is intended to address a framework of basic points in its analysis:

i) special circumstances affecting implementation;
ii) legislative and policy measures adopted to implement obligations;
iii) authorities/agencies responsible for implementation;
iv) legislative/policy measures to co-ordinate this implementation;
v) regional institutions/mechanisms to co-ordinate the application of regional agreements and/or t agreements
vi) problems identified in co-ordinating national implementation; and,
vii) best practice drawn from national experience.

This structure has been broadly followed (not necessarily in this order) but in the case of the analysis of the ((CBD) it has been subdivided according to the articles of the convention on the basis that this provides a clearer c addressed by the agreement.

Biodiversity policy in Kenya has historically been coordinated by the National Environment Secretariat (NES presidential directive and has never been provided with statutory legal status, and as a consequence has no direc NES has been consistently under funded and has thus been unable to respond to the breadth of its responsibili from dramatic developments such as the results of the United Nations Conference on Environment and De principal result of these shortcomings has been that NES has not been able to adequately coordinate the multiplic with mandates involving biodiversity issues. This has led to fragmented legislation, policies and implementa interests of the major lead agencies such as the Kenya Wildlife Service (KWS), the Kenya Agricultural Res Forestry Research Institute (KEFRI) and the National Museums of Kenya (NMK). Thus, while NES has had res national environment action plan (NEAP) and, more recently, a national biodiversity strategy and action plan (NB

use these processes to coordinate and achieve significant impact on the activities of the lead agencies.

The response to the difficulties experienced by NES has been the recent enactment of framework environm Environment Management and Coordination Act (2000). This Act has created a state of flux in Kenya's envirc represents a watershed that encompasses completely new administrative structures as well as specific standards. broadening of the traditional approach to questions of *locus standi*, or standing, in the Kenyan legal system. This l a recognition of standing without a showing of direct harm or personal loss: any Kenyan citizen now has the rigl the Kenyan environment. While the Act's establishment of a legally powerful National Environment Managemen represent a solution to the problems experienced by NES this will not be clear until details such as the func

determined. This is particularly true due to the fact that while the Environment Management and Coordination A biodiversity policy it leaves the details of many areas to the promulgation of regulations by NEMA. If NEMA able to attract the highest quality staff there will inevitably be significant problems and delays in the implementati

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1. State of Implementation of the Convention on Biological Diversity in Kenya

The Convention on Biological Diversity (CBD) objectives are set forth in Article 1 of the Convention, namely

> *"the conservation of biological diversity, the sustainable use of its components and the fair and equitable the utilization of genetic resources."*

The CBD is the first global comprehensive agreement to address all aspects of biological diversity[1]: genetic resou

Kenya has signed (11.06.1992) and ratified (26.07.94) the CBD. Contracting parties are required to individ implement the Convention according to their own particular circumstances. The following section analyses the ir Biological Diversity (CBD) in Kenya article by article. The theory underlying this approach is that the comple precludes a more thematic structure. Where appropriate linkages between the implementation of various art considering 'soft' obligations, such as recommendations or suggestions from Conferences of the Parties (C obligations created by the Convention itself but also those resulting from successive COPs.

Article 5. Cooperation

Kenya is a Party to the majority of environmentally related conventions and agreements and thus clearly ful through competent international organizations both in respect of areas beyond national jurisdiction and in res within its jurisdiction, as mentioned elsewhere in this report. There is also a long history of cooperation on cross in the case of the Serengeti – Maasai Mara migration routes but has frequently involved other cross border ecosys support for the UNDP-GEF East African Cross-Border Biodiversity Conservation Project, involving Kenya

[1] The Convention define "*biological diversity*" to include "*the variability among living organisms from all sources including, among oth aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ec*

commitment to cooperative management. The main weaknesses in cross-border cooperation are in the north of the effective and consistent management strategies.

Article 6. General Measures for Conservation and Sustainable Use

Kenya has developed a National Environment Action Plan (NEAP) and has completed the preparation of a draft Action Plan (NBSAP). A draft summary of the NBSAP has been made public and in particular has been communi Additionally Kenya has produced various sectoral strategies, plans and programmes, in particular the Forestry M Strategy.

In Part IV, Environmental Planning, the Environment Management and Coordination Management Act 200(environmental planning that seems likely to be significantly concerned with biodiversity. This system is buil Action Plan (NEAP) and the committee established to prepare and oversee that plan. It is envisioned that the cor information provided in provincial environment action plans. These will, in turn, be based upon district enviror what degree the district and provincial environment committees will have access to relevant expertise in the prepa NEMA is able to provide this there be some inherent difficulties with implementation.

The NEAP will be prepared every five years and be submitted to Parliament for approval. The effect of this is ex 38(l) where it is stated that the NEAP shall:

> *"be binding on all persons and all government departments, agencies, state corporations or other orga the National Assembly."*

The NEAP Committee is established as a fairly inclusive body including a wide range of government ministries for the inclusion of NGOs, the private sector and specialised research institutions. The one sector that is no committee, however, is communities themselves. This is frequently difficult to achieve but it would seem provincial committees that has been established could be used for this purpose.

The structure and inclusiveness of the NEAP Committee is indicative of general practice on environmental issue be the National Advisory Research Committee on Genetic Resources that includes representatives of eight Biosafety Committee is similarly broad in its makeup. This inclusiveness maximises the chance that environment in the various sectoral and cross-sectoral plans, programmes and policies of the Government of Kenya. Howeve

ministerial and inter-agency cooperation there are sometimes difficulties in communication between relevant parties resulting from factors such as inadequate staffing levels and, occasionally, institutional rivalries.

Article 7. Identification and Monitoring

Kenya's First National Report to the Conference of the Parties includes a section specifically addressing monit tends to speak in terms of what should be done rather than what is. This reflects the on the ground approach comprehensive approach. Different lead agencies look at different areas and issues and act on the basis of th context. The lead agencies do tend to cooperate to varying degrees but this occurs on an ad hoc basis and is further point to be noted is that most monitoring tends to be on the basis of indicator species rather than any comp and evaluation.

Specific agencies and activities involved with identification and monitoring include:

1. In 1992 Kenya produced its National Biodiversity Country Study. This has formed the basis of a variety o NEAP and NBSAP.
2. The Kenya Wildlife Service has considerable capacity for monitoring and evaluation that is genera surrounding 'buffer zones'. In recent years this has expanded with activities aimed at evaluating variou such as Ramsar and the WHC. KWS monitoring and evaluation activities are, like many of their other str particularly elephants, as indicator species. KWS is also probably the most important agency in monitorin it has large numbers of staff, principally in the form of rangers but also including numerous scientists, ei field. KWS also has capacity to undertake environmental impact assessments and this contributes grea activities.
3. The National Museums of Kenya, through its botanic gardens and herbarium, is extensively involved i focused on identification and monitoring. While these initiatives have been well planned and executed, a a cross-indexed database with assistance from the Royal Botanic Gardens at Kew (UK), they have bee skilled
   manpower. The result of this is that some areas of the country have still never been covered by a collecti visited for forty years or more. This is particularly true in the north of the country where the resources fo to the often need for accompanying security.
4. The Government of Kenya also has a well established Department of Resource Surveys and Remote S suffers from the normal problems of resources but is also frequently not involved in the planning stages of

5. In the pursuance of their mandates the main research universities (through a variety of departme management, botany, pharmacology and pharmacognosy etc.) frequently produce information of relevan Also through the nature of their activities the universities tend to have better connections to lead ager produce is relatively well distributed and accessible. The research universities almost exclusively cons relatively numerous private institutions are only recently beginning to conduct substantive research activit
6. A wide range of NGOs and research institutions conduct significant activities in Kenya. These tend to be provide a wealth of data useful for baseline studies and frequently also ongoing monitoring and evaluatic tend to be conducted more by research institutions than NGOs while the NGOs are quite effective in asse great potential as indicators. The level of integration of this information with that produced by other agen individual characteristics and mandates of the organisations involved.

Relative to the resources available Kenya conducts a wide range of effective identification and monitoring ac coordination and direction. This results mainly from a situation of overlapping mandates with the lack of an Consequently the currently ongoing implementation of the Environment Management and Coordination Act 20(are two articles of particular relevance:

> Article 38*"The national environment action plan shall –*
> *a) contain an analysis of the natural resources of Kenya with an indication as to any pattern c quantity over time;"*
>
> Article 69(1) *"The Authority shall, in consultation with the relevant lead agencies, monitor: -*
> a) *all environmental phenomena with a view to making an assessment of any possible cha possible impacts; .."*

Article 69 could be interpreted as providing the mandate for NEMA to act as the umbrella agency for identificatio

Article 8. In-situ Conservation (excluding Article 8(j))

The core of Kenya's implementation of Article 8 of the CBD, can be found in the provisions of the Wildli (Amendment) Act, 1989. This Act establishes the Kenya Wildlife Service and contains its mandate. The main op Article 3A – Functions of the Service. In brief these cover all issues relating to protected areas, terrestrial an management of wildlife in general. KWS has traditionally taken a broad view of the term 'wildlife' and, while its

always had considerable interest in flora and other types of fauna. A substantial part of the reasoning here has bee maintained then this will automatically protect the habitat of flora and other fauna. A good example of this broad protected areas, such as Saiwa Swamps National Park, have been established for reasons other than those inv mandate, commitment from the Government and significant donor support KWS has consistently been able to r protected areas in an effective manner with substantial breadth and depth to their activities.

The Forest Department is the other agency that manages a system of protected areas that are critical for *in-situ* initiatives here have included the Kenya Forestry Master Plan, the Kenya Indigenous Forest Conservation P Conservation and Management Project. Forest Department activities include an extension service for on-farm arrangements with KWS in the management of specific areas such as the Guineo-Congolian Kakamega Forest a Arabuko-Sokoke Forest. The Forest Department is also extensively supported by the work of the Kenya Forestry conducts a wide range of activities but particularly significant in the context of *in-situ* conservation are its researc communities living in and around key forest areas and also its efforts at supporting the propagation and cultivatio

The National Museums of Kenya also has an active role in *in situ* conservation activities. This principally consis such as the Plant Conservation and Propagation Unit (PCPU). The PCPU targets vulnerable areas and conducts e on rare, endangered and endemic species. Where necessary seed germplasm and replicate plant stocks can be stor

Kenya hosts several hundred NGOs, many with an environmental focus. A large number of these organisations activities whether targeted at specific geographic areas or particular species. However, NGO activities are not ge Kenya also acts as host for several specialised research centres, including the headquarters of three Internati (IARCs). The IARCs all have programs tying *in situ* conservation into their agricultural development goals. Ev coordination in either the planning or implementation of such activities.

Kenya's participation in the development of the Cartagena Protocol was led by the National Council for Science a continued to operate as the lead agency subsequent to the completion of the Protocol and plays host to a N Committee is inter-ministerial and cross-sectoral in nature and is aimed at ensuring effective planning as regards i Plant Health Inspectorate Services (KEPHIS) and the Kenya Agricultural Research Institute (KARI) have both a this field. The main difficulties in the field of biosafety in Kenya have been questions of resources and capaci relatively impressive capacity in biotechnology, in both scientific and policy terms, for a sub-Saharan African limit when addressing biosafety concerns. This problem becomes particularly acute when conflict of interest is several biotechnology multinationals have major interests in some of the research centres. There are various initi deficit, including the Biotechnology East African Regional Network (BioEARN) led by the Stockholm E

indigenous regional initiative, coordinated by an IARC, involving most of the research universities. These initi guaranteeing the future viability of biosafety capacity but are highly vulnerable due to donor dependency.

The monitoring and control of the introduction of alien species falls under the mandate of a number of agencies. acute problems experienced with invasions such as that of the Water Hyacinth in Lake Victoria. There is a histor well, as demonstrated by the introduction of the Nile Perch that also had major negative impacts on indigenous result most agencies, from the fisheries department to KWS have some actively engaged capacity in the field. institutions have also shown themselves to be innovative in addressing the impacts of invasive species. Althoug available would seem to indicate a successful strategy there is once again a problem of coordination, pa implementation. Examples of the impact of this can be seen in the numerous, often independent, strategies emplo This state of affairs can often be problematic as expertise is frequently highly sectoral and thus impact asses impacts, can be flawed. The legislative picture as regards alien species reflects this general situation. There is species issue is also covered by the mandates of almost all lead agencies without any overall coordinating agency possibility that this problem will be addressed by the establishment of NEMA as the Environment Manageme reference to alien species in several places, including articles 42(1)(c) and 51(e). However, this is likely to require the mandate provided by the Act is not particularly clear or strong.

Article 8j Traditional knowledge and related provisions

The CBD requires that, subject to national legislation, Parties respect, preserve, maintain and appropriately prom practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation diversity. These requirements are relatively subjective and difficult to assess in terms of implementation. Howe developed ever more detailed criteria for implementation.

Decision III/14. Implementation of Article 8(j)

The main requirement under this decision was a request that Parties develop national legislation and correspon obligations. Kenya has not yet developed such legislation but various legal and policy steps have been taken. I Management and Coordination Act 2000 does contain a provision related to Article 8(j):

> Article51 *"The Authority shall, in consultation with the relevant lead agencies, prescribe measures ade biological resources in-situ and in this regard shall issue guidelines for.. –*

f) integrating traditional knowledge for the conservation of biological diversity with mainstre

It is not clear whether 51(f) is a step towards the fulfilment of Kenya's obligations as it does not make direct r preserve, maintain and appropriately promote traditional knowledge. This will only become clear once NEMA i the issue.

At the policy level the Kenya Industrial Property Office (KIPO) has been making considerable efforts in its outre of traditional knowledge holders. This has been based upon the fact that KIPO would like to encourage informa various forms of intellectual property protection, principally utility models, technovations and trademarks. Ne expected to be passed in the parliamentary term beginning March 2001. This includes provisions for the prote further form of protection that KIPO would like to see used by traditional knowledge holders.

A number of lead agencies have instituted activities that are intended to further the goals of Article 8(j), th conducted by the Kenya Forestry Research Institute (KEFRI) and the National Museums of Kenya (NMK). KEF ethnobotanical gardens around the country that it is hoped will both act as local level *ex situ* collections and more the continued use of traditional medicines. NMK has established an institution that is best described as a QUANG Indigenous Knowledge (KENRIK) has thus far principally been involved in developing a bibliography of et Kenya. However, it hopes to become a coordinating agency for such research in the future, particularly throug Kenya Society for Ethnoecology.

Further initiatives have not yet been undertaken but all of the lead agencies relevant to the implementation of Art to commit themselves to a program of research on options for the development of national legislation for the pro knowledge in Kenya. This proposal is at an early stage of development but it is hoped that it will be underway donors have expressed interest in the project a key difficulty has been the availability of resources to develo activities prior to their commencement.

Decision III/14 also requested Parties to forward information and case studies to the Secretariat. Kenya's first traditional knowledge but simply made the observation:

"There are gaps in the legal framework regarding indigenous knowledge, as it is regarded as a product of na

[2] Summary of existing laws and regulations, p.16.

Consequently no substantive information has been forwarded as regards current initiatives and policy developme prepared to date are generally focused on the substance of knowledge rather than on legal and policy implications by individual academic researchers, thus none have been forwarded to date. However, it is expected that t legislation or regulatory measures will be based upon case study research so it is likely that the level of informatic

Article 9. Ex-situ Conservation

Provisions for the e*x-situ* conservation of biodiversity are quite widespread in Kenya with a number of agenci activities.

1. The National Genebank of Kenya. The Genebank has been operative for over ten years and has a collection species. Approximately half of these are currently commercially useful, either at the micro or macro level. The c considered to have commercial potential. Consequently biodiversity conservation tends to be incidental to th central to it. There is certainly consideration of the conservation status of the accessions held, and of the statu general, but there is no real policy of targeting endangered or threatened species that are not agriculturally usefu factors but the most significant of these is that the Genebank's parent institution is the Kenya Agricultural Rese have a mandate for broader conservation activities. Combined with this is the fact that limited resources and prioritise, broadening its mandate to cover all threatened and endangered plant species would clearly overwhe constituted.

2. The National Museums of Kenya (NMK) has a number of *ex-situ* conservation related activities, principally Biodiversity. These activities specifically target threatened and endangered species and ecosystems. Where ne limited storage of seed germplasm and conduct replication. NMK also houses a plant nursery display garden, th East African Herbarium. These departments contain a wealth of information, both current and historic, and the propagation and reintroduction activities where necessary. The PCPU, mentioned earlier in the context of *in-sit* these *ex situ* conservation strategies. NMK is also currently conducting large-scale collection missions in partners at Kew (UK) as part of Kew's Millennium Seed Bank project[3]. This project targets the arid and semi arid land thirds of Kenya's territory and intends to collect the widest possible range of all plant genetic resources from thos extent possible, within national capacities, duplicate samples will be deposited with appropriate national institutio

[3] This project also involves the majority of the other lead agencies such as KWS, the Forest Department and KEFRI but NMK is the coo

3. The Kenya Forestry Research Institute (KEFRI) contains several sections with activities that relate to the reintroduction of indigenous tree species but also other forest related species, particularly medicinal plants. The sections is the seed unit that replicates and freely distributes tree seeds. These are mostly indigenous species b commercially useful species. KEFRI has also undertaken significant activities involving medicinal plants, incluc and the establishment of a series of ethnobotanic gardens in various parts of the country.

4. The Forest Department (FD) maintains the Nairobi Arboretum that contains approximately 100 hectares of With the assistance of an NGO, the Friends of Nairobi Arboretum, there has been considerable success in the mar

5. The public universities, principally the University of Nairobi (UoN), have played a significant role in *ex-si* times. This has mostly been based in botany and agriculturally related departments as part of their mandate. How plagued by chronic under funding – UoN is frequently unable to even buy light bulbs for drying plant specimens.

6. The Kenya Marine and Fisheries Research Institute (KEMFRI) has significant stations on the Coast and on La field stations at other lakes around the country. It has some capacity for *ex-situ* conservation activities but of probably suffers the most from under funding and consequent problems of capacity. With its headquarters problems of coordination as nearly all other research centres are based in and around Nairobi.

7. The International Agricultural Research Centres (IARCs) located in Kenya include two with significant *ex-situ* for Research in Agroforestry (ICRAF) and the International Livestock Research Institute (ILRI). Both of these ir national level efforts both in terms of extension work and capacity building and more directly in terms of provi International Centre of Insect Physiology and Ecology (ICIPE) also holds a small amount of material, particular with insect pathogenic value. ICIPE also has significant capacity for insect breeding although this has not conservation and reintroduction purposes. Kenya is also an active supporter of other IARCs, particularly the Inter Centre (CIMMYT), the International Rice Research Institute (IRRI), the International Crops Research In (ICRISAT), the International Institute for Tropical Agriculture (IITA), the International Centre for Tropical Agri Potato Centre (CIP).

8. A number of community based organisations (CBOs) and NGOs conduct *ex-situ* conservation activities, mostly technology type. Such initiatives include the ethnobotany project of the Ilkerin Loita Development Projec establishment of community seed banks by the Intermediate Technology Development Group – Kenya (ITDG-Ke

As the above information illustrates *ex-situ* conservation strategies are fairly widely practiced in Kenya. Howe agricultural, and to a slightly lesser extent ethnomedical, resources rather than targeting threatened and end general. This focus is mostly one of necessity as funds and infrastructure are extremely limited, threatening the projects. NMK conducts some activities with a broader scope but these are still limited by resource and Environment Management and Coordination Act contains the following provisions:

> Article52 *"The Authority shall, in consultation with the relevant lead agencies –*
> *a) prescribe measures for the conservation of biological resources ex-situ especially for those species thr*
> *b) issue guidelines for the management of:-*
> *i) germplasm banks;*
> *ii) botanical gardens;*
> *iii) zoos or aquaria;*
> *iv) animal orphanages; and*
> *v) any other facilities recommended to the Authority by any of its Committees or considered n*
> *c) ensure that species threatened with extinction which are conserved ex-situ are re-introduced into t where:*
> *i) the threat to species has been terminated; or*
> *ii) a viable population of the threatened species has been achieved."*

This Article clearly provides for an effective implementation of CBD Article 9 but given the experiences of the would seem to be a significant question over Kenya's capacity to successfully follow through on these require commitments from the donor community. The donor community has been supportive in the past but this suppor specific nature, something that is not effective for a comprehensive program of *ex-situ* conservation.

Article 10. Sustainable Use of Components of Biological Diversity

Through the structures of its National Environment Action Plan (NEAP) and National Biodiversity Strategy an developed a potentially effective structure for ensuring the sustainable use of biodiversity. These policies Management and Coordination Act but their effectiveness is yet to be fully established. The NEAP has a longer and has had some measure of success but lead agencies still mostly tend to operate sectorally with collaborative i

than the rule. This does often lead to effective measures and strategies in particular geographic regions or c constituting a comprehensive approach.

Customary use of biodiversity is encouraged selectively. In general Government initiatives in the agricultura introduction of improved varieties and increasing levels of technology with the aim of increasing yields and t Equally health policies tend to focus on the provision of western health care and medicines. However, some lea practices within their own operations. Particularly notable are the roles of the Ministry of Culture, KEFRI, the (KEMRI) and to some degree NMK in encouraging the use of traditional medicines. These initiatives freque sustainable use practices.

Remedial action in the case of degraded ecosystems is a difficult proposition in Kenya. KWS has undertaken su certain protected areas, such as Amboseli National Park. However, the more general phenomenon is that resou attempting to prevent further degradation, principally brought on by the enormous population pressure facing s ways this emphasis is a policy decision in that Kenya's emphasis is on preventive measures rather than reme available these are considered to provide greater benefits when applied to preventive actions. In general the poli provisions[4] support the concept of remedial action but in practice such activity is rare to non-existent beyond Permanent Presidential Commission for Soil Conservation and Afforestation that advises the government on ren As with most other initiatives the Commission is handicapped both by the scale of the problem and the limited res

Cooperation between the public and private sectors is generally encouraged, principally in an informal manner legislative provisions where committees are gazetted so as to include representation from the private sector Management Coordination Act provides for the inclusion of four representatives of the business community in the Committee. Historically cooperation between the public and private sectors has always been most effective convergence of interests since Kenya's main tourist attraction is its environment. Most national parks contain tou least have very close relationships with one's nearby. This form of cooperation is strictly monitored and enforce been occasional problems the relationship has generally been a mutually supportive one. In some instances, mos but also including the Bamburi Cement Company's restoration of an old quarry as an *in-situ* conservation and ec extended to companies developing individual initiatives but this practice has yet to spread more widely.

The most direct encouragement of sustainable use practices, particularly when considering customary use issu some degree research centres. However, as mentioned previously many of these activities tend to focus on very sp questions. When this is combined with the fact that the coordination and recording of NGO activity is generally

[4] Most prominently the Environment Management and Coordination Act in Part IX covering environmental restoration orders.

not being employed to its full potential. This problem can, to some degree, be addressed by Government policy l
means that such a solution can never be more than a contributory factor.

Article 11. Incentive Measures

Incentive measures for the conservation and sustainable use of biodiversity are difficult to assess in Kenya. Wh
negative, prohibitive, nature. The current provisions addressing EIAs that are contained within the Environment
do not specifically mention biodiversity as a consideration. However, this is principally because the Act clearly er
appropriate tool for dealing with such questions. Given Kenya's past experience in the execution of EIAs, at le
significant input into the process, it would seem likely that biodiversity conservation will be a major considera
experts in EIAs are likely to come from the existing lead agencies, as they are the major source of such expe
exception these agencies place a high priority on biodiversity considerations. Further prohibitive measures
Management and Coordination Act, namely environmental restoration orders and environmental easemer
mechanisms do not specifically address biodiversity conservation but do contain provisions that could be consider

Article 108(4) *"Without prejudice to the general effect of the purposes set out in subsection (2) an er*
require a person on whom it is served to.. –

b) restore land, including the replacement of soil, the replanting of trees and other flora and
outstanding geological, archaeological or historical features of the land or the area cont
specified in the particular order;

f) prevent damage to the land or the environment, aquifers beneath the land and flora and fa
specified in the order or land or the environment contiguous to the land or sea specified in

Article112(4) *"Without prejudice to the general effect of subsection (2), an environmental conservation*
land so as to –

a) preserve flora and fauna;"

Both environmental restoration orders and environmental easements include the direct penalties of having to und
bear the cost thereof. Environmental restoration orders also carry additional provisions for the award of damage
and for the awarding of costs. Finally there is the fact that, in Part XIII, the Environment Management and Coord
most severe statutory penalties, in terms of both fines and prison terms, for environmental offences.

The Wildlife (Conservation and Management) (Amendment) Act (CAP 376, 1989) also contains a range of i nature. There are the more obvious penalties for the infringement of the Act's provisions but there are also imp KWS has the ability to set terms and conditions for, or even take control of, areas that are considered vital to under its jurisdiction. Consequently landowners whose property adjoins protected areas have a strong incentive these areas does not produce adverse environmental impacts.

The Plant Protection Act (CAP 324, 1979) contains measures, once again generally of a prohibitive nature, aim agrobiodiversity. The principal intention of this legislation is to prevent the introduction and spread of disease impacts on agricultural crops. However, the provisions of the Act can be read as applicable to any pest or dis Accordingly this Act can also be seen as implementing the requirements of Article 8 of the CBD as it addresses th

Positive incentive measures, particularly as they relate to the private sector, have not been well developed in KEFRI do conduct activities, such as the provision of free tree seeds and extension services, as part of their mand internal policies of the lead agencies concerned rather than statutorily established. Despite significant political institutional level extension services have suffered badly in the recent period of severe budgetary pressure. Most with NGOs or other research institutions, have also made considerable efforts at developing alternative in communities, particularly those living in and around threatened forest ecosystems. Such initiatives are explicitly not really gained recognition in other legislative instruments. They do not, as yet, attract any particular rewards might encourage their implementation.

Article 12. Research and Training

The main thrust of the obligations contained in Article 12 is directed at developed countries to ensure support fo However, it is clear that developing countries also have an obligation to facilitate the provision of this support, p framework for its application. All of the public universities offer at least some training courses of relevance to bio these include the wildlife management courses offered by Moi University, the agriculturally related cours particularly at the Jomo Kenyatta University of Agriculture and Technology (JKUAT), and the botany and zoolo the University of Nairobi. Biodiversity considerations, particularly as regards monitoring and sustainable use, can departments and courses such as pharmacology and pharmacognosy, biochemistry, microbiology etc. Most o partnerships both with lead agencies and with the international research centres present in the country. They numbers of students from all over the continent. A good example of both the cooperation and international pe initiatives can be found in the International Centre of Insect Physiology's African Regional Postgraduate Pro

Conducted in partnership with JKUAT, this program has successfully trained and graduated some 140 doctoral stu
Africa.

Many of Kenya's lead agencies, most notably KWS, KEFRI, KARI and NMK, also actively support scientific a
for both Kenyan and foreign students and professionals. This extends into post-doctoral and other research o
agencies have long had mechanisms for playing host to both academic and private sector researchers and initiat
good track record of seeking and supporting training for their staff both in Kenya and overseas. This is frequ
support has normally been available to make up the gap.

Most of the initiatives in education and training are based upon the individual policies and practices of institution
exist. Obvious examples include the mandate of the National Council for Science and Technology (NCST) in the
250) and the research mandates of lead agencies such as KWS. The Kenya Industrial Property Office (KIPO) als
encourage activities involving technology transfer under the Industrial Property Act (1989). Kenya's leg
encouraging foreign research in the country are discussed more fully in the section on Article 15 of the CBD belo

Article 13. Public Education and Awareness

The academic, at least as regards the tertiary sector, aspects of Article 13 have largely been covered by the ear
primary and secondary levels the Government does have requirements for environmentally related courses, par
agricultural concerns, but these are not yet fully developed. The national media also tend to provide extensive c
in general this coverage is not significantly affected by government policy. Lead agencies do, however, cond
awareness programs in fulfilment of their mandates. To the extent that they do not relate to specific activities, s
field projects, public education and awareness roles tend to be considered as implicit and do not appear in legisla
normally general provisions included in the mandates of lead agencies, such as that for KWS in the Wildlif
(Amendment) Act (1989):

Article 3A(e) *"provide wildlife conservation education and extension services to create public awareness*

The NBSAP is the exception to this general rule but while it refers to public education and awareness it does no
undertaken.

Article 14. Impact Assessment and Minimising Adverse Impacts

Kenya has considerable experience in the conducting of Environmental Impact Assessments (EIAs) but until the Management and Coordination Act this was done on a fairly ad hoc, and sometimes flawed, basis. The Kenya EIAs for all of its operations and requires them for others in areas where it has jurisdiction. Historically Governm EIAs in cases where environmental impacts may be an issue. However, the body proposing the project to be a input or monitoring, has generally conducted these studies and thus their effectiveness has not always been cle several major projects have been queried, leaving their status unclear.

The Act establishes an effective framework for EIAs by requiring that the National Authority must register any assessment in Kenya. The provisions for EIAs are found in Part IV of the Act. Requirements for publication of in for public input are established in the Act itself but most other details have been left to the promulgation of regu these regulations are likely to be promulgated but considering the prominence of EIA provisions in the Act one priority area. To some degree civil society has already initiated the process of implementing the Act's EIA prov for EIA experts that is generally expected, both by its members and the lead agencies, to play a leading role in adv

Given the fact that considerable expertise is available, particularly in lead agencies such as KWS, and that the upon financing from those proposing particular activities, it can be expected that the provisions of the Act shoul However, it will be necessary to ensure that the Authority has sufficient capacity to monitor and review the activit

At the policy level the NEAP, due to its role and legally binding nature is intended to ensure that governm requirements of Article 14.

The international aspects of Article 14 are largely still under construction in Kenya. The East African Cooperat force going some way to re-establishing the East African Community that collapsed in the 1970s. EAC curre Uganda with Burundi and Rwanda having also applied for membership. On several occasions the three current that environmental issues will be an early priority. Cooperation with neighbouring countries to the North of Keny highly unstable nature of the border regions.

Article 15 – Access to Genetic Resources

The implementation of Article 15 in Kenya is currently a work in progress and it is thus difficult to say exactly t not being fulfilled. As far back as the early 1994 planning workshops were held to examine the question of the CBD. In 1998 these led to more substantive initiatives including the establishment of an Expert Group on Ac auspices of the National Council for Science and Technology (NCST) and of the Plant Genetic Resources W auspices of the National Museums of Kenya (NMK). Both were inter-institutional and cross-sectoral groups. Bo developing at least guidelines for access and benefit sharing and to a large degree both were overtaken by events and Coordination Act entered into force in January 2000, after a long delay. This Act gave responsibility for acc created National Environment Management Authority (NEMA) that is currently in the process of being establis groups are still active to some degree. The PGRWG, on the basis of an agreement involving all of the major implementing a large-scale access and benefit-sharing project in collaboration with the Royal Botanic Gardens a led to the gazetting, in 2000, of the National Advisory Research Committee on Genetic Resources. This comm Science and Technology Act and is expected to be convened in mid to late 2001. It remains to be seen how the NEMA, as and when it is substantively established, as links between them and the NEMA Implementing Cor However, it seems likely that, at a minimum, one of them will be recognised as some form of advisory body described as one where solid progress is being made and all the elements required to either fulfil, or at least to obligations under Article 15 are in place. It will be fundamentally important to ensure that institutional coherenc the legal authority of NEMA will do this provided that NEMA has sufficient resources to fulfil its functions. The for many of the lead agencies whose resources are rapidly diminishing in what is a period of severe budgetary stre

Convention Requirements

a) Endeavour to facilitate access to genetic resources for environmentally sound uses by other Contracting P counter to the objectives of this Convention

Kenya does not place excessive restrictions on the issuance of permits for any kind of access to genetic resource that such activities have proved problematic due to the regulatory system have been with proposed large-scale co at biopiracy. Lead institutions, particularly the public universities, the Kenya Wildlife Service (KWS) and the N have a long track record of assisting researchers, both foreign and local. While the ability to monitor the uses limited it is quite clear that Kenya can be said to facilitate access and that it does not generally place any unrea those that might be counter to the Convention.

b) Endeavour to carry out scientific research based on genetic resources provided by other Contracting Parti where possible in, such Contracting Parties

Generally Kenyan national institutions engage in research concerning genetic resources of domestic origin. The
The most significant are the activities of the various international research centres present in its territory, both
However, strictly speaking these centres are not under Kenyan jurisdiction and thus have separate arrangements
The second exception is far more limited in that it concerns resources collected under the cooperative systems
Community that collapsed in the 1970s. Firstly these resources were collected prior to the entry into force of th
tend to be preserved herbarium samples rather than propagating material and thus have limited, if any, usefulnes
Finally there is the fact that most of the East African institutions involved with these questions have a good hi
collapse of the EAC. As far as foreign researchers making use of Kenyan genetic resources the current permit sy
a local institutional partner for any project. This has been difficult to enforce at times, particularly in more tha
made.

c) Take legislative, administrative or policy measures with the aim of sharing in a fair and equitable way the
and the benefits arising from the commercial and other utilization of genetic resources with the Contractin

Legislative and policy measures on access to genetic resources have long been an issue of discussion with substa
at least four years now. The only specific legislative measure that has been put in place thus far is Article 53 of
Coordination Act, 2000, which reads as follows:

Article53 (1*) "The Authority shall, in consultation with the relevant lead agencies, issue guidelines and pre
management and utilisation of genetic resources of Kenya for the benefit of the people of Kenya.

*(2) Without prejudice to the general effect of subsection (1), the guidelines issued or measures prescribed
–*

*a) appropriate arrangements for access to genetic resources of Kenya by non-citizens of Kenya inclu
be paid for that access;*
b) measures for regulating the import or export of germplasm;
c) the sharing of benefits derived from genetic resources of Kenya;
d) biosafety measures necessary to regulate biotechnology;
e) measures necessary to regulate the development, access and transfer of biotechnology; and,
f) any other matter that the Authority considers necessary for the better management of the genetic r

However, the current system does require that any individual wishing to conduct research in Kenya must obtain more than one lead agency authorised to issue such permits depending upon the exact circumstances, prin temporary permits are issued, as the National Council for Science and Technology (NCST) must screen p requirements that researchers must report to local authorities in the area where they wish to conduct their res samples collected verified and approved by a designated authority prior to departure. Several key weaknesses hav application of this practice. Where research is conducted outside of protected areas the system is only really desig falls within the mandate of the Ministry of Education. Within protected areas the Kenya Wildlife Service has v establish its own procedures, which it has been able to do effectively. A further difficulty has been enforcement a to monitor research activities is minimal to non-existent. Another major concern of the responsible agencies has l further down the research and development line, where activities are conducted outside of Kenya's jurisdiction. the context of the moves towards developing a new, specifically tailored, regulatory regime in the initiatives m section.

Obligations Deriving from Decisions of the Conference of the Parties

COPs 2 and 3

In Decisions II/1 and III/15 parties are required to forward information on access to genetic resources implemen upon perspective Kenya may or may not have fulfilled this requirement. It has not forwarded information, beyo participation in the access expert panel, but its activities to date have been experimental, and thus often somewha final decisions have yet been taken. While in Decision III/15 information was also requested on research progra not been done as one of the major difficulties has been the availability of funding and technical capacity f workshops that some NGOs have occasionally been willing to support.

Decision III/15 makes further non-binding statements involving capacity building, research and regulatory deve has been generally supportive of such activities but they are still somewhat scattered and suffer from a lack of res fact that access issues are only now in the process of being brought under the overall supervision of a single lead in Kenya of a relative wealth of experience and expertise in most areas relating to the field.

A final statement is also made in III/15 concerning the negotiations for the revision of the International Undertal Food and Agriculture. Kenya is not a member of the contact group for the revision of the IU and awareness of the presence in the country of the headquarters of three IARCs.

COP5

COP 5's Decision V/26 created several binding obligations. The first of these involves the designation of a national authorities to be responsible for access to genetic resources. This is not practical for Kenya at the arrangements to this effect. However, it can be expected that with the formal establishment of NEMA this c constitute the competent national authority and may or may not delegate the position of focal point to the Nationa Genetic Resources.

Two further obligations are not relevant to Kenya at the present time as they involve reporting to the CoP on mea and that in developing national legislation the development of the IU should be taken into account. It may v substantive progress on implementation by COP 6 in May 2002. It is also possible that national legislation, developed but this will depend greatly upon the availability of resources, the substantive establishment of NI among the relevant lead agencies. In this context, and given the fact that the negotiations for the revision of the IU conclusion by the end of 2001, it can be expected that Kenya will create whatever flexibility is necessary to accon

The final obligation is that Parties should provide information on various aspects of access and benefit sharing a be a difficult proposition for Kenya as much of such information is still scattered among a wide range of institutio particular centres of information, such as KWS and NCST records, the major research universities and some systematic collation and analysis has yet been undertaken. Some individual researchers familiar with access issu collected to inform their own activities. One of the major problems is that while Kenya has no comprehensiv amount of activity is on an unrecorded individual-to-individual, or otherwise ad hoc, basis, precluding the possibi

Article 16. Access to and Transfer of Technology

Kenya has historically been effective in facilitating the transfer of environmentally friendly technologies in g given tax and import duty concessions and other incentive measures. The lead agencies also have clear policies of

of support to foreign researchers and projects, partly in the expectation of some level of soft technology encouragement the level of appropriate technology transferred to the country on concessionary terms has been provided is generally support for training overseas and a small amount of older, or publicly available, hard techno

In legislative terms the Government's support for technology transfer is found in the mandates of most lead agen Science and Technology Act establishing the National Council on Science and Technology (NCST) and th establishing the Kenya Industrial Property Office (KIPO). KIPO's role is particularly significant as it is mandated licensing agreements. KIPO is also of interest as one of the most developed Industrial Property offices in significant effort by the Government of Kenya in the field of intellectual property rights has not, thus far, led to the voluntary transfer of environmentally related technologies from developed countries. Kenya has been pr countries to ensure that intellectual property rights are supportive of the objectives of the CBD. Recently this has leadership of the African Group on TRIPs issues at the World Trade Organisation's Third inter-Ministerial Confe

Article 17. Exchange of Information

Kenya has, through the creation of a Biodiversity Data Management (BDM) Project developed a strategy for coo other information resources held by sectoral institutions. It is envisaged that this will lead to the creation of internationally available through the Clearing House Mechanism. The original intention was to have the National the coordinating agency. The situation is now somewhat in flux as there is a presumption that NEMA will succ over this role. NEMA's mandate to manage the BDM project can be said to be implied in the monitoring provisio and Coordination Act. However, despite the fact that it is likely that NEMA will assume responsibility for the e capacity will once again be major considerations. NES has historically had problems in fulfilling its mandate prin

Article 18. Technical and Scientific Cooperation

Kenya, to the extent that its capacity allows has always shown great commitment to technical and scientific coo and international levels. All of the lead agencies and public universities have provisions relating to cooperation

research although beyond general provisions these are normally considered to be implicit in statutory measu
Wildlife (Conservation and Management) (Amendment) Act (1989) provides a representative example of such a g

Article 3A(g) *"conduct and co-ordinate research activities in the field of wildlife conservation and mana*

The National Council for Science and Technology (NCST) and the Kenya Industrial Property Office are inten
technical and scientific activities undertaken by lead agencies.

Beyond these legally mandated activities the Government of Kenya has generally been supportive of initiat
cooperative research activities, whether on a bilateral or multilateral basis. In practical terms the majority of initia
activities of the British Department for International Development (DFID) with KARI or the support that the
Agency (JICA) has provided to NMK. However, the Government of Kenya has also traditionally played host to
of multilateral institutions present in the East and Horn of Africa.

Cooperation involving indigenous and traditional technologies is still in its infancy at the governmental level. Th
at the Kenya Medical Research Institute (KEMRI) has long been an exception to this. The Ministry of Culture h
knowledge and does so through a variety of public education and awareness programmes as well as through th
NMK has always had some involvement in this field due to its interests in ethnobotany but it has recently begun
the activities of the Kenya Resource Centre for Indigenous Knowledge (KENRIK). As mentioned earlier KEI
active in this field.

Traditionally the most active sector in developing indigenous and local community technologies has been that
such as the Intermediate Technology Development Group – Kenya (ITDG-Kenya) have sought to develop and e
range of technologies including ethnoveterinary medicines, traditional medicines, water purification, cooki
strategies. To a lesser degree other research institutions, such as ICRAF and ICIPE, have pursued interests in th
phenomenon. The Governmental contribution to these types of activities is limited but normally consists
concessions and the provision of political support and/or space for activities to be conducted at the local and natio

Article 19. Handling of Biotechnology and Distribution of its Benefits

Kenya was an active participant in the negotiations for the Cartagena Protocol on Biosafety and was the first cou
also indicated it's commitment to the ongoing implementation of the Protocol and seems likely to be an active

Parties. The National Council for Science and Technology (NCST) plays a coordinating role in relation to policy involving and the use of biotechnology. As part of this coordinating role NCST has established an inter-agency Committee, to review research proposals and advise on monitoring, risk assessment and risk management issu derives from the National Regulations and Guidelines for Safety in Biotechnology in Kenya that were promulgat Inspectorate Service (KEPHIS), particularly in its implementation of the Seeds and Plant Varieties Act (1972) a also plays a significant lead role in regulatory issues.

Several lead agencies are involved with biotechnology related activities although the majority of these are at the s of the field, such as the micropropagation and tissue culture activities that have involved a range of agricul experimented with by NMK in the context of conservation activities. The key agency in more sophisticated b Agricultural Research Institute (KARI) that has developed close links with multinational corporations su organizations such as the International Service for the Acquisition of Agri-Biotech Applications (ISAAA). headquartered in Nairobi have also been active in the field, most notably the International Livestock Research vaccines and diagnostic kits for several livestock diseases. The International Centre of Insect Physiology coordinating institution for BioNet-Africa, a network of universities in the East and Horn of Africa that seeks to biotechnology applications.

When foreign researchers or institutions seek access to Kenyan genetic material for biotechnology applications the Kenyan partners to seek capacity building as part of the benefit-sharing provisions. However, in practical ter hoc process as the only legislative requirement is that a researcher has a local partner institution. Discussions system for access and benefit sharing have thus far consistently featured a desire for strict requirements rega developed using Kenyan genetic material so it is likely that this will be included in the regulations that NEMA wi

Kenya's regulatory system for biotechnology has been published and the National Council on Science and Tecl the limits of its capacity and resources. This is facilitated by NCST's key role in Kenya's Biodiversity Clearing H

Article 20. Financial Resources

The Environmental Management and Coordination Act makes specific provision for financial support for the ope the Government in Article 20(3):

> *"There shall be made to the Authority out of monies provided by Parliament for that purpose, grants tow Authority in the exercise of its powers or the performance of its functions under this Act."*

Similar provisions have also been made in the legislation establishing all the lead agencies and on numerous granted land for the use of international institutions including the United Nations Environment Programme (U Research in Agroforestry (ICRAF) and the International Centre of Insect Physiology and Ecology (ICIPE).

All lead agencies have historically depended to a large degree on the support of the donor community and the le in the relative efficiency of the agency. The most obvious example in Kenya is the Kenya Wildlife Service (KWS particularly well supported and has, simultaneously, established a worldwide reputation.

Given the current economic climate in Kenya donor support is likely to become even more critical. There is some budgetary provision for the establishment of NEMA will have negative impacts on support for other environment

Article 21. Financial Mechanism

The main obligation for developing countries under this Article is that they should provide information on thei mechanism. Kenya has not taken any comprehensive steps towards this although the information does exist submitted to the mechanism.

Article 22. Relationship with other international conventions

Article 22 contains two operative elements. The first of these is that the CBD does not generally invalidate However, this is qualified by stating that where these previous agreements address biodiversity considerations in the CBD then they will be invalidated and the CBD will control. This approach is supported by Article 30 of th

Treaties (1969). This Article provides that where states are Party to successive treaties relating to the same subjec treaty are automatically modified to the extent that only those provisions compatible with the later treaty contin Vienna Convention is subject to a state's declaration that a later treaty is deemed not to be incompatible with an e operative element of CBD Article 22 where the CBD is declared to be consistent with the provisions of the Unitec

Kenya can be considered to be in broad compliance with the provisions of Article 22 for several reasons. The mc related elements of the Environmental Management and Coordination Act, the only framework environmental le clearly consistent with, and in most cases are derived directly from, the country's obligations under the CBD. made no declarations to the fact that it considers other treaties compatible with the CBD and thus can be consid modifications to earlier treaties to which it is a Party, according to the provisions of the Vienna Conven declarations during the process of adopting and ratifying the CBD that might be considered as having an effect on

In Decision III/21 the Conference of the Parties to the CBD urged that the conservation and sustainable use of we their habitats, should be fully incorporated into national plans and strategies and that the national authorities for cooperate in the implementation of these treaties. The Environment Management and Coordination Act's establis lead agency in environmental issues can be interpreted as fulfilling Kenya's obligations under this decision. Acti supports such an interpretation. KWS is the implementing agency for both the Ramsar Convention and the Bon and has already taken steps that will ensure compatibility in the implementation of all biodiversity related agre been to initiate the development of an internal secretariat that is intended to coordinate all of KWS' responsibi biodiversity. The second element of KWS' strategy has been to initiate contacts with the NEMA Implementatic policy development activities to those of NEMA as and when it is established. While the effect of this approac commencement of activities by NEMA it seems clear that the right steps have been taken to ensure internal coh ensure that these policies compliment wider national efforts.

Article 26. Reports

Kenya submitted its first National Report in March 1998. The Report does contain some elements referring implementation of the Convention but the bulk of its discussion covers principles and sometimes planned acti contain a summary of the national country study on biodiversity and goes some way towards prioritisation but c While reference is made to the National Biodiversity Strategy and Action Plan this was still in the process of de

consideration was impossible. Notably absent in Kenya's first National Report is direct input from any of the le
practical implementers of the CBD's provisions.

2. State of Kenya's Implementation of the The World Heritage Convention

2.1 Background

The Convention Concerning the Protection of World Cultural and Natural Heritage (World Heritage Convention financial mechanisms to protect objects of cultural and natural heritage, which are of value to present, and f provisions of Article 1 establish that 'cultural heritage' includes monuments that are of universal value from science and sites that include the works of man or the combined works of nature and man, which are of ou historical, aesthetic, ethnological or anthropological points of view. Under Article 2 'natural heritage' includes na and biological formations or groups of such formations that are of outstanding universal value from the aesthetic includes the habitats of threatened species of plants and animals of outstanding value. Natural heritage is also c precisely delineated areas of outstanding value from the point of view of science, conservation or natural beauty. relating to the protection of natural heritage are the main elements of interest as regards the conservation of biodiv

The fundamental obligations a Party assumes under the WHC are that it should identify, protect and conser heritage for present and future generations. These obligations should be integrated into national planning and de be supported by adequate practical measures, such as the training of professionals in relevant expertise. Additiona to refrain from measures that might either directly or indirectly injure sites of importance to cultural and natural h

The WHC also establishes the principle that the aspects of cultural and natural heritage found within the jurisdic
the wider World heritage and as such the international community has an obligation to assist in their protection
financial mechanism of the WHC but it is unclear to what degree it creates corresponding obligations for the s
located. This is complicated by the fact that the Convention also specifically recognises the rights and interests
world heritage aspects of the WHC cannot be considered to create anything more than 'soft' obligations except as

In Articles 8 to 13 the Convention establishes a World Heritage List for sites of outstanding cultural or natural i
for consideration to be listed is ultimately at the discretion of Parties despite a general obligation to submit lists o
World Heritage in Danger List can only be derived from the World Heritage List.

The administrative provisions of the treaty establish a Secretariat (Article 14) and a World Heritage Fund (Articl
combination of mandatory and voluntary contributions. The funding mechanism is intended to support the protect

2.2 WHC Listed Sites in Kenya

Kenya has two sites on the World Heritage List; the Mt. Sibiloi / Central Island National Parks and the Mount K
The two sites can be considered to have significance as both natural and human heritage. Mt. Sibiloi and Central I
shore of Lake Turkana in northern Kenya, are best known for the more than 350 species of aquatic and terrestria
that they support. The site is a particularly important part of the flyway for northbound migrants. The parks als
breeding grounds for the Nile crocodile, with Central Island having been estimated to support a population of m
and Central Island are also significant in ecosystem terms as their combination of distinctive avifauna and a large
and reptiles in a desert environment constitutes an exceptional laboratory for ecosystem research. The cultural
archaeological significance of the site due to the numerous discoveries of at least four species of hominid fossils
years as well discoveries relating to the ancestors of many modern animal species.

The Mt. Kenya National Park / Natural Forest site, straddling the equator in central Kenya, is one of the oldest pr
National Park having been declared in 1949 and having been a gazetted forest reserve prior to that. It beca
UNESCO Man and Biosphere programme in 1978 and a World Heritage Site in 1997. The significance of the
strongly identified with its Afro-alpine ecosystem that is a home to at least 13 endemic plant species as well as
animal and bird species. In national terms Mt. Kenya is extremely important as a watershed that supports a lar
more than 7 million people. In cultural terms Mt. Kenya is historically important as the home of Ngai and his wi
and since independence it has become a major symbol of national identity for all Kenyans.

2.3 Responsible Agencies and Legislative and Policy Measures Adopted to Implement the WHC

The Kenya Wildlife Service (KWS) is the national implementing agency for the WHC and directly manages b Parks both the Mt. Sibiloi / Central Island site and the bulk of the Mt. Kenya site are accorded the highest level o law. The statutory instruments underlying this status are the Wildlife (Conservation and Management) Act (CAI Wildlife (Conservation and Management) (Amendment) Act (1989). The specific instruments protecting the sites them as National Parks (Mt. Sibiloi 1973, Central Island 1985 and Mt. Kenya 1949). At the policy level the ma for the two sites are the most important instruments. The Forests Act and an associated gazette notice establish Forest.

In general the legal instruments implementing the WHC actually predate Kenya's membership of the Conventio obligations created by it. The exceptions to this are the designation of KWS as the implementing agency and management plans for the two sites, the latter having been undertaken, in the case of Mt. Sibiloi / Central Isla Kenya, subsequent to the listing of the sites in 1997.

Kenya's provisions for protecting natural heritage beyond listed sites are also broadly compatible with the WI obligations established by it. This is because the same legislative instruments underlie the protection of unlisted two Wildlife (Conservation and Management) acts. As with the case of Mt. Kenya the Forest Act also protects a n natural significance. The National Museums of Kenya (NMK) also deserves mention here as although it is not the it does undertake many activities that further its objectives. This is true for culturally significant sites under the H true for sites of natural significance because of NMK's activities under the Centre for Biodiversity.

As KWS is the lead agency for most protected areas in Kenya policies for the implementation of the WHC are g involving other biodiversity related agreements. However, although KWS is the focal point for a lot of the biod not hold this position as regards the CBD. This has not proved to be a major problem as the Service has tra strongly CBD compatible policies. It is to be expected that coordination will continue to be effectively under policy-making interests with those of NEMA.

2.4 Experiences in Implementing the WHC

In summary the implementation of the WHC in Kenya has been a relatively simple exercise as the obligatio already recognised in Kenyan legislation and policies prior to its accession. As a result Kenya constitutes a good having had a longer than normal period to assess and adapt to varying impacts. However, some problems in imple

The Natural Forest element of the Mt. Kenya site is not a National Park but rather a gazetted forest that is man Department. The problem here is that the area suffers from extreme population pressures and the type of environmental degradation found elsewhere in Kenya and sub-Saharan Africa under such conditions. Gazetted level of protection is weaker than that of national park status, for both practical and statutory reasons. Further made from the area of gazetted forest in Kenya and this practice raises questions as to the long-term sustainabil statutory measures might alleviate the pressure on the Natural Forest it is clear that only significant improveme the local communities can provide long-term security for the site. These problems are not limited to Mt. Keny preservation of many of Kenya's sites of outstanding natural importance.

The prioritisation and listing of sites under the WHC also has some systemic problems. Kenya is obliged to ass financial ability to conserve them to WHC standards on a long-term basis. Consequently the considerations fo actually related to their relative significance but rather to their ability to attract the necessary financial support, n listing of Mt. Sibiloi / Central Island has been made possible by the overwhelming importance of its avifa archaeological sites as it receives very few visitors due to a remote, and sometimes insecure, location. H USD50,000 and 43 staff (1996) it is difficult to see how the site can be maintained and appropriately exploited in

3.State of Implementation of the

Ramsar Convention on Wetlands in Kenya

3.1 Background

The Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention, 1

> "*the conservation and wise use of wetlands by national action and international cooperation as development throughout the world.*"

The Conventions original emphasis was on the conservation and wise use of wetlands primarily to provide habita has been broadened to cover **all aspects** of wetland conservation and wise use, recognising wetlands as ecosyste biodiversity conservation in general and for the well-being of human communities.

Countries are encouraged to join the treaty and membership entails:[5]

- an endorsement of the principles that the Convention represents, facilitating the development at nat including legislation that helps to make the best possible use of their wetland resources in their quest for su
- presents an opportunity for a country to make its voice heard in the principal intergovernmental forum c wetlands;
- brings increased publicity and prestige for the wetlands designated for the List of Wetlands of Internation of support for conservation and wise use measures;
- brings access to the latest information and advice on application of the Convention's internationally-acc identifying wetlands of international importance, guidelines on application of the wise use concept, and g in wetlands;
- brings access to expert advice on national and site-related problems of wetland conservation and manage Bureau personnel and consultants and through application of the Ramsar Advisory Mission mechanism wh
- encourages international cooperation on wetland issues and brings the possibility of support for w Convention's own Small Grants Fund or through the Convention's contacts with multilateral and bilateral

[5] "What is the Ramsar Convention on Wetlands?", http://www.ramsar.org/about_infopack_2e.htm

3.2 Kenyan situation

Wetlands are estimated to cover 2.5% of Kenya's land area that is 584,850 sq.kilometres. Wetlands have beer permanently waterlogged with fresh, saline, brackish or marine waters, including both natural and man-made are (Kenya Standing Committee on Wetlands). This definition was tailored to suit local conditions, however it is us of wetlands as given by the Ramsar Convention. Kenya has a broad range of wetland types. The marine and 550km length of the Kenyan coast, and include important ecosystems including mangrove forests, cliffs, sand be some unique coastal forests. Wetlands constitute the prime source of water in many areas and contribute signific and for both industrial and domestic use. They also provide tourist attraction sites-a major export of the economy economic value, this in turn has lead to their being exploited by human activities such as reclamation and drain loss of about 15% of its coastal wetlands and 9% of its inland wetlands during the last decade.

It is recognized that wetlands are an invaluable component of biodiversity resources. The Environmental Manag specific reference to the protection and conservation of wetlands and in Part V states:

> Article 42(2) "*The Minister may, by notice in the Gazette, declare a lake shore, wetland, coastal zone o and impose such restrictions as he considers necessary, to protect the lake shore, wetland coastal zone degradation.…"*

The National Wetland Policy (see later) is currently being drafted and is compatible and complimentary with the and Biodiversity Action plan.
At provincial/regional levels, wetlands have been considered in integrated planning processes, such as the Int (ICAM) process which brings together all stakeholders, including government ministries, private sector, NG development authorities, with the prime purpose to develop management plans that includes all natural resources use of them. There are also several initiatives at local levels, such as at Lake Nakuru National Park, Lake Bogo and the Tana Delta where integrated planning based on a catchment approach are being undertaken. In all wetlands and water resources play a central role in the planning and management processes.

3.3 Kenya and the Ramsar List of Wetlands of International Importance

Article 2.1 of the Convention on Wetlands states:

"Each Contraction Party shall designate suitable wetlands within its territory for inclusion in a Importance…."

Article 2.4 obliges on each Contracting Party to designate

"at least one wetland to be included in the list"

Article 2.2 states that

"*Wetlands should be selected for the List on account of the international significance in terms of ecol hydrology. In the first instance wetlands of international importance to waterfowl at any season should be*

All issues pertaining to the list were encapsulated in Resolution VII.II adopted by the Conference of Parties i framework and Guidelines for the future development of the List of Wetlands for International Importance." Eve is founded upon this "Vision for the Ramsar List":

"To develop and maintain an international network of wetlands which are important for the conservatic for sustaining human life through the ecological and hydrological functions they perform."

The Convention on Wetlands came into force for Kenya on 5 October 1990. Kenya presently has two sites desi Importance, with a surface area of 48,800 hectares.

Lake Naivasha

Ramsar site no.724. Lake Naivasha is located in a high altitude trough of the Rift Valley and is one of the few f area comprises of a crater lake, river delta and separate lake and has an extensive range of terrestrial and wetlan and several species of large mammals live in the area. More than 350 species of waterbirds frequent the site, incl 'fulica cristata', 15,000 individuals. The lake provides a water supply for human activities and is a popular site f such as fishing and agricultural activities. The ecology of the lake has actually changed positively due to the lo 1997/98. The area of wetland has expanded significantly and improved the lakes area in respect of all biodi waterfowl. However one of the major environment related problems is that the lake is subjected to pollution fro the flower farmers around the lake. In response to this, the local community has produced a management plan fo farmers a code of conduct to regulate the use and disposal of agro-chemicals and employed an environment offic practices. The Lake Naivasha Riparian Association was one of the Ramsar Wetland Conservation Award winners

Lake Nakuru

Ramsar site no.476. Lake Nakuru is situated in the Rif Valle province and is a National Park. It is a shallow, sa and the permanent Ngosur River. The lake is extremely important for at least 33 species of waterbirds. Altho drought cycle, the El Nino rains boosted the biodiversity, especially in terms of the significant increases of w pressure on the site but initiatives such as the WWF Lake Nakuru conservation and development project that e and through extensive training and awareness shares practical skills on soil and water management among local area.

Other wetland sites in Kenya

Efforts have been made to have Lake Bogoria listed as a Wetland of International Importance under the Ramsa been achieved due to the changes in the administrative boundaries of Baringo District in which the wetland wa two and now the lake lies in the other district-the Koibatek district which means that fresh negotiations with the local authority need to be undertaken. The authorities are still pursuing the same.

3.4 Responsible Agencies and Legislative and Policy Measures Adopted to Implement the Ramsa

The Kenya Wildlife Service (KWS) is the main actor involved in the management, control, and use conservation currently conducted under the KWS/Netherlands Wetlands Conservation and Training Programme which is divid

- The conservation of coastal/marine wetlands and the management of marine protected areas;
- The conservation and management of terrestrial wetlands and
- Training capacity development in wetland and conservation management

One of the objectives of the said programme is to contribute to the development of a national policy on wetlands and whose draft is ready.

The National Wetlands Policy is being developed by the National Wetlands Standing Committee (NWSC) wh ministries and other stakeholders including the national universities and IUCN who participate in the committee on wetland conservation matters. The committee is a sub-committee of the Inter-Ministerial Committee on th finalised and adopted, a group that includes government representatives, planners, NGOs, local communities a undertake the implementation process.

The main features of the Policy include:

- Wise wetland use

- Conservation of wetlands for their value and functions
- Precautionary principle for wetland development
- Wetland inhabitants and communities to be involved in conservation and management
- Wetlands will be considered in national planning
- Raise awareness

Other features of the Policy include:

- Responsibility for sustainable management practices
- Restoration and recovery of wetlands
- EIA requirements for the development and monitoring of wetlands
- International responsibilities to be adhered to
- Regulations and legislation-the specific Article referred to earlier of the Kenyan Environmental Managem

Problems identified in the management of wetlands include a lack of long term planning on wetlands use and i knowledge of wetlands and that there is no complete inventory of wetlands in place. Financial constraints are a hu reason, KWS' main priority is on wetlands-and other biodiversity rich places- lie, within the protected areas. S area are wetlands outside the protected areas that have direct or indirect influence on the protected areas. Wetl resources are also considered.

3.5 Regional programmes

The are several sub regional initiatives being undertaken, such as:

- Joint sessions between Kenya, Uganda and Tanzania within the framework of the GEF-funded Lake V Programme (LVEMP) which project addresses 6 large components that include the buffering capacity resources, pollution and water quality, fisheries and water hyacinth. The overall aim of the project is to ir the lake and restore its ecological, hydrological, biological, economic and socio-cultural values in th perspective.
- Consultations between Kenya, Ethiopia and Tanzania on the proposed GEF-funded projects on the conse Valley Lakes and especially cross-border wetlands like Omo river/lake Turkana and lakes Jippe and Natro
- GEF-funded Transboundary Biodiversity Conservation Project, in which the wise use and conservation of
- UNEP Regional Seas Programme for Eastern Africa that addresses marine and coastal conservation pro Kenya, Somalia, Tanzania, Mozambique and several Indian Ocean island states in the Western Indian Oce

4.State of Implementation of the Convention on Migratory Species in Kenya

4.1 Background

The Convention on the Conservation of Migratory Species of Wild Animals (CMS or Bonn Convention) aims avian migratory species throughout their range. It is an intergovernmental treaty concerned with the conservatior a global scale.

Parties to the Convention work together to conserve migratory species and their habitats by adopting strict protec that have been categorized as being in danger of extinction throughout all or a great proportion of their range and Convention. The Convention also provides for concluding agreements for the conservation and management unfavourable conservation status or who would gain from international cooperation, as listed in Appendix II provides a framework for undertaking joint research and monitoring activities.

Obligations assumed by a State when it becomes a Party to CMS[6]

- Nominate a 'focal point'. Parties may nominate a second focal point if they choose to
- Nominate a 'scientific counsellor'. Parties may nominate an alternate if they choose to. The said counsello Scientific Council
- Government representative to participate at the Conference of Parties
- Payment of annual contributions to the CMS Trust Fund
- Protection of Appendix I species in accordance with the Convention
- Active participation in developing proposals for including species in the Appendices
- Active role in the regional Agreements (as far as Range States parties are concerned) and political comm legislative and enforcement measures to conserve the species and international cooperation.

Several Agreements have been concluded under the auspices of CMS. These may range from legally binding tr understanding. One of the said Agreements is the:

[6] UNEP Environmental Law Training Manual, p.78

4.2 Agreement on the Conservation of African Eurasian Migratory Waterbirds, 1995 (AEWA)

This Agreement is the largest developed under the CMS to date, and was concluded on 16 June 1995. The A ecologically dependent on wetlands for at least part of their annual cycle.

The Agreement has a number of signatories and also provides for 'Range States'-that is, those states that exerc range of a particular migratory species. Kenya is listed as a Range State under this Agreement. Indeed Kenya c Waterfowl Agreement. Kenya co-operates with other range states on the conservation of the migratory wat Wetlands International that complies and analyses data received from the range states. In this regard waterfow (July and December) and the data forwarded to Wetlands International for comparison with those from other State There is also joint cooperation with other countries in the western Indian Ocean sub-region on sea turtle and participates in information exchange with many other countries and institutions on environmental and biodiver framework of IUCN specialised commissions, conservation information is exchanged widely through IUCN netw

The Kenya Wildlife Service (KWS) in the national implementing agency for the CMS. So far there has beer Secretariat, and CMS tends to be dealt with as part and parcel of other Conventions. Migratory species in genera Biological Diversity and the UN Convention on the Law of the Seas (UNCLOS) covers migratory fish species, specifically provide for the special instruments required for conservation. Therefore, Article 5 of the CBD and A on their parties to implement co-ordinated international conservation measures for migratory species through Indeed the CMS provides for these measures.[7] In realisation of the synergies between the Conventions, and to a and CBD secretariats have signed a Memorandum of Co-operation. Indeed there are also overlaps with other in Ramsar convention, CITES and WHC, however despite these overlaps, each convention has its own focus and rol

[7] See UNEP/CBD/COP/5/INF/28;How the Implementation of the Convention on Migratory Species complements the implementation of Note by the UNEP/CMS secretariat, and the appended "A Guide to the Complementarities Between the Convention on Migratory Specie Diversity, *Glowka, Biodiversity Strategies International.*

5. State of Kenya's Implementation of the The Convention on International Trade in Endangered Species of Wild Fa

5.1 Background

CITES is based on a tiered approach to the achievement of two central objectives. The main objective of the Co negative impacts of international trade in endangered species. The second objective covers species that do not yet CITES aims to prevent international trade contributing to the reduction of a species to endangered levels. The C trade in threatened, and in very specific situations even endangered, species can benefit some countries that have conservation activities and thus provides for a system of permits to regulate trade rather than simply prohibiting animal species in its regulatory system.

The tiered approach of CITES is based on its three operative appendices (Appendix IV contains model forms a restrictive and covers species that are currently considered to be endangered. The theory, iterated in Article II(1), in such species could lead to extinction. For the country of origin CITES requires that an Appendix I species i permit issued by a national Management Authority and on the advice of an established Scientific Authority. A must also be based on a series of criteria that focus on both the manner of the proposed transfer and the reason adequate to justify trade in Appendix 1 species; normally such transactions occur for primarily scientific purposes provision imports permits are required for the provision of an export permit. Accordingly CITES also place exporting states. These obligations basically mirror those imposed on countries of origin.

Appendix II covers threatened species and specimens of Appendix I species that have been bred in captivity. Tl such species should be restricted to prevent them from becoming endangered. Trade in Appendix II species is advice of a Scientific Authority system as Appendix I species. The distinction is that an import permit is not requi for Appendix II species and thus commercial uses of Appendix II species are permitted.

Appendix III includes all species that are regulated by individual parties or that parties believe should be liste listing a species in Appendix III is obliged to issue export permits for any trade and other parties are required to issued where applicable.

The CITES system requires that countries designate Management and Scientific authorities to implement it and ac support mechanisms such as rescue centres and systems for the maintenance of records. They are also required tc CITES that include the confiscation and repatriation of specimens.

5.2 The Lusaka Agreement

The Lusaka Agreement on Co-operative Enforcement Operations Directed at Illegal Trade in Wild Flora and Fau agreement of CITES at the regional level in Africa. It establishes a framework of cooperation between enfo trafficking in all species of flora and fauna and thus has a somewhat broader mandate than CITES and thus has of in implementing agreements such as the CBD as well. As of December 1999 Kenya has been designated as the established under the Lusaka Agreement and thus there can be no question of Kenya's commitment to, and fulfiln

5.3 Responsible Agencies and Legislative and Policy Measures Adopted to Implement CITES

KWS is the Management Authority for CITES and is also the Scientific Authority for fauna under the treaty. K integrating its various responsibilities and the office responsible for permits is in close contact with the Research I to changing circumstances as well as competent decision-making based on current information. This is also sup with the Forest Department based on the two institutions co-management of certain protected areas. The Scienti principally rests with NMK due to its capacity in botany. Kenya has generally been highly aggressive in enfc mirroring its approach to illegal activities that has included a shoot to kill policy for poachers under certain condit

Kenya is an unusual position as regards the fauna aspects of CITES as it prohibits all hunting and trapping excep and for many species of megafauna even these are prohibited by policy, the most notable examples of the latter

This makes CITES implementation relatively straightforward as there is no distinction between the appendices, o species. The implementing legislation is the Wildlife (Conservation and Management) Act and the Wildlif (Amendment) Act that far exceed CITES requirements. The only exports that are permitted are strictly for scienti never included the aforementioned species of megafauna. A further significant point is that it is illegal to rem animal, vegetable or mineral, without express permission.

The situation of flora is more ambiguous. The absence of the simple approach used with fauna makes trade in manage. A further complication is that while flora are clearly considered in some aspects of the Wildlife (Cons are only referred to occasionally leaving their overall status vague. Other legislation relating to flora, particularly Act and the Timber Act, does not address the concerns of CITES. The situation of flora in protected areas is above, but problems do arise involving flora found in unprotected areas. Awareness of the potential risks trad lower and thus enforcement that much more difficult. The legal provisions for flora are fundamentally diff approach. Any specimens for export must be identified to the satisfaction of the Scientific Authority and for any s permit must be granted by KWS. For species not listed under CITES the only requirement is that the specimens sh

5.4 Experiences in Implementing CITES

Kenya's experience in the implementation of CITES has generally been positive and in the area of megafauna I actors in the Convention. Kenya's capacity and assertiveness in the implementation of CITES has sometimes be with the policies of other range states. A good example of this is as regards the status of elephants under CITES v its efforts are being undermined by the policies of states that support trade in the species, particularly implementation involving fauna has been an effective and straightforward process.

The situation regarding flora is much less clear with enforceability being the major concern. The lead agen received donor support equivalent to that provided to KWS and there is a consequently lower level of capacity. has also meant that the legal and policy framework governing trade in flora is not fully complete. The principal e is generally effective for species that have already been listed in the CITES appendices it has not proven adequa species that may be threatened, or even endangered, but that are not listed. There is a clear need for legislation other similar resources to more explicitly consider the provisions and objectives of CITES.

7.The United Nations Convention to Combat Desertification

The United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought a Africa (UNCCD) implicitly considers biodiversity issues because of its concern with ecosystem conser development through long-term strategies based on the rehabilitation, conservation and sustainable management strong links to the objectives of the CBD and other biodiversity related agreements.

Drought and desertification are immediate problems for a large proportion of the Kenyan population with some 8
the population, having been estimated as suffering adverse consequences. According to the 1998 Poverty Report[8]
was highest in North Eastern (58%), Eastern (57%) and coast provinces al of them falling within the areas most
desertification. Given this situation Kenya has been active in attempting to achieve the goals of the UNCCD long

The entry into force of the UNCCD led to the Government of Kenya assigning responsibility for implemen
Secretariat (NES). There has been no specific implementing legislation. NES' lack of statutory legal status, ass
and constantly critical funding situation has meant that effective implementation of the UNCCD, other than thr
difficult. NES has established a potentially effective structure, led by a national coordinating body (NCB) an
committee (NSC) with strong links to the community level. This structure is intended to implement a national a
others provided for the establishment and management of a Community Desertification Trust Fund. The situatior
regular budget is indicative of the situation. At the policy level KWS has been effective in integrating the princip
particularly its community development strategies, and efforts have consistently been made to ensure that poverty
take the Convention's provisions into account.

NGOs and CBOs have had some success in implementing the provisions of the UNCCD on a piecemeal basis a
notable achievements in implementation has been its effort to develop an overview of initiatives in the country ar
desertification, to create some level of coordination amongst these initiatives. Follow up to the useful recom
limited due to enormous scale of the problems and the NCB's limitations as indicated above. Ultimately Keny
UNCCD depends on the future development of NEMA, as that institution is expected to succeed NES and t
desertification strategies. Particularly important in this regard is the expectation that NEMA will develop a compr

7.The United Nations Framework Convention on Climate Chang

[8] First Report on Poverty in Kenya, Volume1, Incidence and depth of poverty, 1998

Kenya's implementation of biodiversity-related conventions

The United Nations Framework on Climate Change sets an "ultimate objective" of stabilizing atmospheric concer levels. These levels should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to production is not threatened and to enable economic development to proceed in a sustainable manner. To achiev general commitment to address climate change, adapt to its effects, and report on the action they are taking to imp

Kenya has signed and ratified (30 August 1994) the Convention. Although Kenya, relative to industrialised count especially in the rural areas, it is increasingly evident that as the country gears itself towards industrialization, the National Environment Secretariat (NES) is the focal point and through the Inter-Ministerial Committee on Envir technical sub-committee on climate change, the National Climate Change Activities Coordinating Committee (NC matters pertaining to climate change, including advising the Government on what initiatives should be under protocols objectives are translated and incorporated into national development priorities. The NCCACC and Environment Conservation Officers take the interests of all stakeholders into account in carrying out this task Committee include, inadequate financial support to carry out all its activities, underdeveloped early warning sys dangers of gaseous emissions and their control and management and generally inadequate information, inad compliance mechanisms and not enough enforcement mechanisms in place to control emissions.

A specific policy or action plan to address climate change has not been developed to date, but policies for sound the NEAP, the NBSAP, the EIA Guidelines and Procedures and the Environmental Management and Co-ordin same. Additionally, Sessional Paper No.6 of 1999 on Environment and Development states that the Governm comprehensive policy on the management of atmospheric pollution and air quality; establish emission star emissions and particle matter; strengthen research and monitoring; undertake impact assessment on climat strengthen institutional structure for the management of climate change matters. Currently, Kenya is well int national report to be submitted to the CoP.

[9] http://www.unfcc.de/resource/process/components/response/respconv.html

8. Regional and Sub-Regional Agreements to which Kenya i

8.1 **The African Convention on the Conservation of Nature and Natural Resources, 1968**.

The African Convention on the Conservation of Nature and Natural Resources, developed under the auspices o (OAU) is the most comprehensive regional agreement on environmental issues in Africa. Signed in 1968 by t ratified by Kenya in May 1969, it is a principal reason why countries such as Kenya had laws broadly cc biodiversity related treaties prior to the entry into force of these treaties. While, due to its timing, the Conv biodiversity this is clearly a major consideration for the treaty:

> Article IV(2) *"The Contracting States also shall undertake the conservation of plant species or commun special scientific or aesthetic value by ensuring that they are included in conservation areas."*

While the above clause addresses the question of flora there are similar provisions in the sections of the treaty (Article IV) and marine resources (Article V). These provisions are based on the ecosystem approach that has be of the CBD. As a consequence there are also extensive provisions on protected areas both in specific term unusually, in the definition provided by Article III (4).

The African Convention's provisions on issues such as development plans (Article XIV), inter-state coope education (Article XIII), research (Article XII) and organisation of national conservation services (Article XV) a of the CBD on the same issues. Article XI, customary rights, raises the issues of traditional knowledge in a simi of the CBD. In addition Article IX, traffic in specimens and trophies, and the appendices to the Convention provisions of CITES and to some degree Article VII (1)(b) can be seen as addressing the major concerns of the Ra

The African Convention also endorses basic principles, particularly that of sustainable use, that have subsequently

> *Accepting that the utilization of the natural resources must aim at satisfying the needs of man accord environment*;

[10] The Convention has been ratified without qualification by 30 African states and signed but not ratified by a further 12.

An examination of the African Convention on the Conservation of Nature and Natural Resources, in combina clearly demonstrates a deep and longstanding commitment to the principles of the CBD, and other biodiversity r CBD advances the principles and objectives of the African Convention. While African national laws were largel Convention, and thus made compatible with the future CBD, comprehensive implementation was limited by acce technical expertise. The NEAPs and NBSAPs for example, only became a feature of African policy making onc a clear endorsement for such initiatives by the African Convention's Article XIV.

8.2 **Convention for the Protection, Management and Development of the Marine and Eastern African Region (Nairobi, 1985)**

The provisions of the Convention for the Protection, Management and Development of the Marine and Coastal Region are similar in nature to those for any other agreement relating to protected areas. There are provision fragile ecosystems, the habitats of endangered species as well as broader provisions to maintain the overall level In short the obligations created by this Convention mirror those found in the CBD's provisions on *in-situ* co Convention.

The implementation of this convention is almost exclusively covered by earlier sections of this report, particular Ramsar Convention. Some form of protected area status, principally national marine parks and national marine re territorial waters, particularly those immediately adjoining the coast and surrounding the coral reef. In legis management of these areas is not distinguished from that of terrestrial parks and reserves. At the policy level th the development and implementation of management plans. However, these differences are based on technical qu policy differences. In some instances the terrestrial coastal area has proved problematic with the status of area important wetland with major significance for migratory birds, remaining unclear due to local political difficult coastal area is a currently proposed project for titanium mining in the Kwale district of Coast Province. This p development of standards for environmental impact assessments but also for public education and aware accountability in the EIA process has come from the local community and civil society organisations. Governm largely been towards monitoring the application of existing laws, which are deficient in the absence of EIA regul and a more positive insistence that local community wishes and views should be respected.

In summary the obligations established by the Convention for the Protection, Management and Development of t of the Eastern African Region are replicated by the obligations created by broader agreements such as the CI consequence legislative implementation is as discussed in earlier sections regarding these other agreements governmental support and effective lead agency action, with some deficiencies in coordination, also applies wit isolated local circumstances.

8.3 **Protocol Concerning Protected Areas and Wild Fauna and Flora in the Eastern African**

The Protocol Concerning Protected Areas and Wild Fauna and Flora in the Eastern African Region was establis for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African focused on coastal and marine issues the Protocol is rather an extension of some of the principles and objectiv trade to the national level. Thus, while it does address trade issues, the Protocol also covers questions of ecosys measures involving capture or killing, protection of migratory species and alien invasive species. Due to this v also be seen to tie into the concerns of the CBD and the Convention on Migratory Species.

Since the Protocol Concerning Protected Areas and Wild Fauna and Flora in the Eastern African Region is pred areas and / or wildlife issues the main implementing agency in Kenya is automatically the Kenya Wildlife implementing legislation is once again the Wildlife (Conservation and Management) Act as amended in 1989. T as discussed earlier in the section on CITES, straightforward in Kenya, at least where fauna are concerned, as the leaves only very restricted, and thus fairly easily monitored, opportunities for trade. Also as discussed earlier the clear.

It should be noted that both the Protocol and its parent Convention predate the CBD and it has thus been suggest should be reviewed to ensure compatibility. However, Kenya has made no stipulations as regards the compatibi and the Protocol with the CBD. The result of this situation is that the CBD can be assumed, according to the prov the Law of Treaties, to have automatically modified the earlier agreements wherever necessary. This has essent implementation as the Environment Management and Coordination Act clearly derives many of its principles and rather than the two East African regional agreements.

8.4 **Convention for the Establishment of the Lake Victoria Fisheries Organisation (Kisumu,**

The Convention for the Establishment of the Lake Victoria Fisheries Organisation is principally a commercia aspects that touch on biodiversity issues. The first of these is the Convention's interest in the maintenance of the associated habitats. The second aspect is the general aim of improving the environment of the lake, and in partic provisions that have clear links to basic international biodiversity agreement principles such as sustainable utilisa and collaborative research strategies.

In legislative terms the Convention has been difficult to implement in terms of its biodiversity related interests d and policy from conservation related agencies. However, coordination has been far more effective at the policy le have been somewhat informal, due to immediate problems facing Lake Victoria's environment. The major Fisheries Convention has, thus far, been the question of invasive species as the introduction of the water considerably disrupted the ecosystem and created consequent economic costs for surrounding communities and t also been a significant question with strong evidence of problems relating to pesticide use. Fisheries policy in Ke chaotic but recent pressure from the European Union, the main export market for Kenyan fish, has led to fundar been mainly targeted at the streamlining and harmonisation of fisheries policy and regulation. There have also with conservation related lead agencies due to the economic difficulties that have arisen from the degradati expected that continuing economic pressure, particularly from the EU, will lead to further consolidation and pr goals of this Convention.

9.National Initiatives for the Effective Implementation of Biodiversity-

Kenya's implementation of biodiversity-related conventions

Kenya's biological resources are diverse, with an estimated 35,000 known species of animals, plants and mi Government has taken a firm initiative to protect its biological diversity and incorporates issues of sustainable agriculture, industrial development, human settlements and water and sanitation initiatives. The Government has land area (about 8%) as protected areas for wildlife and forestry conservation, and to ensure the survival, conse valuable assets. This *in-situ* conservation includes 26 national parks, 30 national reserves and 2 game sanctuaries conservation including arboreta/botanical gardens, animal orphanage, animal (snake and crocodile, game, ostrich private sectors.

Kenya's National Vision as stated in the Summary of the NBSAP, Ministry of Environment and Natural resources

Kenya's national vision is that there will be a healthy environment providing abundant biodiversity resources people. Our biodiversity resources will be sustainably conserved and utilized by sensitised and empowered management practices, and the application of modern and indigenous technologies. Best practices in biodiversity national development planning, and through good governance, there will be sustainable utilization and equi improved social, cultural and economic status of the people for posterity.

The General Objectives as set out in the same document, are:

-To conserve Kenya's biodiversity
-To sustainably use its components
-To fairly and equitably share the benefits arising from utilization of biodiversity resources among stakeholders
-To enhance technical and scientific cooperation nationally and internationally, including the exchange of inf conservation.

In an effort to realise these objectives, and in accordance with the obligations set forth in the CBD, and more s which has been examined before, the said Article calls for parties to:

> *develop national strategies, plans or programmes, or adopt existing plans, to address the provisions o biodiversity work into sectoral and cross-sectoral plans, programmes and policies.*

Kenya's implementation of biodiversity-related conventions

The importance of developing national biodiversity strategies and action plans is further underscored in Resoluti Chapter 15 of Agenda 21[11]. Hence the CBD calls for country studies; national strategies and action plans. Kenya l NEAP and has submitted a national report to the CoP. The NBSAP will be put to test by continual analysis of th identifying whether its overall objective-

To address the national and international undertakings elaborated in Article 6 of the Convention. It is a national implementation of the Convention to ensure that the present rate of biodiversity loss is reversed, and that prese maintained at sustainable levels for posterity..

is met.

Kenya's strategic approach to developing the NBSAP recognized that the country did not have one integrated r biodiversity. Rather, there were a number of sectoral strategies and programmes that would generally operate inc to address this fragmented approach and to realise its obligations under the CBD and work towards attaining i developed as one of the tools to meet these objectives. Various precedents and guides were used in developing National Strategy, mentioned throughout this study, analyses the gaps between current reality and the aspiration objectives. The Strategy addresses the issues raised in the Convention, stating what needs to be done and how to specifically lists the actions to be undertaken, by whom and includes a time frame for doing so, is attached as Anr process include factors such as most of the conservation efforts focussed on a small number of species thereby i view, a lack of sufficient human and technical expertise and a lack of funds.

The Environmental Management and Coordination Act is the legislative cornerstone of Kenya's efforts to biodiversity. The Act calls for the establishment of a National Environment Management Authority (NEMA) who

> Article 9(1) *"..to exercise general supervision and co-ordination over all matters relating to the en instrument of Government in the implementation of all policies relating to the environment."*

The said Act also makes specific reference to translating the obligations imposed by environment convention national context:

> Article 124(1)*"Where Kenya is a party to an international treaty, convention or agreement, whether bila management of the Environment, the Authority shall, subject to the direction and control of the Counci agencies:-*

[11] Chapter 15 of Agenda 221 calls on governments to develop *"new or strengthen existing strategies, plans or programmes of action account of education and training needs"* and *"to undertake country studies or other methods to identify components of biological d sustainable use"*

(a) initiate legislative proposals for consideration by the Attorney-General, for purposes of giving e
agreement in Kenya or for enabling Kenya to perform her obligations or exercise her rights under such tr
(b) identify other appropriate measures necessary for the national implementation of such treaty, conventi

The current Mid-Term Expenditure review Framework (MTEF) and the Poverty Strategy Reduction Paper (PRSI the natural resources, funds must be available to carry out the same. At present only 2% of ministerial allocations environmental management on the ground and all the rest of the allocations are from development partners. In r preferential treatment will be given for environmental considerations during the next ten years, such as by encourage sustainable use and protection of the environment through the budget and also by for example, in Investment Programme and in private sector investment and supporting the effective management of the same. with professional skills and sound regulatory and enforcement policies and legislative measures, paves the road the country's national environmental objectives.

[12] For a list of recommendations for the preparation of NBSAPs, see Report of the NBSAP Workshop for Eastern Africa, RBF (Mombas

10. Conclusion and Recommendations

This study has taken a broad over view of Kenya's implementation of a number of regional and global bio agreements have profound implications for Kenya's legislative and policy structure in all fields, particularly approach is considered. Despite this complexity it is clear that there are some trends that have both benefited and internationally derived obligations. These trends are of particular concern as Kenya's development of a new statu matters creates a unique opportunity for past problems to be addressed, just as it also presents an unusually dange historical deficiencies in biodiversity policy.

The study makes the following findings:

1) Kenya has historically been consistently supportive of the objectives of the various biodiversity agreeme political will is weakening and it thus constitutes an important asset for future management and planning political will has been fundamental to all of Kenya's successes in the past several decades as it has a capacity of both the technical and policy aspects of biodiversity, partly through its fostering of a predictab

2) The statutory and financial weakness of NES is a fundamental structural problem that has resulted in the lead agencies with no effective coordination. The coordination that has taken place has been of a largely and thus has still always been plagued by the presence of competing institutional overlaps and also by gap

3) The establishment of NEMA is clearly a potentially effective solution to the problems of NES but this problems are addressed:
   a) The scope and complexity of the Environment Management and Coordination Act 2000 are enorm commitment by the people of Kenya to successfully implement;
   b) The statutory force of NEMA will be difficult to fully realise unless the institution is appropriately considering the current donor climate, will need to show substantive support in terms of both fun branches of government to allow NEMA the option of being an effective international fundraiser, so success or failure of most Kenyan lead agencies in the past. It will also be important that this suppor become self-defeating by unduly damaging the interests and capacities of existing lead institutic strategies to ensure the availability of resources.
   c) The NEMA Implementing Committee must rapidly broaden its activities to be seen to be considering agencies and thus ensure their commitment to, and cooperation with NEMA. Without this it will be di actual needs and capacities.
   d) The NEMA Implementing Committee must rapidly move from its current focus on administrative ar clearly takes account of the institutions many future functions. If these functions are not considered systemic difficulties will be built into the institution. This may involve the early involvement of spe fields such as access to genetic resources or wetlands management.

4) The NEMA Implementing Committee should make Article 15 of the CBD, access to genetic resources, genetic resources is a crosscutting issue of significant importance to Kenya due to the high level of activities in the country and/or based on its genetic resource base. The current situation clearly allows for genetic material, both through so-called 'biopiracy' but also through the lack of awareness of some lead ag fragmented, and frequently *ad hoc*, approach is often ineffective but there have been success stories so so access to genetic resources in Kenya would be warranted to highlight successful strategies as well as sy important that the NEMA Implementing Committee consider access to genetic resources at an early countries in implementing Article 15 indicate that structural factors are a critical element in the success or

5) Agricultural and fisheries legislation and policy need to be more explicitly included in the biodiversity age to the CBD and the ongoing negotiations for the revision of the International Undertaking on Plan Agriculture have clearly illustrated the basic linkages between agricultural and biodiversity considerations and events involving invasive species have also established clear common issues between fisheries pol There is no explicit consideration of agricultural and fisheries issues in the Environment Management ar various statutory instruments governing agriculture and fisheries do not contain more than a minimum of b even more important than the statutory level is that of policy and practice in the ministries and agencies issues. At a minimum the development of clear linkages between the ministries and agencies responsible be made an early priority of NEMA and at the other extreme a review of the agricultural and fisheries legis

6) The Kenya Wildlife Service has had considerable success in implementing innovative strategies for coord concerns at the internal level. This tradition of innovation seems to be continuing and is now being e engagement with NEMA. These efforts should be actively reinforced at KWS but also efforts should be other agencies in an effort to avoid overlapping and/or conflicting mandates and activities.

7) A comprehensive review of legislation and policy relating to flora and microorganisms is needed to de current regulatory overlaps and gaps. Kenya's traditional focus on fauna has been and should contin particularly as regards ecosystem conservation. However, this focus has been unable to address the ever e organisms leaving a situation where research and commercial activity involving fauna is comprehensive the regulation of activities involving flora and micro organisms is patchy at best, and frequently even cor regulations and ground level practice should be examined and a focus placed on flora and micro organis areas or covered by the provisions of CITES. This is not to suggest that Kenya should be encouraged to term successful strategy of focusing on fauna but rather that it should be encouraged and supported in policy gaps that have developed, particularly in the last twenty years.

8) The holding of a national Environment Convention that would include all lead agencies and key stakehol the Environment Management and Coordination Act. This Convention could build upon the basic struct

NEMA Implementing Committee but more importantly it could break up into focused technical working g
the basis of advisory bodies to NEMA on the various aspects of its mandate. The Convention would al
already exists that could be co-opted to effectively assist NEMA in its functions, such as the National
National Regulations and Guidelines for Safety in Biotechnology in Kenya. Such a Convention if efficient
to produce substantive results, would allow NEMA to be founded on broadly considered and technically
structure and processes of the Conference of the Parties to the CBD, combined with some aspects of the
suitable model for such a national Environment Convention.

ANNEX 1

Kenya-The Action Plan[1]

The Action Plan identifies specific policy objective sand actions to be undertaken in an effort to enhance the biodiversity.

In the short term, the action plan attempts to translate and put the strategy into action. In Kenya's case the actio specific objectives within the next five years.

	ACTION	BY WHO
1.	Strengthen institutional and community capacities and linkages	Government of Kenya, KWS, NGO CBOs
2.	Promote gender equity in biodiversity management	Government of Kenya, KWS, NGO CBOs
3.	Strengthen and harmonize national policies and legislation for the effective conservation and sustainable utilization of biodiversity	Government of Kenya, KWS, NGO CBOs
4.	Take measures to reduce the impacts of poverty on biodiversity	Government of Kenya, Private secto NGOs, CBOs
5.	Strengthen national capacity for monitoring and evaluation of biodiversity	Government of Kenya, KWS, NGO Universities

[1] The Kenya National Biodiversity and Action Plan, Ministry of Environment and Natural Resources

	ACTION	BY WHO
6.	Strengthen and maintain high standards of management and conservation in the protected area system, especially the wildlife sector	Government of Kenya, KWS, Priva sector, NGOs, CBOs, Universities
7.	Protect aquatic ecosystems from pollution and other threats	Government of Kenya, Private secto NMK, KWS, NGOs
8.	Protect and promote sustainable development activities in arid and semi-arid lands	Government of Kenya, KAR Universities, KWS, CBOs
9.	Promote the conservation and sustainable utilization of forests	Government of Kenya, KEFR Universities, Private sector, NGOs, CBO
10.	Rehabilitate degraded ecosystems and restore threatened species	Government of Kenya, KWS, NMI Universities, NGOs
11.	Formulate national guidelines and regulations with respect to alien, invasive and genetically modified organisms; biotechnology and biosafety	Government of Kenya, KARI, NCS Universities
12.	Support and promote the utilization of indigenous knowledge, innovations and practices	Government of Kenya, NGOs, CBOs
13.	Strengthen national *ex situ* conservation facilities	KARI, NMK, Universities
14.	Promote the sustainable utilization of the components of biodiversity	Government of Kenya, Private secto Universities, KWS, NMK, NGOs, CBOs
15.	Provide incentives to promote biodiversity conservation	Government of Kenya, NGOs, CBOs
16.	Strengthen the national capacity for research and training, technical and scientific cooperation and biotechnology	Government of Kenya, KAR Universities, NMK, KWS, NCST
17.	Strengthen national programmes for public education, awareness and exchange of information	Government of Kenya, Universitie NGOs, CBOs
18.	Strengthen pollution control measures and conduct impact assessments	Government of Kenya, Private sector
19.	Facilitate access to genetic resources and transfer of technology	Government of Kenya, KWS, NMI Universities, NCST
20.	Strengthen the conservation and sustainable utilization of agricultural biodiversity for food and agriculture	Government of Kenya, NMK, KW Universities, Private sector, NGOs, CBO
21.	Act on the decisions of the Conference of Parties	

	ACTION	BY WHOM
21.1	Address issues on alien species and develop relevant country-drive projects as elaborated in Decision VI/I	Universities, KARI, KEMFRI, NGO Government of Kenya
21.2	Develop country-driven projects to implement the Global Taxonomy Initiative (Decision III/10 and Annex 1)	NMK, Universities
21.3	Develop and implement the National Clearing House Mechanism (Decision IV/2)	Government of Kenya
21.4	Explore options and modalities for access and benefit sharing mechanisms in the national context (Decision IV/8)	Government of Kenya, NCST, NMI Universities, NGOs
21.5	Institute appropriate measures, including ways and means, to assess environmental impacts and minimize their adverse effects on biodiversity (Decision IV/10)	Government of Kenya, Universities
21.6	Design and implement economically and socially sound incentive measures for the conservation and sustainable use of biodiversity (Decision IV/10)	Government of Kenya, NGOs
21.7	Analyze and report nationally as appropriate the content and national obligations implied in Decision III/11	Government of Kenya
21.8	Identify, assess and report back to the COP the relevant on-going activities and existing instruments at the national level, choosing among the thematic areas in the indicative list in Annex 2 of the COP IV report	Government of Kenya
21.9	Identify and report to the COP issues and priorities in agricultural biodiversity that need to be addressed at the national level	Government of Kenya, Private secto KWS
21.10	Make tourism and related activities compatible with the conservation and sustainable use of biodiversity (Decision IV/15)	Government of Kenya, Private secto KWS
21.11	Implement the work programme elements for forest biodiversity as elaborated in Decision IV/7	Government of Kenya, Universitie KWS, NMK
21.12	Implement the work programme elements for the biodiversity of inland water ecosystems as elaborated in Decision IV/4	Government of Kenya, KWS, NMI Universities, KEMFRI

	ACTION	BY WHOM
21.13	Implement the work programme elements for the biodiversity of marine and coastal biodiversity as elaborated in Decision IV/5	KEMFRI, KWS, NMK, Universities
21.14	Implement the Global Plan of Action of the FAO for food and agriculture	Government of Kenya, KAR Universities, NMK
21.15	Implement Decision III/20 on issues related to biosafety, including the National Biosafety Framework	Government of Kenya, NCST Universities
21.16	Consider and address specific issues on the conservation and sustainable use of agricultural biodiversity raised in Decisions III/11 and IV/6	Government of Kenya, KAR Universities, Private sector