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Kenya Country Environment Profile

Final Report

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Executive Summary
Findings, Conclusions & Recommendations

This Country Environmental Profile for Kenya has as main objective to identify and assess environmental issues to be considered during the preparation of the coming Country Strategy Paper. It provides information on key environmental challenges, as well as policies, strategies and programmes designed to address them. According to the Terms of Reference for the preparation of the Country Environmental Profile, this information would ensure that the strategies applied by the EC Cooperation systematically integrates environmental considerations into the selection of priority focal areas and mainstream environmental considerations into all programmes.

Key Environmental Issues

As key environmental issues are identified : (i) Natural resources degradation (land, water, vegetation cover); (ii) Loss of biodiversity in the country's main ecosystems including wetlands, forests, marine ecosystem; and (iii) Socio-economic environment: dropping socio-economic indicators in health (high prevalence of major diseases, HIV/AIDS, malaria and TB), access to water and access to education.

The main forces leading to resource degradation are:

- The increasing pressure on the limited resources (land, water, energy), which in turn is caused by (i) a skewed landownership, (ii) lack of a comprehensive land policy regulating landownership, land tenure and land management; (iii) high dependency on agriculture and livestock for livelihoods and inadequate alternative employment opportunities; and (iv) the growing population;
- Low productivity in agricultural systems, especially subsistence production systems;
- Unsustainable use of resources; and
- Inadequately designed and managed settlement schemes.

The high pressure on land in the high potential zones leads to:

- Migration of farmers to the semi-arid areas, applying agricultural practices of the high potential areas that are unsuitable for these semi-arid areas and causing resource conflicts with the livestock-holders/pastoralists who depend on the semi-arid areas for their dry-season grazing;
- Encroachment of forest areas, leading to de-forestation, soil erosion on hilltops and sloping areas;
- Utilization of sloping lands, riverbanks without applying appropriate conservation measures;
- Subdivision of agricultural lands through heritage; eventually resulting in un-economical units.
- Migration to urban areas: people who cannot find a living in agriculture eventually will migrate to urban areas.

The increased pressure on resources (land, water, forage) in the ASAL areas has led to degradation of this fragile ecosystem as shown in loss of forage, reduction in rangeland productivity, increased water & wind erosion and decline in water sources. The traditional pastoralist system has become increasingly vulnerable due to: (i) Decreased access to the dry season grazing areas in the semi-arid areas; (ii) increasing frequency and intensity of droughts through which the herds cannot recover fully, thus resulting in decrease in production of animals and milk, threatening pastoralists with a growing risk of food insecurity; (iii) the deteriorating security situation; (iv) increased drought

occurrence; (v) sedentary policies; (vi) inadequately designed and poorly managed development projects; and (vii) inadequate marketing opportunities.

The increasing pressure on natural resources is leading to increased occurrence of resource conflicts: (i) agriculture – agriculture, (ii) agriculture – livestock, (iii) agriculture – wildlife, (iv) livestock – wildlife; and (v) human – wildlife.

Main indicators of resource degradation are: loss of vegetation cover, loss of forests (5,000 ha/year), increased soil erosion, decrease in soil fertility, reduction in bio-diversity, decreasing quality and quantity of water, and decreased agricultural productivity.

The main effects of resource degradation are: (i) Decreased economic base for the major livelihoods; (ii) Loss of economic investments (infrastructure) due to erosion; (iii) Increased occurrence and intensity of droughts and floods; and (iv) Increased poverty.

There is a clear relationship between resource degradation and poverty; poverty being a cause as well as a result of resource degradation. The high dependency on the limited natural resources for their livelihood, leads to over-exploitation and depletion of the natural resources, which in turn leads to decreased productivity and increased poverty and eventually in abandoning the agricultural and livestock sectors, resulting in migration into the urban areas seeking for alternative employment. Addressing resource degradation therefore largely coincides with addressing poverty reduction.

Kenya has experienced a rapid urbanisation, mainly because of the shrinking sources of livelihoods in the rural areas.. Between 1969 and 1999 the urban population increased from 1.2 million to 7.7 million people, which represents respectively 10% and 27% of the total population. In the period 2000 – 2005, urbanisation amounted to 7.05%, being the highest in the world[1]. Most people migrate to the urban centres of Nairobi, Mombasa and Kisumu.

The rapid urbanisation has placed considerable pressure on available housing, infrastructure and other services. Urban policy and planning have not been able to cope with the rapid urbanisation. As a result the urban areas experienced a rapid growth of slums and squatter settlements, which suffer from inadequate water and sanitation, health facilities and other basic infrastructure. While 90% of the urban population has access to safe drinking water (40% national), the access to improved sanitation is reported to be 65% (57% national) . Only 30% of gazetted urban areas in Kenya have sewerage systems, which results in serious health risks and environmental consequences. Many of the major cities and towns including Mombasa, Kisumu and Naivasha have inadequate and/or malfunctioning sewerage systems. This is further exacerbated by reports of high leakage rates from these networks. Solid waste management has become a critical feature that is sorely lacking in all urban areas. As a result the larger part of the solid waste finds its way in surrounding areas and rivers, with dire environmental consequences including outbreak of diseases.

The main areas/sectors for intervention in addressing resource degradation are: (i) Creation of a regulatory framework for the use of natural resources, mainly through the formulation of a comprehensive land policy; (ii) Increasing the agricultural and livestock productivity, adapted to the different agro-ecological zones; (iii) Increasing/restoring the forest cover (reforestation of 'water towers' and other catchments), to balance energy demand (fuel wood, charcoal); and (iv) Creation of alternative employment opportunities to reduce the pressure on natural resources.

[1] 2.57% for the world and 4.37% for Africa.

Loss of biodiversity is closely related to resource degradation. Over-exploitation of biodiversity resources includes illegal logging, over-fishing, poaching, overgrazing and overstocking of livestock, all posing a significant threat to the country's major ecosystems; (i) wetlands, (ii) coastal and marine ecosystems, (iii) forests, (iv) ASALs, and (v) farmlands.

The socio-economic environment relates to (i) access to health services, education and provision of water and sanitation; (ii) poverty; and (iii) gender issues. Kenya has shown dropping socio-economic indicators in health, water supply and education in the past two decades.

HIV/AIDS prevalence has increased from 4.8% in 1990 to 13% in 2000 to 10.6% currently. One of the significant negative impacts of the HIV/AIDS pandemic is on the working and productive age group of society, that is between the ages of 15 and 50. This has led to a disproportionately high number of orphans, child-headed, single parent or grandparent headed households with the consequential effects on society, all impacting on poverty levels.

Environmental Policy, Legislative and Institutional Framework

Kenya does not have yet an overarching national environmental policy; a detailed and comprehensive National Environmental Action Plan (NEAP) was developed in 1994. The NEAP contains suggestions for broad objectives and strategies of a national environmental policy. However, Kenya currently has a sound environmental legislative framework in place which is being built upon. The Environmental Management and Coordination Act (EMCA) came into force in 1999 and its main function is to provide for the establishment of an appropriate legal and institutional framework for the management of the environment. The Act is administered by the National Environmental Council and implemented by the National Environmental Management Authority (NEMA). Other relevant legislation includes:

- The Environmental Impact Assessment and Audit Regulations, 2003. The Environmental (Impact Assessment and Audit) Regulations of 2003, contained in Kenya Gazette Supplement No. 56, Legal Notice 101, have been legislated;
- The Environment Management Order, 2004 (Lake Naivasha Plan);
- The Forest Act, 2005;
- The Water Act, 2002; and
- Approximately 77 sectoral and other laws (e.g. Agriculture, Mining, Factory Acts etc.).

Regulations in draft form include:

- The Environmental Impact Assessment Guidelines, 2004);
- Environmental Quality Standards, 2004 (for Land degradation, water quality, waste quality, chemicals, biodiversity, economic instruments and air emissions).

Kenya is a signatory of the following international and regional conventions:

- UN Convention on Biological Diversity (UNCBD), 1992;
- UN Framework Convention on Climat Change (UNFCC), 1992 ;
- UN Convention to Combat Desertification (UNCCD), 1994;
- Protocol for Sustainable Development of the Lake Victoria Basin, 2004;
- Stockholm Convention on Persistent Organic Pollutants (POPS);
- Basel Convention on Control of Trans-boundary Movements of Hazardous Wastes and their Disposal, 1989;
- Montreal Protocol on Substances that Deplete the Ozone Layer, 1987;

- Convention on International Trade in Endangered Species, 1973;
- Ramsar Convention, 1971.

There is a large number of national policies and strategies that incorporate environmental components or are closely related to the key environmental issues:

a. Agricultural development related Policies & Strategies: (i) Strategy for Revitalizing Agriculture (2004 – 2014); (ii) draft National Livestock Policy, 2006; (iii) draft Fisheries Policy, 2005; (iv) Kenya Rural Development Strategy (KRDS) 2002 – 2017; (v) draft Food and Nutrition Policy; and (vi) ASALs Policy, 2004.
b. Other Sectoral Policies & Strategies: (i) Energy Policy – Sessional Paper No 4 of 2004; (ii) Forest Policy, 2004 and Forest Act, 2005; (iii) Water Act, 2002 and associated Policies; (iv) Wildlife Conservation and Management (Amendment) Act, 1989; and (v) Mining Act and Policies. Review of the latter is over due.
c. National Plans & Policies: (i) National Development Plans; (ii) The Poverty Reduction Strategy Paper (PRSP); and (iii) Economic Recovery Strategy (ERS) for Employment and Wealth Creation (2003-2007).

At the national level, the two main organisations directly responsible for dealing with environmental issues are the Ministry of Environment and NEMA. It appears that there is insufficient distinction between the roles and responsibilities of the MENR and NEMA both within the two organisations and externally among donor agencies, experts working in the environmental sector and the public.

In NEMA, there are four main departments: (i) The National Environment Trust Fund; (ii) The National Environment Restoration Fund; (iii) The Standards and Enforcement Review Committee; and (iv) National Environmental Action Plan Committee (under this department, there are the Provincial and District Environment Committees).

EMCA, 1999 is reported to be one of the best framework laws on environment and yet enforcement of the law, to date is weak. Part of the reason for this is the lack of gazettment of standards, but part of the reason is also inadequate political will at the most senior levels. Ministers have the power to issue orders and furthermore Presidential decrees can also be issued.

Other key institutions involved in environment are:

- Ministries: (i) Planning and National Development, (ii) Finance, (iii) Agriculture, including KARI; (iv) Livestock and Fisheries (Vet. Department), (v) Water and Irrigation, (vi) Lands and Settlement, (vii) Trade and Industry, (viii) Energy, (ix) Tourism & Wildlife
- Office of the President, Department of Arid Lands.
- National Authorities; TARDA, LBDA, ENNDA, ENSDA, KVDA, CDA.
- National institutions/Private Sector: KWS, NMK, KIPPRA, HCDA, KPSF, KAM, KTB.
- Relevant Projects and Programmes; LVEMP, CDTF.
- Civil Society Organisations; KFWG, KLA, ELCI, Green Belt Movement.

Some main features of these institutions are:

a. The financial resources of the government institutions have declined over the past years due to the stagnating economy, governance issues and related decline in donor support. As a result the implementation capacity of the government institutions has reduced considerably. Increasing budget allocations for development of relevant programmes is one of the objectives of the ongoing ERS. Projections show a slightly improving trend for the coming years.
b. Closely related to the foregoing is the still weak institutional capacity of most of the government institutions.

c. Civil Society Organisations have gained in strength over the past years. There are approximately 600 NGOs that are operational in the environmental sector in Kenya. CSOs that have been successful in lobbying and advocacy in the past 10 years include : EAWS, KFWG, KLA and the Green Belt Movement.

Donor Cooperation from an Environmental Perspective

The European Community

Cooperation between the EC and Kenya from an environmental perspective has been analysed at two levels: (i) the strategic level: the degree to which the environmental issues are addressed in the Country Strategy Paper 2003 -2007 (CSP) and (ii) the implementation level: the degree of implementation of the environmental relevant sectors and the extent of integration of environmental issues in project cycle management.

With regard to the strategic level (the CSP), the conclusions are (i) environmental issues, although not in great detail, have been considered in the analysis of the political, and the socio-economic, which forms the basis for the Indicative Programme and (ii) the priorities as indicated in the CSP/IP coincide to a large extent with the environmental priorities: Agriculture and Rural Development as a focal sector and GBS to support the PRSP implementation.

With regard to the implementation of the focal sector Agriculture & Rural Development, the conclusions are: (i) this environmental relevant sector did not receive the importance in terms of budget allocation as was envisaged in the CSP. Only 6-7% of the total budget has been committed instead of the planned 25-35%; (ii) The EC is active in agricultural sub-sectors (Coffee, KARI, Tse-tse control (regional)) but not a main player in the agricultural and rural development sector; and (iii) the Community Development Projects (I&II) the Bio Diversity Projects and the EC supported FAO Food Security Programme have been successful and represent project types that can be scaled up.

GBS is provided through the Poverty Reduction Budget Support (PRBS). Financing agreement for the PRBS II was signed in November 2005. The purpose of PRSB II is to contribute to poverty reduction by supporting the implementation of the ERS and by linking GBS to the outcomes of the reforms. PRSB II focuses on three interrelated objectives: (i) Support macro-economic stability and underpin fiscal consolidation; (ii) Support improvements in service delivery in health and income; (iii) Strengthen public financial management.

Performance of the IP-ERS implementation is monitored through 29 outcome indicators that are reported annually. Of these 29 indicators 9 relate to the social sectors and two to the bio-physical environment: (i) the area of gazetted protected forest which is targeted to increase by 13,000 ha annually and (ii) the proportion of public sector projects subjected to EIA, but no targets have been set. Both outcome indicators have not been reported for the progress 2004/05.

GBS disbursement is linked to the overall macro-economy performance and the performance indicators for public financial management and social sector. Therefore, it may be concluded that relatively little importance is given to bio-physical environment in the implementation of the ERS. GBS therefore, will contribute to the improvement of the socio-economic environment (drinking water, sanitation, health and education), but less to the bio-physical environment: the degradation of natural resources and bio-diversity.

The EC is currently developing procedures for environmental integration in PCM for GBS and SPSP. In the present PCM procedures environmental integration is limited to the cross-cutting issues in identification, formulation, implementation and evaluation. For projects, the EC has procedures for assessment of EIA requirements for different types of projects.

Reviewing the environmental integration in the JOAR 2005 showed that environment is hardly addressed in the paragraph on cross-cutting issues; only for two of the eleven sectors was environmental integration considered sufficient. Environment has been well integrated in the design of the CDP, BCP and the TISMPP programmes. Guidelines for EIA and EIA screening have been included in these programmes.

Other Development Partners

An inventory has been made of donor programmes related to environment. The inventory is not comprehensive, but is indicative of current and emerging support for the environment and cross-cutting sectors. At least 20 donor organisations are involved in environmental programmes.

Donor support related to environment has increased over the past five years. Relatively more support is provided to the institutional strengthening of MENR and NEMA. Also, a lot support is given to the water and forestry sectors and coastal environment, while support to the ASALs and Agriculture is relatively small.

Most of the donor agencies have regulations and procedures for environmental screening in place, often based on the national rules & regulations of the donor country or especially developed for the donor agency.

Coordination between the donors on environment is currently split into three types of fora, as follows:

i. Donor / Environment meetings. These were chaired by UNDP-PEI and are now chaired by USAID. The meeting schedule is approximately once every quarter.
ii. Sub-Group-1 – Donor - MENR/NEMA/EMCA,1999 meetings. These are currently chaired by MENR and co-chaired by DfID and to date three meetings have been held.
iii. Sub-Group-2 – Donor – Forestry meetings. These are also currently chaired by USAID and meetings are held approximately once every four months.

Main Conclusions

Key Environmental Issues

- Natural resources (land, water, vegetation cover) degradation is considered the main environmental threat in Kenya.
- Main forces leading to natural resources degradation are the high pressure on these resources, due to increasing population combined with (i) a skewed landownership; (ii) inadequate legislation towards land ownership, land tenure and land management; (iii) inadequate enforcement of existing legislation; and (iv) low productivity in agricultural and livestock systems.
- Main indicators of degradation are: (i) loss of vegetation cover (forage); (ii) loss of forest areas; (iii) increase in soil erosion; (iv) decline in soil fertility; (v) reduction in biodiversity; (vi) distortion of the hydrological balance, mainly because of deforestion, resulting in increased intensity and occurrence of drought and floods; and (vi) decreasing water levels in the majority of the country's lakes.

- Main effects are: (i) declining growth in agriculture; (ii) declining livestock production; (iii) declining fish production; (iv) increased occurrence of resource conflicts; and (v) increased poverty.
- There is a direct relationship between poverty and environmental degradation: poverty being a cause as well as a result of degradation.

Legislation and institutional framework

- Main environmental regulatory legislation is in place, (EMCA 1999). The main institutions responsible for its implementation are MENR and NEMA. Although considerable progress has been made, substantial support will remain required.
- Policies and strategies of the main sectoral agencies related to environment have been established in the past five years. Substantial support will be needed to implement these policies and strategies.
- An exception is the formulation of a comprehensive land policy, regulating landownership, land tenure and land management. Although the new government has taken initiatives in this context, the outcome is unsure at this moment.
- Institutional capacity of most sectoral agencies is still weak; substantial support will be required for effective functioning.
- The financial resources of the sectoral agencies have declined over the past years due to the stagnating economy, governance issues and related decline in donor support. The projection is that the budgets for the line ministries will gradually increase in the coming years; however donor support will be required for the implementation of the planned strategies.
- Overall, the enforcement of legislation is weak and although the importance of political will is recognised,,first and forememost support will be needed to strengthen institutions that enforce legislation.

Support by Development Partners

- Donor support has increased over the past three years including the support to environment-relevant programmes. Donor coordination is focussing on harmonization of donor support. A GoK initiated framework for donor support in the sector is considered a first priority.
- The EC support to Kenya is assessed positively at the strategic level (e.g. the CSP) in terms of choice of focal sectors and attention for environmental integration. At the implementation level, the focal sector “Agriculture & Rural Development” was not given the importance as anticipated in the CSP, environment was insufficiently integrated in the EC programmes (exceptions are CDP, BCP, TTMIP).

Main Recommendations

Environmental Integration in EC Project Cycle Management (PCM)

One of the conclusions is that environment is not well integrated in PCM. The EC-HQ in Brussels is currently preparing guidelines for integration of environment in the PCM procedures. It is recommended that these guidelines are implemented soonest in the EC Delegation.

An important instrument for environmental integration in the case of GBS and SPSPs is the Strategic Environmental Assessment (SEA). SEAs contribute to properly integrating

environmental concerns in strategy and policy papers, and define indicators to be monitored during implementation and evaluations. SEA screening and SEA studies are already practiced by other donors (SIDA, USAID) and SEA-screening is recommended by NEMA (See SoE 2004). In many of the national policy and strategy papers environment is not well integrated. It is therefore recommended that the EC utilizes the instrument of SEA as a standard procedure in all its sectoral programmes including GBS, for screening of policy and strategy documents.

Introducing environmental integration in PCM will require adequate institutional capacity within the Delegation, which is presently not available. It is therefore recommended to have an environmental specialist within the delegation with sufficient decision-making power, who has the responsibility to: (i) screen planning and strategy documents and project proposals on environmental integration; (ii) identify the requirement for SEAs and EIAs; (iii) commission SEA and EIA studies, (iv) monitor environmental integration during implementation; and (v) integrate environmental issues in evaluations.

EC-Sectors and Environmental Integration

Institutional Development, Good Governance and Rule of Law

- Further strengthening of Environmental Policy Formulation and support to MENR and NEMA.

  Considerable efforts have been made over the past years to develop the environmental legislation and to establish main environmental institutions (MENR and NEMA). There is still ample scope to continue providing support to these institutions, especially in environmental policy formulation, further strengthening of the institutional capacity in the implementation of the legislation.

  Detailed suggestions are made in this report for further support to the following:

  1. Strengthening Policy Formulation;
  2. Strengthening NEMA: the EIA and Audit Process;
  3. Strengthening of Environmental Communication and Information Systems; and
  4. Institutional Support for the environmental profession and training.

- The lack of a comprehensive land policy (and its enforcement) is one of the key issues in land degradation; and often mentioned in policy and strategy documents as a major constraint (see for example NEMA, SoE 2004). The EC could consider supporting the process of policy formulation, through support to the Ministry of Lands & Settlement and/or support to advocacy groups.

- Support to Sectoral Institutions: The institutional capacity of sector agencies is still weak, especially at provincial and district level; any sectoral programme or project should have a strong institutional capacity building component.

Food Security & Rural Development

There is a strong relationship between this sector and most of the environmental themes. From the environmental (and poverty) perspective, it is recommended to include food security and rural development as a focal sector. As compared to the 9th EDF, the investment in the sector could be substantially increased. As a first step a vision & strategy for EC support should be elaborated, in collaboration with the GoK and other partners in the sector.

Opportunities for programmes and projects are many, to mention some:

a. ASAL programmes: (i) To expand on present KARI activities and link with extension; (ii) Link with WB ASAL programme and invest in part of District Action Plans, (iii) Expand on livestock activities (regional programmes) and participate in livestock development investments (ASAL strategy 2005 – 2015;
b. Continue and strengthen the support to the KFSG under the Arid Lands Project and the EC/FAO Food Security Programme
c. Support to the implementation of the Agricultural Recovery Strategy: (i) Include/finance/ environmental sound techniques in extension, (ii) Stimulate watershed management programmes, (iii) Support the implementation of the Forestry Strategy;
d. Continue and expand on the present BCP.

Social Sector

From the environmental perspective, the socio-economic environment is considered as a second priority. The social sectors are however important from the poverty perspective. It is recommended that the present support to health and education continues through GBS and the specific programmes.

Transport

Roads and especially rural roads are important from the poverty perspective (marketing agricultural and livestock produce, access to inputs and other service) and will therefore contribute to increased productivity. Roads are mentioned as a first priority in the ASAL Policy.

It is therefore recommended that the Roads Programme (especially rural roads) is continued and expanded to the ASALs.

Trade and Environment

Tourism is and will likely continue to be an important and growing economic sector with potentially positive as well as negative environmental impacts. The environmental integration in the EC programmes (TDSDP and TISMPP) has been assessed positively. It is therefore recommended that support to this sector continues and further expands.

The relationship between manufacturing and environmental themes mainly refers to avoiding and mitigating negative environmental impacts. Environmental integration therefore entails the proper integration of EIAs, EMPs in project planning and implementation.

Macro-economic Reform

As GBS is the main focal sector of EC support in terms of investments, it is recommended that the EC consider integration of environmental indicators in the monitoring of the ERS implementation and to make disbursements conditional to these outcome indicators. An SEA would be a first step in identification of environmental outcome indicators. Possible indicators are: (i) Preparation and enactment of a comprehensive land policy; (ii) Indicators for enforcement of existing land policies; (iii) Area brought under forestry (apart from the gazetted forests); and (iv) Areas of implemented soil and water conservation areas.

Regional Cooperation

Many of the environmental issues are of regional nature like the shared resources (Lake Victoria) and the trans-boundary nature of nomadic pastoralism. Other trans-boundary environmental issues include: (i) persistent organic pollutants (POPS), (ii) trans-

boundary movements of hazardous wastes and their disposal, (iii) reduction of substances that deplete the ozon layer, (iv) trade of endangered species, and (v) wetlands of international importance. For all these trans-boundary issues Kenya has signed international treaties.

Several EC programmes are already addressing these regional environmental issues: Association for Strengthening Agricultural Research in Eastern and Central Africa (ASERECA), Pan African Programme for Control of Epizootics (PACE), Farming in Tsetse Controlled Areas (FITCA) aiming at reduction in tsetse infestation, support to Fisheries Research and Management of Lake Victoria (LVFRP and LVFO) and the EC/FAO Food Security Programme run in 20 countries in Africa. These programmes should continue and scaled-up where possible.

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ANNEX 2: Administrative Appendices

LIST OF ABBREVIATIONS

AfDB	African Development Bank
AFP	Agence Française de Développement
AIDS	Acquired Immuno Deficiency Syndrome
ASAL	Arid and Semi Arid Lands
BCP	Biodiversity Conservation Project
BECA	Bioscience Facility for East and Central Africa
CARE	Cooperative for Assistance and Relief Everywhere
CBD	Convention on Biological Diversity
CBO	Community Based Organisation
CDA	Coast Development Authority
CDEMP	Community Development to Environmental Management Project
CDP	Community Development Project
CDTF	Community Development Trust Fund
CEF	Community Environment Facility (of CDTF)
CEP	Country Environmental Profile
CIDA	Canadian International Development Agency
CITES	Convention on International Trade in Endangered Species
CSO	Civil Society Organisation
CSP	Country Strategy Paper
CSPIP	Country Strategy Paper/Indicative Programme
CSR	Civil Service Reform
Danida	Danish International Development Assistance
DDC	District Development Committee
DEAP	District Environmental Action Plan
DEC	District Environmental Committee
DEO	District Environmental Officer
DFID	Department for International Development (UK)
DGSP	Democratic Governance Support Programme
DHSSDP	District Health Services and Systems Development Programme
DoE	Department of Environment
DRS&RS	Department of Resource Survey and Remote Sensing
EA	Environmental Assessment
EAWS	East Africa Wildlife Society
EC	European Commission
ECHO	European Commission Humanitarian Organisation
EDF	European Development Fund
EIA	Environmental Impact Assessment
EIB	European Investment Bank
ELCI	Environment Liaison Centre International
EMCA	The Environmental Management and Coordination Act (EMCA of 1999)
ENNDA	Ewaso Ngiro North Development Authority
ENSDA	Ewaso Ngiro South Development Authority
EoID	End of Identification Document

ERS	Economic Recovery Strategy for Wealth and Employment Creation
ESPS	Environmental Sector Programme Support
EU	European Union
FITCA	Farming in Tsetse Controlled Ares
FKE	Federation of Kenya Employers
GBS	General Budget Support
GDI	Gender Development Index
GDP	Gross Domestic Product
GEF	Global Environmental Fund
GMO	Genetically Modified Organism
GoK	Government of Kenya
HCDA	Horticultural Development Authority
HIV	Human Immuno Virus
HMPL	High to Medium Potential Lands
HRD	Human Resources Development
ICZM	Integrated Coastal Zone Management
ILRI	International Livestock Research Institute
IP	Investment Programme
IRBM	Integrated River Basin Management
ITCZ	Inter-Tropical Convergence Zone
IUCN	International Union for Conservation of Nature
IWRM	Integrated Water Resources Management
JAS	Joint Assistance Strategy
JOAR	Joint Annual Operational Review
KAM	Kenya Association of Manufacturers
KAPP	Kenya Agricultural Production Project
KARI	Kenya Agricultural Research Institute
KASAL	Kenya Arid and Semi Arid Land Resource Programme
KEFRI	Kenya Forest Research Institute
KEMFRI	Kenya Marine and Fisheries Research Institute
KEPHIS	Kenya Plant Health Inspection Services
KFS	Kenya Forestry Service
KFWG	Kenya Forest Working Group
KIPPRA	Kenya Institute for Public Policy Research and Analysis
KFSCS	Kenya Food Security Coordination System
KFSM	Kenya Food Security Meeting
KFSSG	Kenya Food Security Steering Group
KLA	Kenya Land Alliance
KPSF	Kenya Private Sector Forum
KRDS	Kenya Rural Development Strategy
KSH	Kenya Shilling
KTB	Kenya Tourism Board
KVDA	Kerio Valley Development Authority
KWF	Kenya Wetlands Forum

KWS	Kenya Wildlife Services
LBDA	Lake Basin Development Authority
LPG	Liquid Petroleum Gas
LVEMP	Lake Victoria Environmental Management Project
LVWATSAN	Lake Victoria Region Water and Sanitation
MDG	Millennium Development Goals
MENR	Ministry of Environment and Natural Resources
MESP	Micro-Enterprise Support Programme
MPND	Ministry of Planning and National Development
MS	Danish Association for International Co-operation
MTR	Mid Term Review
NACC	National Aids Control Council
NAO	National Authorising Officer
NAP	National Action Plan
NARC	National Rainbow Coalition
NASCOP	National Aids and Sexually Transmitted Disease Control Programme
NBSAP	National Biodiversity Strategy and Action Plan
NDP	National Development Plan
NEAP	National Environmental Action Plan
NEC	National Environment Council
NEMA	National Environment Management Authority
NEPAD	New Partnership for African Development
NES	National Environmental Secretariat
NGO	Non-Governmental Organisation
NMK	National Museums of Kenya
NPG	Natural Petroleum Gas
NRM	Natural Resource Management
OP	Office of the President
OXFAM	Oxford Famine
PACE	Pan African Programme for the Control of Epizootics
PCM	Project Cycle Management
PEAK	Pathways to Environmental Action in Kenya
PEC	Provincial Environment Council
PEI	Poverty and Environment Initiative (UNDP/UNEP)
PIP	Programme Implementation Plan
POP	Persistent Organic Pollutants
PRBS	Poverty Reduction Budget Support
PRSP	Poverty Reduction Strategy Paper
RNE	Royal Netherlands Embassy
SEA	Strategic Environmental Assessment
SIDA	Swedish International Development Agency
SNV	The Netherlands Development Co-operation
SoE	State of the Environment Report
SPSP	Sector Policy Support Programme

SRA	Strategy for Revitalising Agriculture
SSP	Service Support Programme
Stabex	Stability of Export Earnings
SWAp	Sector Wide Approach
TA	Technical Assistance
TARDA	Tana and Athi River Development Authority
TB	Tuberculosis
TDSDP	Tourism Diversification and Sustainable Development Programme
TISMPP	Tourism Institutional Strengthening and Market Promotion Programme
ToR	Terms of Reference
TTF	Tourism Trust Fund
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nation Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEO	United Nations Environmental Organisation
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate
UNIDO	United Nations Industrial Development Organisation
USAID	USA International Development
WB	World Bank
WRMA	Water Resource Management Authority
WSPS	Danida/SIDA Assisted Water Sector SPS
WSRB	Water Services Regulatory Board
WSUP	Water and Urban Sanitary Initiative
WWF	Worldwide Fund for Nature

1. INTRODUCTION

This Country Environmental Profile (CEP) for Kenya has as main objective to identify and assess environmental issues to be considered during the preparation of the coming Country Strategy Paper. The Profile provides information on key environmental challenges, as well as policies, strategies and programmes designed to address them. According to the Terms of Reference (ToR) for the preparation of the Country Environmental Profile, this information would ensure that the strategies of the European Commission (EC) in Kenya systematically integrate environmental considerations into the selection of priority focal areas and mainstream environmental considerations into all programmes.

This report consists of four main parts:

Chapter 2: Assessment of the state of environment;

Chapter 3: Assessment of the national environmental policy, legislative and institutional framework;

Chapter 4: Assessment of the EU and other donor cooperation with Kenya from an environmental perspective; and

Chapter 5: Conclusions and Recommendations.

The assignment has been carried out by ETC East Africa Ltd. and the team consisted of the following persons:

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2. STATE OF THE ENVIRONMENT

2.1 Physical Environment

Kenya is located in the eastern part of the African continent approximately between latitudes 4° 21' N and 4° 28' S and between longitudes 34° and 42° E. Kenya is bordered by Uganda to the west, Ethiopia and Sudan to the north, Tanzania to the south and Somalia and the Indian Ocean to the east. Kenya covers an area of approx. 587,000 km^2, of which 11,000 km^2 consists of water bodies.

The land stretches from the sea level (Indian Ocean) in the east through a diversity of landforms. From the coast, the altitude changes gradually through the coastal belt and plains (below 152 metres above sea level), the dry intermediate low belt to what is known as the Kenya Highlands (over 900 metres above sea level). The country is split by the Great Rift Valley into the Western part, which slopes into Lake Victoria from the Mau ranges and Mount Elgon (4,300m) and the Eastern part dominated by Mt. Kenya and the Aberdare Ranges which rise to 5,200m and 4,000m respectively.

2.1.1 Climate and Agro-Ecological Zones

Lying astride the Equator, Kenya experiences a tropical climate that is a function of the Inter-Tropical Convergence Zone (ITCZ) and varies with altitude. Most of the country experiences two rainy seasons between March and May (called the long rains) and October to November (the short rains). December to February are usually dry periods.

Highlands and forest areas experience greater rainfall averaging 2000 mm per annum, while low lying areas receive much lower rainfall in general ranging from 200 to 800 mm per year. Only 12% of the country receives reliable rainfall, while the rest not only experiences erratic and unreliable rainfall but also have high evapo-transpiration rates that exceed the rainfall received. Temperatures range from a mean minimum of 10°C to a mean maximum of 34°C, with great diurnal variations. The temperatures are significantly modified by altitude.

Kenya is prone to cyclic droughts, with major ones occurring every decade and minor ones every three to four years. Localised severe droughts occur frequently especially in the Arid and Semi Arid Lands (ASALs).

Kenya's landmass has been classified into seven agro-climatic zones[2] (AEZ)(Table 2.1). AEZ-1 is Afro-alpine moor-land and grassland or barren land above the forest line. AEZ-2 is land comprising forests and derived grasslands and woodlands, which contain most of the country's indigenous and planted forests. Land in AEZ-3 is of the greatest agricultural value with intensive crop and livestock production, while the lands in AEZ-4 are considered of medium agricultural potential. AEZ-5, 6 & 7 are the ASALs comprising 83% of the country and are largely used for extensive livestock production. Zone-4 is considered as marginally suitable for agriculture.

2.1.2 Land and Land use

Of the total land area (576,000 km^2), about 16% (9.4 million ha) is of high to medium potential (HMPL) and the remaining 83% (48 million ha) are arid and semi arid .Of the 9.4 million ha HMPL, 2.8 million ha is crop land, 2.8 million ha is for grazing (mostly dairy), 2.0 million ha forest, 1.1 million ha national parks and reserves and 0.5 million ha for urban areas and infrastructure.[3]

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[2] See Technical Appendix 1, figure 1

[3] Strategy for Revitalizing Agriculture (2004)

In the 48 million ha ASALs, about 9.0 million ha support some sort of agriculture, 15.0 million ha is suitable for extensive livestock keeping, while the remaining 24.0 million ha is only suitable for nomadic pastoralism.

Table 2.1: Agro-climatic Zones

Zone	Area	Rainfall and Use	Environmental issues
1. Afro-Alpine	68,400 km^2 (12%)	Moor-land or grassland.	Global warming, receding glaciers
2. Humid		1500 – 2500mm, forests, wildlife	Deforestation, encroachment
3. Humid		1000 – 2500mm, High agricultural potential,	Land degradation, agro-chemicals, pollution
4. Semi -humid	114,000 km^2 (20%)	700 -1000 mm: Crop and livestock production, irrigation; wildlife	Mining, quarrying encroachment, soil erosion, pollution
5. Semi-arid		550 – 700 mm: Ranching, wildlife crop and irrigation	Encroachment, overgrazing, mining, quarrying, soil erosion, pollution
6. Arid	353,000 km^2 (68%)	300 – 500 mm: Nomadic pastoralism	Overgrazing, mining, quarrying, soil erosion, pollution
7. Very Arid		< 300 mm; Nomadic pastoralism	

Source: Pratt and Gwynne, 1997

Agriculture & Livestock

Agriculture provides a livelihood for 70% of the population and contributes 26% of the GDP.[4] Main food crops are maize, wheat, sorghum, millet, cassava, Irish & sweet potatoes, bananas, mango's and other fruits and vegetables. Main cash crops are tea, coffee, horticulture (flowers and vegetables). Dairy cattle are found in the highlands, while beef cattle, goats and sheep are mainly found in the ASALs.

Due to the population increase (2.9% per year), the pressure on the limited available agricultural suitable lands has increased substantially over the past 20-30 years, leading to unsustainable use of the land resource and to degradation. The pressure on land is aggravated by:

- A skewed land ownership: Those having access to small pieces of land – usually the poorer sectors of society - use land intensively resulting in resource mining. At the Kenyan coast, large chunks of land lie idle because of absentee owners while the area has the greatest number of squatters in the country. Because of the tenuous nature of squatting, the squatters do not pay attention to sustainable use of the land because they know that sooner or later they will be moved. The lopsided ownership of land has to a great extent contributed to poverty in some of these areas.
- Lack of a comprehensive land policy to guide access, control, use and management of the lands and the non-implementation of the existing land legislation.
- Inadequate sources of alternative employment opportunities: still the majority of the population remains dependent on land as a livelihood.

The pressure on land has led to:

- Migration to the marginally suitable parts of ASALs, where agricultural practices of the HMPL are practised resulting in higher crop failures and land degradation;

[4] UNEP, IISD; Connecting Poverty & Ecosystems Services

- Encroachment of forest areas, utilisation of sloping lands and river banks;
- Sub-division of lands into small 'uneconomical units' through the traditional heritage system and through the purchase of land by land land-buying companies which in turn subdivide these lands into economically unviable plots;
- Migration to the urban areas (see below).

Land degradation takes the following forms:

- Soil erosion on steep slopes, encroached catchment areas, agricultural farmlands and the overgrazed range areas.
- Decreasing soil fertility mainly because of overuse and inadequate replenishment of soil nutrients.
- Deforestation due to encroachment for agricultural purposes, charcoal production, illegal excisions for human settlements and illicit felling.
- Chemical and agro-chemical pollution due to increased and inappropriate use
- Loss of forage cover due to overgrazing.
- Invasive species in the rangelands e.g. *Prosopis juliflora* in Baringo, Garisa and Turkana.

The ASALs comprise at least 83% of Kenya's land surface and host at least 34%[5] of the country's estimated 33 million people. Currently, most of this land is under pastoralism where livestock is produced in an extensive system. Some of the higher elevated areas allow crop cultivation and where surface and underground water allows, irrigation is practised. ASAL areas have enormous natural capital epitomised by wildlife, minerals (e.g. soda ash), water (lakes and rivers) among others.

The increased pressure on resources (land, water, forage) in the ASALs has led to degradation of this fragile eco-system as shown in loss of forage, water & wind erosion and decline in water sources. The traditional pastoralist system has become increasingly vulnerable due to:

- decreased access to the dry season grazing areas in the semi-arid areas;
- increasing frequency of droughts through which the herds cannot recover fully, thus resulting in decrease in production of animals and milk, threatening pastoralists with a growing risk of food insecurity;
- the deteriorating security situation; and
- inadequate marketing opportunities.

The livestock numbers (cattle, goats & sheep and camels) have decreased between the 1970's and 1990s by some 12%[6], while the population has increased. With the increasing population a higher number of livestock would be required to sustain the population, while the already reduced capacity of the rangelands cannot sustain even the already reduced number of livestock.
The increasing pressure on natural resources is leading to increased occurrence of resource conflicts: (i) agriculture – agriculture, (ii) agriculture – livestock, (iii) agriculture – wildlife, (iv) livestock – wildlife; (v) human – wildlife.

Forests & Woodlands

Kenya's closed canopy forests cover only 1.7% of the country, while gazetted forests cover approx. 2% of the land surface. Kenya has five distinct forest categories:

[5] Draft National Policy for the Sustainable Development of ARID and Semi Arid Lands of Kenya 2004.
[6] NEMA, State of Environment 2003

(i) indigenous forests found mainly on mountains (water towers), (ii) tropical rainforest (Kakamega), (iii) plantation forests, (iv) marine forests, especially the mangrove forests and (v) woodlands (shrub forests) in the rangeland areas.

Most forests are managed as reserves by the Forest Department. Closed canopy forests in national parks and reserves are managed by the Kenya Wildlife Services (KWS), while the National Museums of Kenya (NMK) manage forests that are of cultural value. The Local Councils (which have little or no requisite capacity) manage Forests in Trust Lands.

All the forest types have come under immense pressure from increased population with illegal logging, charcoal production, illegal excisions for human settlements, encroachment and illegal cultivation and livestock grazing. It is estimated that Kenya has been losing about 5,000 ha of forest annually.

Degradation of the forests and catchment areas has huge economic and social effects:

- The de-forestaton of the major catchments, leads to a distortion of the hydrological balance, leading to increased intensity and frequency of droughts and floods;
- Loss of bio-diversity; and
- Decreased availability of wood-fuel.

Urban Areas

Kenya has experienced a rapid urbanisation, mainly because of the shrinking livelihood base in the rural areas as discussed before. Between 1969 and 1999 the urban population increased from 1.2 million to 7.7 million people, which represents respectively 10% and 27% of the total population. In the period 2000 – 2005, urbanisation amounted to 7.05%, being the highest in the world[7]. Most people migrate to the urban centres of Nairobi, Mombasa and Kisumu.

The rapid urbanisation has placed tremendous pressure on available housing, social amenities, infrastructure and other services. Urban policy and planning have not been able to cope with the rapid urbanisation. As a result the urban areas experienced a rapid growth of slums and squatter settlements, which suffer from inadequate water & sanitation, health facilities and other basic infrastructure (see also section 2.3.4):

- While 90% of the urban population has access to safe drinking water (40% national), the access to improved sanitation is reported to be 65% (57% national)
- Only 30% of gazetted urban areas in Kenya have sewerage systems, which results in serious health and environmental consequences. Many of the major cities and towns including Mombasa, Kisumu, Naivasha have inadequate and/or malfunctioning sewerage systems. This is further exacerbated by reports of high leakage rates from these networks.
- Solid waste management has become a critical feature that is sorely lacking in all urban areas. As a result, the larger part of the solid waste finds its way in surrounding areas and rivers, with all environmental consequences.

2.1.3 Water

Kenya is currently classified as a net water deficit country. It has been estimated that Kenya has 19,500 million m^3 of renewable surface water and 619 million m^3 ground water potential, while total annual demand was estimated to be 3,874 Mm^3 in 2000 but expanding very rapidly (See also section 2.3.4).

[7] 2.57% for the world and 4.37% for Africa

The country has five major drainage basins: Lake Victoria, Rift Valley, Athi/Sabaki River, Tana River and Ewaso Ngiro North River. Only Tana River and Lake Victoria basins have surplus water. The other three basins have water deficits and often rely upon inter-basin transfers to meet basic water demands.

Water is a significant resource in Kenya not only because of its value for domestic use but also its value for generating hydro-electric power, irrigated agriculture and fisheries. Lake Victoria is the source of 93% and 98% of Kenya's total landed fish and fresh water fish respectively.

Access to potable water is relatively low in the country estimated at 45% with 33% in the rural areas. Low access to water resources is exacerbated by poor distribution of the existing sources and the variable quality of ground water sources. Time spent in search of water is estimated to cost 15% of the women's time.

Degradation of the watershed areas leads to distortion of the hydrological balance, resulting in increased intensity and frequency of floods and droughts. Recent reports suggest that all of Kenya's major lakes are shrinking as a result of watershed degradation and use of water for irrigation. Lake Victoria levels have dropped by more than seven meters, seriously affecting marine transport, while it is feared that all the lakes in the Great Rift Valley (Lakes Nakuru, Bogoria, Baringo, Elementeita, Naivasha, Magadi, Turkana and Logopi) are threatened with extinction in the next decade.

In the rangelands, livestock face critical water shortages during droughts that have become more frequent and harsher in recent times and many die as a result of starvation exacerbated by lack of water and excessive trekking distances for water. It is estimated that pastoralists in northern Kenya may have lost about half of their herds in the 2005-2006 drought – said to be the worst in recent times. Inter-tribal tensions over water (water catchments and land) are now a permanent feature of Kenya's social landscape.

Kenya shares several water resources with neighbouring countries, including Lake Victoria, the world's second largest fresh water mass, which is shared with Uganda and Tanzania. More importantly, Lake Victoria is the source of Africa's longest river, the Nile. Other shared resources include Lake Jipe with Tanzania, Lake Turkana with Ethiopia, and River Mara with Tanzania. The Mt. Elgon water tower is shared with Uganda.

2.1.4 Mineral resources

Kenya is endowed with a variety of mineral resources including base metals, (gold, silver, copper), dimension stones (granite, marble and limestone), industrial minerals (fluorspar, titanium, limestone), gemstones (ruby, sapphire, rhodolite) and chemical minerals (soda ash, carbon dioxide, salt and hydro-carbons).

Of significance to the mineral sector is the method of mining. Mining is largely an extractive industry and entails the use of chemicals. These methods lead to local and regional disturbances to the surrounding ecosystems. For example, effects of artisinal gold mining in McCalder and western Kenya resulted in the use of mercury whose effects are still felt to date. In addition, the controversial mining of titanium in Kwale Kenya poses a potential serious danger to the marine life at the coast. In the Rift Valley, residents surrounding Kenya Fluorspar Company are concerned over effluent disposal to the Kerio Valley, resulting in elevated levels of iron.

It is worth mentioning that some mining companies e.g. Bamburi for cement - have rehabilitated its quarries at the coast and is now a major conservation and tourist attraction site. However, quarrying in some areas e.g. Mt Kenya has destabilised the local geology to the extent of causing massive landslides with many lives lost. Such landslides have destroyed or blocked roads e.g. the Embu-Meru road.

Sand harvesting is prevalent on many Kenyan rivers especially in the ASAL areas. Conservation and development experts have recently put pressure on the government to regulate sand harvesting because of the negative consequences it has on the water holding capacity of the rivers.

2.2 Biological Environment

2.2.1 Biodiversity

The country has a varied biodiversity resource base that provides food, fuel, wood, medicines and income from tourism. Kenya has over 35,000 known species of plants, animals and micro-organisms, however many species still remain unknown and possibly not even discovered. This shows that the country has one of the highest gene pools with some species being endemic, critically endangered, rare, threatened and vulnerable (Table 2.2).

The biodiversity hotspots in Kenya are the Kakamega forest, and the coastal forests in Shimba Hills, Tana Delta and Arabuko-Sokoke Forests. The Kakamega forest is a remnant of the eastern limit of the Guineo-Congolian rain forest ecosystem and unique in Kenya since the forest contains many flora and fauna species found nowhere else in the country. The Arabuko-Sokoke Forest is the largest existing fragment of the tropical rain forest and is an important habitat for endemic/endangered birds, insects and mammal species.

Table 2.2: Examples of rare, threatened and endangered species in Kenya

Species	Locality	Status
Tana River Red Colobus monkey	Tana Delta	Critically endangered & endemic
Tana River mangabey	Tana Delta	Critically endangered & endemic
Kenya Wattle bat	Arabuko-Sokoke forest	Endangered
Black rhinoceros		Critically endangered
Savannah Elephants	Several Parks	Vulnerable
Shimba Hills banana frog	Shimba Hill forest	Endangered
African Violets	Shimba Hills and other Coastal Forests	Endangered
Sokoke Pipit	Arabuko-Sokoke forest	Endangered & Endemic
Sokoke Scop-owl	Arabuko-Sokoke forest	Endangered & Endemic
Hirola	Coastal and Northern Areas	Critically endangered
Dugong dugong	East African coastal waters	Vulnerable
Sitatunga	Wetlands in Rift valley & Western Kenya	Rare

The main causes of biodiversity loss are habitat loss (decline in habitat, land degradation), over harvesting of the resources and introduction of invasive species. Invasive introduced species such as Nile perch, common carp, crayfish, water hyacinth, *Prosopis sp*. and striga sp. have become environmental disasters and pose a major threat to both the ecosystem and biodiversity in areas where they have been introduced. Some of these invasive species also pose a threat to agricultural production, transport, health and water quality.

Widespread poverty, especially in the rural areas leads to over use and destruction of natural resources where short-term needs are pursued at the expense of long-term environmental sustainability. Over-exploitation of biodiversity resources includes illegal

logging and charcoal burning, over-fishing, poaching, overgrazing and overstocking of livestock. These activities pose a significant threat to biodiversity.

Economic and wealth creation activities especially in marginal/ASAL areas such as agriculture and pastoralism may result in biodiversity losses. Agricultural practices such as monoculture and use of pesticides threaten biodiversity and genetic diversity.

2.2.2 Policy on management of biodiversity resources

To conserve biodiversity the Kenya government established national parks, national reserves, and forest reserves as protected areas. The protected areas including sanctuaries occupy over 8% of Kenya's land area. The management of the national parks is under the mandate of Kenya Wildlife Services (KWS) and is mainly governed by the Wildlife Act. The management of forests and forest reserves is guided by the Forest Act and the Forest Department under the Ministry of Environment and Natural resources.

The Environmental Management and Coordination Act (EMCA; 1999) provides for conservation of biodiversity and the National Environment Management Authority (NEMA) in consultation with the lead agencies is charged with maintaining an inventory of biological diversity, determining which components of biological diversity are threatened and establish national plans for protection and sustainable use of biological resources. However, NEMA does not yet have adequate capacity or full political commitment at either head office or district-level to do all this.

2.2.3 Biological Ecosystems

Kenya is richly endowed with varied and important biological ecosystems including wetlands, forests, woodland in the arid and semi arid regions and farmlands under agricultural production. These ecosystems have different characteristics, are used for varying activities but also face threats from various factors (Table 2.3).

Table 2.3: Biological ecosystems and their threats

Ecosystem	Main Characteristics	Major Threats
Wetlands	i) Support a rich biodiversity of both flora and fauna some of which are rare or endangered ii) Support livelihoods of many communities as sources of water, grazing lands and fisheries iii) Are important biodiversity conservation area iv) Tourism is an important activity v) Some are protected areas	i) Pollution ii) Introduction of invasive species, iii) Water scarcity iv) Diminishing size due encroachments and conversion to other uses v) Over-exploitation of resources (over-fishing) vi) Inadequate implementation of conservation policies in the catchments vii) Protection status for some wetlands is not clear
Forests	i) Indigenous and plantation forests ii) Rich biodiversity iii) Act as water towers iv) Source of social and economic resources	i) Excisions for human development activities ii) Encroachment for agricultural expansion iii) Illegal logging iv) Livestock grazing on trust land v) Fires vi) Forest degradation by wildlife vii) Political expediency

Ecosystem	Main Characteristics	Major Threats
ASALs	i) Very little forest cover ii) Covered mainly by woodlands iii) Rich in wildlife and flora diversity some of which are rare or endangered iv) Low agricultural productivity v) Require more inputs in terms of irrigation and soil improvement vi) Low carrying capacity vii) Suitable for extensive livestock production	i) Increase in frequency of drought and reduced recovery period meaning loss of opportunity of vegetation generation and increased vulnerability to high levels of erosion due to lack of ground cover, lowering overall productivity. ii) Overgrazing iii) Over-exploitation of natural resources linked to poverty levels e.g. fuel wood and charcoal burning, de-vegetation (deforestation). iv) Cultivation pressure after subdivision of ranches v) Poaching vi) Inadequate policies on conservation vii) Human/wildlife conflicts viii) Wildlife/livestock disease transmission
Farm Lands	i) Rich in agricultural biodiversity-crops and animals including both indigenous and exotic species ii) The decreasing agricultural production and increased population pressure has resulted in increase in new land being converted to farm lands and intensive use	i) Population pressure has resulted in increase in semi arid/marginal land being converted to farm land. ii) Pests and diseases iii) Drought and unpredictable weather conditions iv) Unsustainable agricultural practices v) Lack of inputs due to poverty levels vi) Inadequate markets & infrastructure

Wetlands

Wetlands include marine/coastal wetlands and inland wetlands including freshwater lakes, rivers, swamps, alkaline and soda lakes and constructed wetlands. Wetlands cover about 3%-4% (SoE 2003 Report, NEMA) but the current size may now be below 2.5% (SoE 2004 report, NEMA) of the total area of Kenya an indication that the size of wetlands is reducing due to population pressure and encroachment.

Wetlands are utilised for fishing, hunting, cultivation and grazing, and as source of water and building materials and therefore support livelihoods of many communities. They are therefore, key resources for sustainable development especially poverty alleviation and improvement of livelihoods for the communities through water related functions. In particular both marine and inland fisheries is highly dependent on integrity of the wetlands.

Inland Water Ecosystems

Kenya has a total of over 467 lakes and wetland habitats; these include the larger lakes such as Lakes Victoria, Naivasha, Baringo, Bogoria and Nakuru, many small lakes, six dams, marshes, swamps and the banks of the five main watershed river systems. Inland wetlands in Kenya continue to support a rich diversity of flora and fauna, including some unique assemblages of wild birds such as flamingos. Their biodiversity includes a large number of aquatic plants, fish, herbivores and avifauna of resident and migratory birds. Wetlands are also important grazing areas in the ASALs especially during periods of prolonged drought.

Threats to inland wetland biodiversity include alien species introductions such Nile perch, common carp, crayfish and water hyacinth into wetlands. These have altered the characteristics of the fisheries and endangered certain species by altering the food chains. Wetlands are also under increased threat from pollution and diminishing size due to encroachment, increased water abstraction, destruction of catchments and changes in weather patterns such as decreased rainfall levels. All these factors have contributed to decline in fish production and decline in species composition in the wetlands.

Coastal and Marine Ecosystems

Coastal and marine ecosystems include deltas, forests, beaches, mangrove forests, coral reefs, in-shore and off-shore fishing grounds and the exclusive economic zone. Kenya's 640km long coastline has a distinctive coral reef running parallel to the shoreline, which is rich in unique biodiversity. Tidal wetlands include the mangrove forests and salt marsh swamps which are important sites for fish and bird species.

Although the rich biodiversity in the coastal and marine ecosystems has not been fully described, these habitats have many species of fish, crustaceans, corals, mangroves, micro-algae, mammals and reptiles. Important marine habitats include mangroves, coral reefs, turtle nesting beaches and sea-grass beds. The coral reef is an important habitat that supports 70% of the off-shore fisheries.

These marine resources bring much revenue to the country by sustaining trade, tourism and food production. However, natural resources at the coast are under increasing pressure due to increased pollution from factories, towns, hotels and siltation (threatens coral reefs). The fisheries are being exploited unsustainably, sometimes by vessels outside the national control. The increased population pressure, poverty and development activities along the shore are destroying critical turtle nesting grounds. Marine turtles are also under increased threat due to over-exploitation for their meat and oil, collection of their eggs and incidental capture of the turtles in fishing nets including trawls, drift nets and gill nets. Other species including dugongs, whales, dolphins and game-fish (i.e. sailfish and marlin) are also under similar threat from trawling and habitat destruction.

Policy and Management of Wetlands

The management of wetlands is currently under various institutions, whose mandates and activities are not only sectoral but also uncoordinated and sometimes overlapping. KWS being the national focal point for the Ramsar Convention on Wetlands has the mandate of conserving and managing the wetlands within the protected areas.

To assist in the conservation and management of marine resources five marine national reserves have been established along the coast, namely Kiunga, Malindi, Watamu, Kisite-Mpunguti and Mombasa. The marine parks and reserves are under the mandate of KWS.

The management of wetlands in national reserves such as Lake Bogoria is done by Local Authorities (County Councils). Other organisations involved in wetlands management and conservation are Lake Victoria Environmental Management Programme (LVEMP), Kenya Wetlands Forum (KWF), World Wide Fund for Nature (WWF) and other NGOs.

Some wetlands are Ramsar sites and therefore ought to enjoy protection under the Ramsar Convention; some of these include Lake Nakuru, Lake Naivasha, Lake Bogoria and Tana Delta. Although Kenya is signatory to the Ramsar Convention, little is in place to guide the management of this critical resources and the same can be said about other multilateral environmental agreements.

Conservation of wetland resources is done with several legislations and legal notices. Some of the recent measures include a ban on trawling and the establishment of closed fishing areas. Other statutes related to conservation and management of wetlands are found in the Water Act , EMCA (1999), Agriculture Act, Government Fisheries Protection

Act, the Wildlife Conservation and Management Act and the Coast Development Authorities Act. Kenya has also made international commitments to protection of wetland environments through ratification of relevant regional and international environmental agreements.

In an effort to promote the conservation, management and sustainable use of wetlands and wetland resources, Kenya has formulated a national wetlands policy and presented to stakeholders, however to date the policy is not yet in place.

Arid and Semi- Arid Lands (ASALs)

ASALs, despite their low rainfall and shallow soils support much of Kenya's wildlife, they also host Kenya's terrestrial National Parks and are principle livestock producing areas**.** The ASALs account for 80% of Kenya's ecotourism activities and 50% of national livestock.

In the ASALs the changing land tenure, subdivision of group ranches and lack of a comprehensive land policy are major threats to biodiversity conservation. The changes in land use from grazing to agrarian or housing results in loss of seasonal wildlife migratory corridors and dispersal areas leading to habitat destruction in the protected areas and an increase in human/wildlife conflicts in areas such as Laikipia, Kajiado, Narok and Garissa. Encroachment of livestock into parks and reserves such as Amboseli and Maasai Mara has also increased habitat loss through loss of tree cover and increased soil erosion.

Farmlands (Agricultural systems)

The farm lands in Kenya have a wide range of plant, animal and microbial resources that are important for agricultural production, including a variety of indigenous and exotic species that are found in different agricultural landscapes, and that provide basic livelihoods. Trends indicate, however, that genetic diversity within and between species especially agricultural biodiversity is being reduced by efforts to improve productivity through breeding and preference for high yielding exotic varieties, which may be more prone to diseases and pests.

The greatest factor contributing to loss of genetic and biological diversity is the spread of high input agriculture and displacement of more diverse traditional agricultural systems in the high potential areas with monoculture of exotic varieties such as in tea, coffee, flower and the increasing vegetable farming for the export market. This undermines the conservation efforts of certain genetic resources, which otherwise would be sources of livelihoods were it not for the changing production and consumption patters. Poor land use practices have reduced overall agricultural production which has led to more land being utilised for agriculture to compensate for under- production.

2.2.4 Biological resources of economic importance

Kenya's biological resources are of considerable economic and intrinsic value. For example agriculture, livestock, fisheries and forests account for most of the economic outputs.

Forests

Forests rank high among Kenya's biological resources and are an integral part of national development. Kenya is endowed with a wide range of indigenous forests including montane forests (in central and western highlands), rain forest (Kakamega), lowland forests and mangrove forests at the coast. In 1994, the gazetted forest resource covered 6,687,390 hectares (SoE 2003 Report, NEMA), but this has been diminishing at an alarming rate and probably the forest cover currently stands at 1.7% (SoE 2004 Report, NEMA) or 1.24 million hectares, which is far below the minimum 10% cover

recommended internationally for a country. The most affected forests are Mount Kenya, Abardares and the Mau Forest.

Coastal forests in Kenya are a biodiversity hotspot as they contain half of the countries rare flora and fauna e.g. Arubuko-Sokoke Forest and Shimba Hills. However, these forests are under increasing pressure due to increased population and over exploitation of biological resources.

Wildlife

Wildlife biodiversity is an important resource for the tourism industry, research, education and contributes greatly to economic development.. About 8% of the country is occupied by wildlife conservation areas such as protected areas in form of parks, reserves and sanctuaries; wildlife is also dispersed into surrounding areas seasonally (SoE 2004 Report, NEMA). The protected areas in Kenya include gazetted forests, national parks (243,170 ha), natural resources (195,970), marine resources and mangroves (28,200 ha), and sanctuary (500 ha). The total conservation area in Kenya is about 47,674km^2 (see Table 2.4 and Technical Appendix 1).

In Africa, Kenya ranks third in richness of mammal species with 334 mammal species, 10 of which are endemic. Animal numbers have declined over the years as shown by the census data produced by the Department of Remote Sensing and Resource Surveys (DRSRS; see SoE 2003 Report and SoE 2004 Report, NEMA).

Table 2.4: The status of conservation areas in Kenya

Name	Number	Area (km2)	% area occupied
National Parks	23	30,348	5.2
National Reserves	26	16,478	2.8
Marine National Reserves	6	706	0.12
Marine National Parks	4	70	0.01
National sanctuaries	4	71	
Total	63	47,674	8.2
Community private conservation areas	26	Unknown	unknown

Source: SoE 2004, NEMA

Major challenges to the wildlife sector include loss of habitats due to changes in land use and human encroachment into protected area and adjacent wildlife dispersal corridors, inadequate policy and governance, and capacity to curb poaching. Human encroachment into dispersal areas and use of protected areas as grazing areas by pastoralists has heightened human/wildlife conflicts in areas such as Amboseli, Mara and the Aberdares. Other challenges include degradation of the environment as result of unsustainable levels wildlife in certain parks especially during drought periods e.g. in Nakuru National Park and Amboseli has increased habitat degradation through loss of tree cover and soil erosion. Consequently over the last 3 decades, there has been a decline in wildlife numbers with some reaching endangered levels such as rhinos, the hirola antelopes, and the dugongs.

Encroachment has also prompted human/wildlife conflicts and sometimes community conflicts. Another major challenge is that some diseases common to both livestock and wildlife such as rinderpest and foot and mouth diseases, which can be transmitted to or by wildlife may adversely affect livestock and other wildlife leading to major difficulties in the control and management of disease outbreaks on both livestock and wildlife.

In order to address threats and challenges facing wildlife management, several measures and initiatives have been put into place. Where numbers exceed carrying capacity, animals such as elephants, have been trans-located to areas where there is less pressure. But this may be a temporary solution.

The creation of Rhino Sanctuaries in different parks has enabled the threatened rhino population to remain at about 500 animals for the last two decades. Following the success of the sanctuary approach, the Kenya Rhino programme has resolved to develop and conserve on a long-term basis a genetically viable population of 2,000 black rhinos in their natural habitats and to encourage continued protection and breeding of white rhinos on private lands and enclosed parks. The goal of this programme is to maintain a population growth rate of at least 5% starting from a population of 500 in 2005.

Policy and management of wildlife

The management and conservation of wildlife within protected areas is governed by the Wildlife Act. KWS has the sole mandate for managing wildlife within the protected areas. However, KWS has set up the Community Wildlife Services Unit whose responsibility is to conserve and manage wildlife resources outside protected areas in collaboration with communities and other stakeholders such as Local Authorities. One of the key functions of KWS is to manage the human/wildlife conflicts wherever wildlife coexists with people. To minimize the conflicts KWS has erected electric fences and live barriers in several parks (Tsavo East, Mwea, Shimba Hills and Aberdares), and is also involved in animal drives and translocations of problem animals at very high costs.

The EC funded CDTF/BCP (Biodiversity Conservation Programme) was set up to encourage community involvement in – and benefits from - biodiversity conservation. The programme fully supports the KWS initiatives: support of fencing projects, community conservations areas, eco tourism for community benefits.

The Government of Kenya (GoK) through Kenya Wildlife Service has strengthened security, research and monitoring of protected areas to ensure availability of data and information to enable quick and informed management decisions on emerging issues. The Wildlife Act is being reviewed to respond to emerging challenges in wildlife management in the country.

Fisheries

Freshwater fisheries are a major contributor to most of the fisheries production in the country. Lake Victoria is the major source of this fish contributing about 192,738 metric tonnes per annum (SoE Report 2004, NEMA). Over-fishing, fishing in spawning grounds and introduction of alien species has resulted in reduced fish catches and can lead to extinction of certain fish species. Exploitation of fisheries resources in Kenya is unsustainable due to increased demand for the resource to feed the increased human population and export market. The increase in fish export has exerted increased pressure for good quality fish and this has impacted negatively on fish prices locally and on the nutritional status of communities that rely on fish as their sole protein source.

Pressure has also been exerted on local fisheries by the destructive fishing methods, habitat degradation due to changes in land use in the catchment areas and non-point source pollution due to agricultural chemical and industrial activities. The degradation of habitats, over-fishing as well as changes in species composition has led to fish stocks decline over the years.

Constraints to fish production include fish resource decline, inadequate infrastructure such as cooling facilities at the landing beaches and poor road network, poverty, local and regional conflicts on resource use, and inadequate monitoring and enforcement of regulations.

There is great potential in the development of marine fisheries which is greatly hampered by inadequate fishing gear particularly for the lucrative deep sea fishing.

2.3 Socio-Economic Environment

2.3.1 Administration, ethnic groups and population

Administratively Kenya is sub-divided into eight provinces and with the exception of Nairobi province, these provinces are further divided into districts, divisions, locations and sub-locations. Simultaneously, Kenya is also divided into voting constituencies and wards which do not necessarily follow the smaller administrative boundaries but do normally fit within the district boundaries. There has been a tendency in recent years to sub-divide existing districts and create more autonomous districts. There are over 70 districts as of early 2006.

Kenya has over 40 different ethnic groups that can be divided into three broad linguistic groups; the Bantu, Nilotic and Cushitic. The Bantu group form approximately two-thirds of the Kenyan population and consist of the Kikuyu, Kamba, Mijikenda and Luhya. The Nilotic group include the Luo, Maasai, Turkana, Samburu and Kalenjin. The Cushitic group include the El Molo which are generally regarded as Kenya's smallest ethnic group.

Kenya's population dynamics have undergone significant change in the last century – perhaps more so than any other country in Africa. In 1948, the population was about 5.4 million. Over the next two decades the population doubled to reach 10.9 million in 1969 and again doubled over the next two decades to 23.7 in 1989. This rate of increase is now slowing down and the population is predicted to increase from 28.7 million in 1999 to 36.5 million by 2010. In the 1970s Kenya was reported as having the highest population growth rate in the world but this has correspondingly dropped relatively dramatically to 2.7% in 1999 and is said to have recently stabilised around 2.9%.

Adult and childhood mortality rates have increased, notably over the last decade. Infant mortality rates have increased from 63 to 71 deaths per 1000 live births from 1993 to 1998 respectively. Under five mortality rates have similarly increased from 365 to 590 deaths per 1000 live births from 1995 to 1998. Life expectancy (measured at birth) has decreased from 58 to 54 for males and from 61 to 57 for females over the decade 1989 to 1999.

2.3.2 Poverty

The UNDP human development reports were first launched in 1990. In general terms human development is reported to have been declining since the early 1990s in Kenya. More specifically, in just three years Kenya has fallen 20 places on the UNDP human development index to 154th out of 177 places. It now ranks ten places below Uganda, despite the fact that it was once regarded as a middle income economy.

2.3.3 Gender

The UNDP human development index provides also information on gender comparisons. Data exists on the educational enrolment at all levels, participation in the workforce, and participation in politics sub-divided into male and female categories. These culminate to form a gender-related development Index (GDI) which was 115 in 2001 dropping slightly to 117 for 2003 which is higher when compared with Tanzania which has a GDI of 127 for 2003 but lower than Uganda which has a GDI of 109 for 2003.

The distribution of the economically active population reveals a gender based division of labour. Most of the economically active females can be found within the agricultural sector with low representation in fishing, construction, transport and many other sectors in Kenya. Furthermore, women dominate the category of unpaid family workers and the unemployed irrespective of whether it is in an urban or rural setting in Kenya. This pattern

permeates all levels of society with a relatively low number of women in politics and senior positions.

2.3.4 Social Services

Water and sanitation

Kenya is currently classified as a chronically water scarce country. Water is a basic need and it has been estimated that Kenya has 19,500 million m^3 of renewable surface water which translates as approximately 650 m^3 per capita. This is expected to drop to 250m^3 per capita in 2025 when the population is predicted to grow to about 60 million. This is against a global recommendation of 1,000 m^3 of water per capita. Currently, the supply of safe drinking water is low in Kenya with only 40% national coverage. About 90% of the urban population has access to safe drinking water compared to 35% in the rural area. This makes achieving MDG 7 which is to reduce by half the proportion of people without sustainable access to safe drinking water by 2015 a significant and difficult challenge in Kenya.

Current levels of access to improved sanitation are reported to be 49% in rural areas and 65% in urban areas, giving a national average of 57% for improved access.

Only 30% of urban areas in Kenya have sewerage systems, which results in serious health and environmental consequences. This appears to be reflected in the national morbidity statistics where water-borne and water related diseases are usually in the top three causes of morbidity and are often first place. Many of the major cities and towns including Mombasa, Kisumu, Naivasha have inadequate and/or malfunctioning sewerage systems. This is further exacerbated by reports of high leakage rates from these networks.

It has also been assessed that very few schools have access to sufficient sanitation facilities. The national ratio of people per toilet was 55:1 in 1999 which dropped to 64:1 in 2003 against recommended ratios of 25:1 for girls and 30:1 for boys.

Health

Access to affordable health care services vary greatly between districts and provinces, as does the quality of the care provided. The Government has introduced measures to make health care more affordable by reducing user fees. However, geographical access and quality issues are still of major concern. Through the new National Health Strategic Plan II (NHSSP II) the Government is hoping to implement an accessible and affordable national health care service programme.

Morbidity statistics indicate that water-borne and water-related diseases are generally among the top ten causes of outpatient morbidity in Kenya and often rank top of the ten. Specifically, malaria is a major cause of morbidity and is endemic in Nyanza, Western and Coast provinces. In 1999, malaria accounted for 32% of the total cases reported. Respiratory diseases often rank second with an increase in all forms of TB reported from 1988 to 1999. HIV/AIDS is responsible for about 60% of reported TB cases. Kenya is faced with moderate rates of HIV infection when compared to other countries in Sub-Saharan Africa and high rates when compared with the rest of the world. Reported rates have increased from 4.8% in 1990 to 13% in 2000 to 7% currently. One of the significant negative impacts of the HIV/AIDS pandemic is on the working and productive age group of society that is between the ages of 15 and 50. This has led to a disproportionately high number of orphans, child-headed, single parent or grand-parent headed households with the consequential effects on society.

In response to the pandemic, the Government has established the National Aids and Sexually Transmitted Disease Control Programme (NASCOP) and the National Aids

Control Council (NACC). HIV/AIDS was declared a national disaster in 2000 and the Government has since developed a strategy and action plan.

Education

Kenya has a strong history of primary, secondary and tertiary education since independence. Adult literacy is particularly high in Kenya when compared with the rest of Africa and there is generally a well educated workforce. However, the current statistic on gross primary, secondary and tertiary enrolment in education is relatively low at 53% when compared against for example Rwanda (a country recently out of war) also at 53%, or Uganda or Zimbabwe at 58%.

2.3.5 Trade

Trade, industry, mining and services sectors have steadily grown over the years and are now critical elements of the national economy with manufacturing contributing to 13% of the GDP[8].

While contributing significantly to economic development, the manufacturing sector is largely dependent on the natural resources for its raw materials e.g. crops, water and fuel-wood. Its dependence on natural resources means that this sector contributes substantially to environmental degradation.

Agro-based manufacturing e.g. coffee has 1200 factories which discharge wastewater into nearby streams and rivers. The tea sector is a big consumer of biomass for curing process. The plastic industry has contributed significantly to solid waste pollution. Fish processing, hides and skins, paper factories all contribute to pollution especially of the water bodies.

Recent studies suggest that small and medium industries in the manufacturing sector may be doing more damage to the environment than the large ones because they are not subject to the stringent Environmental Impact Assessments (EIA) and Environmental Audits (EA).

Kenya signed the International Declaration on Cleaner Production Technology in 2000 that promotes continuous improvement of industrial processes, products and services to reduce use of natural resources, prevent pollution at source and reduce waste generation. However, policies and operational frameworks should be put in place to encourage use of environmentally friendly technologies that are efficient; such policies should come up with carrots for the industries to improve compliance. Already, 25 cleaner production projects have been implemented by various industries in the country saving at least KShs 91 million, reducing water consumption by 200,000 tons, and waste production by 412,000 tons.

In general, issues related to industrial development that are of environmental importance include:

- Increased demand on natural resources – water, land, fuel. As these resources continue to dwindle, the laws of supply and demand come into force with the consequence that products from the industries become more expensive especially for the common man, and importantly too, they become less competitive in the international markets.
- Population growth and settlements around the industrial sites resulting in more waste produced and increased demand for water, sewerage, social amenities and other infrastructure that cannot be met.
- Increased waste generation.

[8] Economic Survey 2004

- Increased energy consumption, electricity, fuel-wood and petroleum. As industrialisation expands, demand for energy increases but because the government is almost unlikely to meet the demand, private industries will resort to energy sources they can easily access. Some of these sources including fuel-wood and thermal sources have a significant impact on the environment.
- Potential occurrence of disaster and associated risks (Kenya has no functional disaster management mechanism). Although Kenya has been largely spared major industrial accidents, any such occurrence will meet with almost no disaster management mechanisms and almost certainly with huge consequences to the environment. Oil spills at the coast have often taken long before being adequately managed.
- Increased road traffic and vehicle emissions.

At another level, there is prevalence of illegal trade. Poaching of wildlife including trees, selling of illegal game meat, illicit trade in minerals are all on-going. The consequence of illegal trade is loss of revenue to the government and a threat to biodiversity.

2.3.6 Tourism

The performance of Kenya's tourism industry has fluctuated over the last decade as a result of several factors including insecurity, tribal clashes, a general slowdown in the global economy and adverse travel warnings. However, the last three years have seen tremendous recovery and growth of the tourism industry. According to the 2003 Economic Survey, tourism now accounts for 15% of total export earnings and has witnessed a 15% growth in visitor arrivals against 0.8% in 2002. Kenya's tourism is largely based on wildlife safari and the scenic coastal beaches.

The tremendous increase in tourist arrivals (both local and international) has put great strain on the tourist resorts; competition for viewing wildlife has risen and with it some degradation of the wildlife ecosystems e.g. the Maasai Mara. More tourist facilities have to be developed and although all developments are now subject to NEMA conditions, NEMA does not have the requisite capacity to effectively ensure good health of these ecosystems.

With the assistance of the EU, a Tourism Trust Fund (TTF) has been established in Kenya and among its objectives is to diversify the industry. Already, several tourism and conservation management areas have been mapped and strategic plans for development of tourism put in place. The TTF has been instrumental in the drafting of the National Tourism Policy, which is at the cabinet stage. TTF also spearheaded the development of EIA guidelines for the tourism sector. Such policy and legislative frameworks will go a long way to ensure sustainability of the sector with respect to environmental and social issues as well as addressing head-on, some of the MDGs especially on poverty reduction.

Tourism has positive as well as negative impacts on the environment. Positive impacts are considered: (i) the enhancement of environmental conservation and wildlife protection because of its economic importance, (ii) the upcoming eco-tourism, and (iii) provision of alternative employment. Negative impacts are: (i) destruction of forests for construction materials, (ii) increase of solid waste disposal, and (iii) transportation emissions.

2.3.7 Energy and emissions

Energy

Six major categories of energy have been identified in Kenya as biomass, fossil fuels, electricity, solar, wind and other. Currently, biomass contributes 68% of all energy needs, petroleum 22%, electricity 9% and others 1% (after Ministry of Energy, 2004).

Biomass energy includes fuel wood, charcoal, biogas and biomass wastes. Wood fuel (Fuel wood and charcoal) is estimated to contribute to 95% of energy demand in the rural areas. A study in 2000 revealed that the principle sources of fuel wood were agro-forestry (84%), biomass in trust lands (8%) and gazetted forests (8%). Currently, there exists a growing imbalance between supply and demand of biomass energy. For example, in 2000 biomass demand stood at 34.3 million tonnes as compared to a sustainable supply of 15 million tonnes, thereby indicating a deficit of 56% which is estimated to have increased to 60% by 2005. The principal drivers of biomass energy demand are population growth, lack of access to energy substitutes and the growing incidence of poverty among Kenyans. Biomass demand and supply is exerting considerable pressure on remaining forests and vegetation cover and contributing to soil erosion, land degradation and desertification in Kenya. Demand for charcoal in particular in urban and peri-urban areas is impacting vegetation cover, especially in the ASALs. Thus, effective regulation and legalisation of the charcoal industry is an urgent imperative for the Government.

All fossil fuels are imported into Kenya with a percentage of crude oil being refined at the Mombasa Oil Refinery. Positive steps include the move towards unleaded petrol and low sulphur diesels. Diversification into Liquid Petroleum Gas (LPG) and Natural Petroleum Gas (NPG) is still in the early stages. Overall, Kenya spends approximately 60% of total foreign exchange earnings on petroleum imports.

There is an installed capacity of 1,239 MW to generate electricity in Kenya with an effective capacity of 1111.2 MW under normal hydrological conditions against a peak demand of 821 MW. 57% of installed capacity is based on hydropower, 33% on thermal and 10% on geothermal. Consumption in Kenya is low at 121 kWh/capita with a national access rate of about 15% which is also low when compared against a developing country average of 32%. Demand is expected to rise sharply in the forthcoming years and without extensive planning will outstrip supply. Potential exists for further development of geothermal sources and new development of coal deposits and wind.

Renewable sources of energy include solar, wind, biogas, cogeneration using bargasse and animal draught power. These are currently being developed at different rates. It is estimated that up to 220,000 solar photovoltaic units for lighting, pumping, telecommunications etc and 7,000 solar thermal units for water heating and drying are in use in Kenya. The first commercial wind farm is under development and there are about 1,392 biogas plants installed each producing about 2.2m^3 of biogas per day. Only Mumias Sugar Company is self-sufficient in electricity production from its bargasse and still has 2MW of electricity to sell to the national grid.

Emissions

Major point sources of air emissions in Kenya include thermal power plants, vehicular exhausts and some specific industry emissions. In global terms Kenya's volume of air emissions are low. However, until recently the quality of fuel has been some of the poorest in the world with lead in petrol and high quantities of sulphur in the diesel. This has exacerbated the effect of emissions from both the thermal plants and vehicles, particularly the effects of particulate matter (PM), nitrogen oxides (NOx), sulphur oxides (SOx), ozone (O3), hydrocarbons, heavy metals (lead, mercury), carbon monoxide (CO) and carbon dioxide (CO2). Diffuse sources of air emissions include the burning of biomass fuels (estimated at 34.3 tonnes annually).

2.3.8 Security issues

Kenya has remained a largely peaceful country. However, it faces serious threats from international terrorists. Already, terrorists have visited Kenya three times causing many

deaths and loss of property: the Norfolk hotel, Nairobi (1981), the American Embassy (1998) and a coast hotel (2002),

Internally, politically instigated tribal clashes and fights over natural resources (especially water and pasture) are now common. Also, due to high levels of poverty, crime is on the increase with cases of armed robbery quite common in the urban areas.

Of environmental significance are the cross-border raids by nomadic and semi nomadic pastoralists from Ethiopia (Merille), Sudan (Toposa), Karamojong (Uganda) and the Pokot and Turkana of Kenya, especially at time of climatic stress like in the current drought when there is an increase in cross border migrations e.g. into and from southern Somalia, by pastoralists in search of water and pasture which invariability leads to conflict over these already scare resources.
Raids for livestock often involving human deaths have created immense fear among pastoralist thereby interfering with their traditional seasonal grazing patterns resulting in the concentration of livestock in small areas that has in turn led to over-grazing. In addition, these communities are ever involved in turf wars, for the forage and water resources.

2.3.9 Cultural values

Kenya has an Antiquities and Monuments Act, 1983 (CAP 215) which aims at preserving national heritage. Section-2 defines an antiquity as any moveable object other than a book or document made or imported into Kenya before 1895. Human, faunal or floral remains in Kenya dating to before the benchmark date of 1895 are also deemed to be antiquities. Both the National Museums of Kenya and the Kenya Cultural Centre have been established in part to discharge this Act. Monuments of note include Fort Jesus in Mombasa, rock art in Koobi Fora and archaeological remains in Oloregasaile. It is interesting to note that there is an emerging shift on cultural heritage to examine both the tangible and intangible as evidenced by the WB-IFCs new Performance Standard, No 8 on Cultural Heritage. It is therefore expected that future SoEs of Kenya will deal with cultural values in a broader way.

2.4 Key Environmental Issues

2.4.1 Key environmental issues

The indicated key environmental issues, in order of priority, are: (i) Natural resources degradation (land, water, vegetation cover); (ii) Loss of biodiversity in the country's main ecosystems: e.g wetlands, forests, marine ecosystem; (iii) Socio-economic environment: dropping socio-economic indicators in health (high prevalence of major diseases, HIV/AIDS, access), access to water and access to education.

The main forces leading to resource degradation are:

- The increasing pressure on the limited resources (land, water, energy), which in turn is caused by (i) a skewed landownership, (ii) lack of a comprehensive land policy regulating landownership, land tenure and land management; (iii) high dependency on agriculture and livestock for a livelihood and lack of alternative employment; (iv) the growing population;
- Low productivity in agricultural systems;
- Unsustainable use of resources;
- Inadequately designed and managed settlement schemes.

The high pressure on lands in the high potential zones leads to:

- Migration of farmers to the ASALs, applying agricultural practices of the high potential areas, not suitable for these semi-arid areas and causing resource conflicts with the livestock-holders/pastoralists who depend on the ASALs for their dry-season grazing areas.
- Encroachment of forest areas, leading to de-forestation, soil erosion on hilltops and sloping areas.
- Utilisation of sloping lands, riverbanks without applying appropriate conservation measures.
- Subdivision of agricultural lands through heritage; eventually resulting in un-economical units.

The increased pressure on resources (land, water, forage) in the ASAL areas has led to degradation of this fragile eco-system as shown in loss of forage, water & wind erosion and decline in water sources. The traditional pastoralist system has become increasingly vulnerable due to:

- Decreased access to the dry season grazing areas in the semi-arid areas;
- Increase in frequency of drought and inadequate recovery period resulting in a loss of productivity in areas exacerbated by increases in populations dependent on the areas;
- The deteriorating security situation;
- Past and present sedentary policies;
- Inadequately designed and managed development projects in the past and present;
- Lack of marketing opportunities.

Main indicators of resource degradation are: loss of vegetation cover, loss of forests (5,000 ha/year), increased soil erosion, decrease in soil fertility, reduction in bio-diversity, decreasing water availability and quality, decreased agricultural productivity. and increased land-fragmentation. The main effects of resource degradation are:

- Decreased economic base for the major livelihoods;
- Loss of economic investments (infrastructure) due to erosion;
- Increased occurrence and increased intensity of droughts and floods; and
- Increased poverty.

Main areas/sectors for intervention in addressing resource degradation are:

- Creation of a regulatory framework for the use of natural resources, mainly through the creation of a comprehensive land policy; (also water, forestry, agriculture, mining, tourism);
- Increasing the agricultural and livestock productivity, adapted to the different agro-ecological zones;
- Increasing/restoring the forest cover (reforestation of 'water towers' and watersheds); and
- Creation of alternative employment opportunities to release the pressure on natural resources.

Loss of biodiversity is closely related to resource degradation. Over-exploitation of biodiversity resources includes illegal logging, over-fishing, poaching, overgrazing and overstocking of livestock, all posing a significant threat to the country's major ecosystems: (i) wetlands, (ii) coastal and marine ecosystems, (iii) forests, (iv) ASALs, and (v) farmlands.

The socio-economic environment relates to (i) access to health services, education and drinking water supply (ii) poverty (iii) gender issues. Kenya has been showing dropping

socio-economic indicators in health, water supply and education in the past two decades. Issues of HIV/AIDS have been mentioned above.

All the above described key environmental issues are clearly reflected in the outcome of the PRSP consultations. Top-three identified sectors for poverty reduction were: (i) Agriculture & Rural Development, (ii) Human Resource Development and (iii) Physical infrastructure (roads, water, energy).

2.4.2 Environment and poverty

There is a clear relationship between environmental degradation and poverty; poverty being a cause as well as a result of resource degradation. The high dependency on the limited natural resources for their livelihood, leads to over-exploitation and depletion of the natural resources, which in turn leads to decreased productivity and increased poverty and eventually in abandoning the agricultural and livestock sectors, leading to migration into the urban areas, seeking for alternative employment.

Addressing resource degradation therefore largely coincides with addressing poverty reduction.

More specific effects of environmental degradation on the poor livelihoods are:

- Decreasing available agricultural land and decreasing soil fertility. The per capita available agricultural land (HMPL) decreased from 0.80 ha/capita in 1969 to 0.26 ha/capita in 2006.
- Decreasing availability of forage and water sources affecting the livestock holders in the ASALs.
- Decreasing water levels in the major lakes and biodiversity loss leading to decreased fish catches. The major lakes in the Rift Valley are expected to extinct in the next decade, while the levels in Lake Victoria are decreasing dramatically.
- Decreasing availability of wood fuel, leading to higher prices and to longer distances for fuel-wood collection. The actual biomass demand of 34.3 tonnes against the sustainable supply of 15 million tonnes will aggravate the wood fuel availability in the years to come.
- Migration from the rural to the urban areas where insufficient employment opportunities are available, leading to further impoverishment. Kenya has the highest urbanisation rate in the world. Between 1969 and 1999 the urban population increased from 1.2 million to 7.7 million people (respectively 10% to 27% of the total population).
- Although substantial investments have been made, the access to safe drinking water is still at a level of 40%.
- The significant negative impacts of the HIV/AIDs pandemic on the working and productive age group of society.

A recent study of UNEP and the International Institute for Sustainable Development. (IISD)[9] concluded that in six of the eight provinces the main ecosystem services (maintenance of bio diversity, food production, water supply and energy resources) are under immediate threat. Consequently the main formulated constituents of well-being ('adequately nourished', 'clean water', 'energy for warmth & cooking' and 'earn a livelihood') are equally under immediate threat. (see figure 2.1)

[9] UNEP, IISD: Connecting Poverty & Ecosystem Services; Focus on Kenya, 2005

Figure 2.1: Ecosystem Services and Constituents of well-being: degrees of threat, by province

Ecosystem Services and Constituents of well being	Province						
	Central	Coast	Eastern	North Eastern	Nyanza	Rift Valley	Western
1. Ecosystem Service							
Maintenance of Biodiversity							
Food production							
Water Supply							
Energy Resources							
2. Constituent of well-being							
Adequately nourished							
Clean Water							
Energy for warmth and cooking							
Earn livelihood							

ecosystem service or well-being constituent under threat
areas of immediate piority
not under threat.

2.4.3 Environment and Socio-Economic Impact

Production & Productivity

Growth in agriculture has decreased over the past decades, from 6% in the 1960s and 1970s to 3.5% in the 1980s and 90s; this against a population growth of 2.9%. Although this cannot be only attributed to the environmental degradation, it certainly has contributed to it. Livestock production has declined since the 1980s. Kenya has changed from a meat exporting country to a meat importing country; also the export trade on hides and skin has decreased since the 1980s.

Trade

The main export commodities for Kenya are: (i) Tea, (ii) flowers & vegetables and (iii) fish. Agricultural produce are dependent on climate. The effect of increased droughts and floods is shown in the tea production: the current drought has halved the export production; furthermore tea production process is highly dependent on wood-fuel and therefore puts a high demand on this scarce resource.

The flowers and vegetable sectors are big water consumers; although no declining trend in production and export are noticed, this might be the case in the future.

The fish export (mainly to the EU) has not yet suffered from the declining resources. However, the availability of fish on the national market has decreased and prices increased.

Tourism is still a growing sector (15% per annum). With this increase, the sector will put higher pressure on the scarce resources (land & water), especially because the tourist resources are mainly situated in the ASALs. The main destinations are the game parks and the beaches. Decreasing numbers and diversity in Kenya's wildlife will affect the tourist industry in the future.

Threats to human health
The increased impoverishment in rural and urban areas will lead to increased malnutrition affecting the health situation of the poor especially the women and children.

The decreased availability and decreased access to clean drinking water will lead to increased prevalence of waterborne disease.

As has been noted before the HIV/AIDS pandemic has significant negative impacts on the working and productive age group of society.

Environmental disasters
The increasing distortion of the hydrological balance mainly through deforestation and loss of vegetation cover, has already led to increased flood and drought frequency and intensity. With the growing population the negative impacts are affecting an ever growing number of people. The current drought has caused famine for around 3.5 million people in the north and north east of the country.

Sustainability of resource use
Inadequate natural resources especially in the rural areas forces the inhabitants into overexploitation of these resources for their livelihoods, resulting in the vicious circle of resource degradation – overexploitation – increased degradation. This holds for all livelihoods in the high and low potential areas as well as for fisheries.

2.4.4 Trans-boundary environmental issues

While most of the environmental issues described in the foregoing sections are of national or local character, there are two major issues that cross the national boundaries.

a. The environmental problems in Lake Victoria (loss of biodiversity, decreasing water levels and water pollution) are a concern of the bordering countries: Uganda, Tanzania, Kenya, Burundi and Rwanda. In 2004 the East African Community Council approved the Protocol for Sustainable Development of Lake Victoria (see also section 3.2.3).

b. The trans-boundary migration of pastoralist nomads covering the north and north east of Kenya, Somalia, South Ethiopia and South Sudan. Required regional cooperation regarding the ASALs is still weak. Exceptions are the EU programmes (i) on tsetse control and rinderpest, (ii) Trans-boundary Environmental project (See section 4.1).

Other trans-boundary environmental issues include: (i) persistent organic pollutants (POPS), (ii) trans-boundary movements of hazardous wastes and their disposal, (iii) reduction of substances that deplete the ozon layer, (iv) trade of endangered species, and (v) wetlands of international importance. For all these trans-boundary issues Kenya has signed international treaties, which will be discussed in section 3.2.3.

3. ENVIRONMENTAL POLICY, LEGISLATIVE AND INSTITUTIONAL FRAMEWORK

3.1 Historical Perspective

The origins of environmental administration in Kenya can be traced back to the preparations that culminated in the landmark UN Conference on the Human Environment in 1972 in Stockholm. The Kenyan government established a small secretariat in the Ministry of Natural Resources, called the National Environmental Secretariat (NES) during 1971. This was followed by the establishment of the United Nations Environment Programme (UNEP) headquarters in Nairobi in 1973. This is said to have influenced Kenya in that it was at the forefront of developing environmental issues in Africa in the 1970s.

Between 1974 and 1994, NES was transferred to the new Ministry of Environment and Natural Resources. In 1981 an inter-ministerial committee on environment was set up with an objective to coordinate environmental studies and discussions, but in practice it became more of a forum for discussion and deliberation on non-controversial environmental issues. The 1980s and early to mid 1990s are generally characterised as a period of stagnation in terms of environmental governance and Kenya's lead in Africa was lost.

This was followed by the preparation of a National Environment Action Plan (NEAP) in 1994 which aimed to establish a single institution with legal authority to coordinate the management of environmental resources that were managed by different sectoral statutes. One of NEAP's main responsibilities was the coordination of stakeholders in the preparation of national environmental legislation. NEAP was wound up in 1998.

The first draft of the Environmental Management and Coordination Bill was released in January 1996 but it took four years to become law in 1999. Stakeholder consultation and input into the Environment and Coordination Management Act, 1999 was considered to be widespread and represented a distinct change in approach from the drafting of previous laws and regulations in Kenya.

3.2 Environmental and other Related Policies

3.2.1 Environmental policies

Surprisingly, Kenya does not have an overarching national environmental policy and has not had one since environment came onto the centre-stage of global thinking in the early 1970s. Given Kenya's dramatic increase in population over the last five decades compounded with the recent decades of slow economic growth combined with the heavy reliance on the natural resource base, it is interesting to consider why it has not been a national priority, to date.

The above mentioned National Environmental Action Plan (NEAP) contains suggestions for broad objectives and strategies of a national environmental policy (see Technical Appendix 2) In the intervening 12 year period, most of these suggestions still remain valid. Major developments, in line with the NEAP recommendations since 1994, have been the institutionalisation of the EIA in the environmental law in Kenya and the formation of the National Environmental Management Authority.

NEMA is the authority charged with the responsibility of implementing the National Environmental Management and Coordination Act, 1999 of Kenya. The Board of

Management was appointed in April 2003 and the Authority largely became operational in 2003. Since NEMA became operational, they have issued through the national newspapers five main policy directives. These are (i) the phasing out of leaded fuel by 2005/6; (ii) the banning of plastic bags by 2005; (iii) the registration of a number of laboratories that can undertake testing for NEMA; (iv) The demand for environmental audits by 31 December 04 by all enterprises in Kenya; and (v) registration of environmental impact assessment and audit lead experts and associate experts in 2004.

The policies of phasing out leaded fuel and the banning of plastics emanated from inter-ministerial committees that were established to deal with these issues in part, in response to active regional and global programmes. And while the registration of laboratories is seen as a policy directive, it was done to enable proponents who are completing the environmental audits by the 31 December 2004 to use conveniently located laboratories.

The demand for environmental audits to be completed by this date for all enterprises was directly in response to the legal requirement in EMCA, 1999 and the prior registration of the EIA / Audit Experts was to facilitate that major requirement. The policy for phasing out certain gauges of plastic bags appears to be progressing more slowly. It is understood that the major partners involved in this policy include the Kenya Association of Manufacturers (KAM) and UNEP. Most plastic manufacturers have been given three years to phase out the thinner gauges of plastic bags. So, it remains to be seen when and how strongly NEMA will issue and subsequently enforce this policy.

In March 2006, NEMA reported that two new draft policies were under development. These are for solid waste and waste water. All these policy directives do appear to be national environmental priorities, rather than, for example donor driven or simply *ad hoc*, but since NEMA recently launched their Strategy for 2005-10, this now provides a framework reference for all future policies and directives to interlink with. Implementation and enforcement of the Strategic Plan is discussed further in Technical Appendix 2.

3.2.2 Other policies with environmental components

There is a large number of national policies and strategies that incorporate environmental components or are closely related to the key environmental issues. These policies and strategies are shortly discussed in Technical Appendix 2 under the following headings:

a. Agricultural development related Policies & Strategies;
   i. Strategy for Revitalizing Agriculture (2004 – 2014),
   ii. National Livestock Policy - 2006,
   iii. Fisheries Policy - 2005,
   iv. Kenya Rural Development Strategy (KRDS) 2002 – 2017,
   v. Food and Nutrition Policy - 2005, and
   vi. ASALs Policy - 2004.

b. Other Sectoral Policies & Strategies;
   vii. Energy Policy – Sessional Paper No 4 of 2004,
   viii. Forest Policy - 2004 and Forest Act - 2005,
   ix. Water Act, 2002 and associated policies,
   x. Wildlife Conservation and Management (Amendment) Act - 1989,
   xi. Mining Act (1940) and Policies,
   xii. National Strategy on Tourism (draft, not elaborated in appendix), and
   xiii. Private Sector Development Strategy (draft, not elaborated in appendix).

c. National Plans & Policies;
   xiv. National Development Plans,
   xv. The Poverty Reduction Strategy Paper (PRSP), and
   xvi. Economic Recovery Strategy (ERS) for Employment and Wealth Creation (2003-2007).

In relation to the key environmental issues (resource degradation and biodiversity loss) the agricultural development related policies are most relevant from the environmental perspective. Common features of these policies and strategies are:

- Most policies are of recent date and often not yet followed by action plans and/or implementation;
- Most development strategies are directed at economic growth and focussed on the high potential areas; and
- Environment is often mentioned in a separate chapter as a cross cutting issue and not integrated within the policy and strategy actions.

Furthermore, as discussed in section 3.4.2, the financial resource base for most government organisations responsible for the implementation of the policies and strategies, is rather weak, hampering the implementation of the policies and strategies.

Of the other policies, the following need to be highlighted:

- The ERS is the Government's focal strategy and is presently under implementation. The Strategy has been developed by the new government. The NARC Election Manifesto as well as the PRSP priorities formed the basic inputs for the ERS. The ERS addresses macro-economic and public investment reforms. Review of the ERS document reveals that equal importance is given to the productive (agriculture & roads) and the social sectors (education, health), while agriculture is viewed from an economic growth perspective rather than from the environmental point of view. However, the ERS does partially address environmental issues through discussion of water resources management, EIA and forestry. The ERS is due to be revised in 2006/7 and therefore this represents a distinct opportunity to integrate environmental issues more fully into such a key national policy.
- With regards to the Water Act, the formation of Water Service Regulatory Boards is currently underway as is the formation of Water Resource Management Authorities for each of the catchments/basins. At the municipality level water service providers are gradually becoming registered and water user associations are beginning to organise themselves at the grass roots / community level. Nanyuki already has an active water users association and Naivasha is likely to follow.
- A key policy related to land degradation, which has not been developed to-date is the Land Policy. Many documents, including NEMA's State of Environment 2004, refer to the urgency of an integrated land policy for addressing the land related environmental issues. Presently the legislation towards land use, land tenure and land management is scattered over numerous laws and rules and regulations and not being enforced. Although the new government has taken initiatives (stakeholder consultations) for the development of a new land policy, the outcome is unsure at this moment.

3.2.3 Kenya's approach to International and Regional Environmental Conventions

As requested in the ToR, the Consultant has covered Kenya's approach to the Convention on Biological Diversity, Climate Change and Desertification. In addition, the Consultant has added a brief section on other conventions and agreements considered to be important to Kenya.

a. UN Convention on Biological Diversity (UNCBD), 1992

Kenya signed and ratified the CBD in 1994. Biodiversity policy was in the past coordinated by the NES which had no statutory legal status and as a consequence no enforcement powers. Furthermore NES was consistently under funded. The principle result of these shortcomings was that NES was unable to coordinate the multiplicity of lead agencies and institutions with an interest in biodiversity. This led to fragmented policies, legislation and implementation mechanisms dominated by the lead agencies including Kenya Wildlife

Service, Kenya Agricultural Research Institute (KARI), the Kenya Forestry Research Institute (KEFRI) and the National Museums of Kenya.

As NEMA became operational in 2003, it absorbed many NES staff and Kenya's work on the CBD. At the time it inherited a draft national biodiversity strategy and action plan (NBSAP) where a summary had been made public.

b. UN Framework Convention on Climate Change (UNFCC), 1992

Kenya ratified this Convention in 1994 and the country's main area of interest is in the emerging carbon trade mechanisms that are expected to reduce greenhouse gas emissions, while contributing to sustainable development. Article 2 states: *Stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system…within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner.* The Kyoto protocol of 1997 committed industrialised countries to have agreed to reduce their emissions of greenhouse gases by, on average 5.2% during the period 2008-2012, relative to 1990 levels.

c. UN Convention to Combat Desertification (UNCCD), 1994

Kenya ratified this convention in 1997. The objective of this Convention is to combat desertification and mitigate the effects of drought in countries experiencing serious drought and/or desertification, particularly in Africa, through effective action at all levels, supported by international cooperation and partnership arrangements in the framework of an integrated approach that is consistent with Agenda 21, with a view to contributing to the achievement of sustainable development in the affected areas. The seventh session of the Conference of the Parties took place in Kenya in October, 2005. The UNCC website states "*Combating desertification is essential to ensuring the long-term productivity of inhabited drylands. Unfortunately, past efforts have too often failed, and around the world the problem of land degradation continues to worsen"*. Kenya has drawn up a National Action Plan (NAP) to combat desertification that calls for the establishment of a Desertification Community Trust Fund, strengthening early warning systems and promotion of sustainable use of renewable energy.

d. Other International and Regional Conventions and Agreements

These are listed and briefly described in Box 3.1 in chronological order:

Box 3.1 Other International and Regional Conventions & Agreements

Protocol for Sustainable Development of the Lake Victoria Basin, 2004
This was approved by the East African Community Council in 2004. Article 7 on Sustainable Development of Natural Resources states "*The Partner States shall manage, develop and utilise the natural resources of the Basin in a sustainable manner".* Article 12 discusses the modalities for EIA while Articles 13 to 20 discuss prior notification of planned measures, environmental audits, prevention of significant harm to neighbours, monitoring and precautionary measures and the polluter pays principle.

Stockholm Convention on Persistent Organic Pollutants (POPs),
Twelve specific persistent organic pollutants are internationally recognised as requiring elimination and reduction: aldrin, chlordante, DDT, dieldrin, dioxins, endrin, furans, heptachlor, hexachrobenzene, mirex, PCBs and toxaphene.

Basel Convention on Control of Trans-boundary Movements of Hazardous Wastes and their Disposal, 1989
NEMA is in the process of establishing a unit in their offices in Karura Forest to coordinate Kenya's activities on the Basel Convention.

Montreal Protocol on Substances that Deplete the Ozone Layer, 1987
This is considered to be one of the most successful international agreements and it committed industrialised nations to reduce consumption of CFCs and HCFCs by 50% by 1999 and cease production of halons in 1992. Less developed countries are required to phase out use by 2010, now only four years away.

Convention on International Trade in Endangered Species, 1973
This treaty restricts trade in certain plants, animals and animal products between member countries. Among the treaty's successes is the listing of the African elephant as an endangered species, thereby halting ivory trade. Kenya has been instrumental in the enforcement of this treaty. This has caused tension with other African countries that believe their elephant populations are stable and require culling and revenues should be accrued from the proceeds. Kenya's counter argument against this, is that poaching and illegal trade will increase again as it will be difficult to monitor the movement of bona fide ivory globally.

Ramsar Convention, 1971
A Ramsar site is a place designated as a wetland of international importance. Kenya has already designated four lakes as Ramsar sites: Baringo, Bogoria, Naivasha and Nakuru. Apparently Lake Elementita has also been proposed. The Convention aims to stop the draining of wetlands for agricultural and development purposes. Wetlands are more accurately defined by the Convention on Wetlands of International Importance Especially as Waterfowl Habitat (RAMSAR Convention), to which Kenya is a party, as *"areas of marsh, fen, peat- land or water, whether natural or artificial, permanent or temporary with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters".*

3.3 Environmental Legislation

Kenya currently has a sound environmental legislative framework in place which is being built upon. Major existing regulations include:

- The Environmental Management and Coordination Act, 1999. The main function of the EMCA is to provide for the establishment of an appropriate legal and institutional framework for the management of the environment. The Act is administered by the National Environmental Council and implemented by the National Environmental Management Authority (NEMA).
- The Environmental Impact Assessment and Audit Regulations, 2003. The Environmental (Impact Assessment and Audit) Regulations of 2003, contained in Kenya Gazette Supplement No. 56, Legal Notice 101, have been legislated.
- The Environment Management, Order, 2004 (Lake Naivasha Plan).
- The Forest Act, 2005.
- The Water Act, 2002.
- Approximately 77 sectoral and other laws (e.g. Agriculture, Mining, Factory Acts etc.)

Regulations in draft form include:
- The Environmental Impact Assessment Guidelines, 2004;
- Environmental Quality Standards, 2004 (for Land degradation, water quality, waste quality, chemicals, biodiversity, economic instruments and air emissions); and
- Sector Guidelines for EIA, 1997.

Details of the existing legislation are presented in Technical Appendix 2.

Although the environmental legislative framework is in place, its implementation is still far from desirable. The weak institutional capacity (see section 3.4) is one of the constraints, but lack of political willingness and other governance issues are considered of higher importance is this regard.

3.4 Institutional Framework

3.4.1 Institutional structures / responsible authorities for dealing with environment

a. General perceptions

At the national level, the two main organisations directly responsible for dealing with environmental issues are the Ministry of Environment and NEMA. Other line ministries, such as Planning and National Development, Agriculture, Energy, Finance, Lands and Settlement, Livestock and Fisheries, Water, Tourism and Wildlife, Trade and Industry environmental issues, in so much as environmental issues relate to their specific sector.

b. Ministry of Environment and Natural Resources

The MENR comprises the departments of Forestry, DRSRS, NEMA and other EMCA, 1999 institutions, KEFRI and Mines and Geology. Within MENR, there is a Department of the Environment (DoE) with approximately 5-10 staff. MENR is in the process of formulating a strategy and as of March 2006, it has the following broad objectives to: (i) create an enabling environment; (ii) protect, conserve and ensure sustainable development; (iii) generate knowledge for environmental technology; (iv) establish partnerships with organisations for the implementation of bilateral and multilateral agreements; (v) strengthen capacity; (vi) improve resource mobilisation; (vii) establish systems for monitoring and evaluation; and (viii) create awareness on key environmental issues.

It appears that there is insufficient distinction between the roles and responsibilities of the MENR and NEMA both within the two organisations and externally among donor agencies, experts working in the environmental sector and the public. It is agreed by NEMA, that MENR has the overall environmental policy function, but where the boundaries of essential inputs into policy formulation start and end are unclear.

c. National Environmental Management Authority (NEMA)

The National Environmental Management Authority was formed and had a Director General by July 2001, however it was not fully functional for a period of time due to the absence of a Board and staff. Since mid-2003, NEMA has been operational. Currently NEMA headquarters employs about 210 people with approximately 30 positions yet to be filled. Staff dedicated to environmental impact assessment, enforcement and compliance number around 10 or more and there are plans to employ more.

NEMA is currently answerable to a Board of Management who in turn are answerable the National Environmental Council (NEC) and the Ministry of Environment and Natural Resources. The Public Complaints Committee is a separate unit that is directly answerable to the National Environmental Council, but not NEMA. The National Environmental Tribunal is directly answerable to the High Court of Kenya.

In NEMA, there are four main departments: (i) The National Environment Trust Fund; (ii) The National Environment Restoration Fund; (iii) The Standards and Enforcement Review Committee; and (iv) National Environmental Action Plan Committee (under this department, there are the Provincial and District Environment Committees).

In August 2004 NEMA recruited environmental officers for each of the districts and also for each of the divisions of Nairobi. This suggests that there are now between 71 and 90 districts, divisional and provincial environmental officers. However, it has been

commented that these officers do not have resources dedicated to them and this is one of the major constraints to enforcing environmental legislation in Kenya.

Through brief discussions with NEMA, the priorities for capacity building and training are in: (i) Environmental Impact Assessment (EIA); (ii) Environmental Auditing (EA); (iii) Environmental standard development and enforcement; (iv) Support to province and district environmental officers; and (v) Support for the formation and effective functioning of district environmental committees.

What NEMA doesn't clearly define though, is whether the priority is the ability to undertake sound screening of proposed projects, or the ability to review EIAs and Audits or the ability to undertake an EIA. Of course each of these functions is essential for the smooth running of NEMA, and while prioritisation is an essential step, it appears that much more is required.

NEMA has produced State of the Environment reports for 2003 and 2004 and is currently working on the report for 2005.

NEMA has also trained 20 staff to become Inspectors. Two members of staff have been trained in the UK while the remaining 18 have been trained in-house in Kenya. There are plans to expand this training to the line Ministries in the future.

EMCA, 1999 is reported to be one of the best framework laws on environment and yet enforcement of the law, to date is weak. Part of the reason for this is the lack of gazettment of standards, but part of the reason is also inadequate political will at the most senior levels. Ministers have the power to issue orders and furthermore Presidential *decree* can also be issued.

NEMA has launched a Strategic Plan for the next 5 years (2005-2010). This was to be published in October 2004 but was delayed and NEMA has only recently launched it in February 2006. The key objectives of the Strategy and an assessment of the level of implementation to date are provided in Technical Appendix 2.

3.4.2 Other key institutions involved in environment

Other main institutions involved in environment are:

- Ministry of Planning and National Development;
- Ministry of Finance;
- Ministry of Agriculture, including KARI;
- Ministry of Livestock and Fisheries (Vet. Department);
- Ministry of Water and Irrigation;
- Ministry of Lands and Settlement;
- Ministry of Trade and Industry;
- Ministry of Energy;
- Ministry of Tourism & Wildlife;
- Office of the President, Department of Arid Lands;
- National Authorities: TARDA, LBDA, ENNDA, ENSDA, KVDA, CDA;
- National institutions/Private Sector: KWS, NMK, KIPPRA, HCDA, KPSF, KAM, KTB;
- Relevant Projects and Programmes: LVEMP, CDTF;
- Civil Society Organisations: KFWG, KLA, ELCI, Green Belt Movement.

Some main features of these institutions are:

a. The financial resources of the government institutions have declined over the past years, due to the stagnating economy, governance issues and related decline in donor support. As a result the implementation capacity of the government institutions has reduced considerably. Increasing budget allocations for development relevant programmes is one of the objectives of the ongoing ERS. Projections show a slightly improving trend for the coming years.
b. Closely related to the foregoing is the still weak institutional capacity of most of the government institutions.
c. Civil Society organisations have gained in strength over the past years. There are approximately 600 NGOs that are operational in the environmental sector in Kenya. Civil Society organisations that have been successful in lobbying and advocacy in the past 10 years are: KFWG, KLA and the Green Belt Movement.

3.4.3 Level of coordination between sectoral institutions

Most of the line ministries have employed either officers dedicated solely to environmental issues or officers who work on environment as part of an overall job description. The extent of liaison and coordination between the sectoral ministries and NEMA varies widely and is often related to whether the individual in the line ministry has had sufficient environmental training and secondly whether they are encouraged and facilitated within their particular ministry to execute the necessary activities.

One of the gaps that is acutely felt by developers is in the municipal and city councils in the country. Most of them are ideally placed to comment on environmental issues and yet many have either not received significant training in environmental issues or if they have received training, the councils often remain unclear on the exact mandate of environmental officers and where and what the distinctions in duty should be between the council environmental officer and the district environmental officer.

4. EU AND OTHER DONOR COOPERATION WITH KENYA FROM AN ENVIRONMENTAL PERSPECTIVE

4.1 EU Cooperation

4.1.1 Introduction

The cooperation between the EC and Kenya from an environmental perspective has been analysed at two levels:

a. At the strategic level:
   - The degree to which the environmental issues have been addressed in the Country Strategy Paper 2003 -2007 (CSP);
   - The relevance of the chosen sectors from the environmental point of view; and
   - The extent to which environmental issues have been integrated in the proposed programmes and projects.

b. At the implementation level
   - The degree of implementation of the environmental relevant sectors; and
   - The degree of integration of environmental issues in project cycle management of EC programmes and projects.

Relevance from the environmental perspective is reviewed on the basis of the degree to which the major identified environmental issues (Chapter 2) have been addressed:

- Degradation of natural resources including loss of bio-diversity, and
- The Socio-economic environment (health, education, drinking water)

4.1.2 The Country Strategy Paper 2003 - 2007

The formulation of the CSP is largely based on the priorities as indicated in the PRSP consultations; these priority sectors are explicitly mentioned in the CSP[10], with agriculture and rural development being the first priority. In the section on "Analysis of the Political, Economic and Social Situation"[11], agriculture is analysed on its importance for the economy; environment comes in, in the social section[12], where explicit mention is made of the land problems and the poor environmental practices. In the section on 'assessment of sustainability of current policies'[13], due attention is paid to the PRSP, the Kenya Rural Development Strategy (KRDS) and the policies on Forestry and Water Development. The priorities indicated in the CSP are clearly reflected in the EC-GoK response strategy and in the Indicative Work Programme. The indicative allocation of Envelope A (€ 170 million) is distributed as follows: (i) Agriculture & Rural Development (25% - 35%), (ii) Transport, Roads Infrastructure (20% - 30%), (iii) Macro-economic Support (40% - 50%) and (iv) Other Programmes (5% - 10%).

The specific objective in the Agriculture & Rural Development Sector is the achievement of the PRSP sectoral growth of 6%. Although this objective is formulated from an economic perspective, environmental considerations are made under the 'major accompanying policy measures'[14], of which the major ones refer to land use policies, awareness creation and community involvement in environment, emphasis on forestry

10 CSP 2003 – 2007, para 2.3, page 4
11 Idem, chapter 3, page 6
12 Idem, page 8
13 Idem, para 3.4, page 10
14 Idem, page 30.

and rural water. In the Transport/Road sector, the capacity to undertake environmental impact assessments as a standard element of all road programmes is referred to in the 'major policy measures' section[15]. Budget Support would be provided as a contribution to the public sector reform and the implementation of the PRSP. One of the government economic and institutional reform measures would be 'clear reflection of the PRSP priorities in the budget'[16].

From the foregoing one may conclude that:

- Environmental issues, although not in great detail, have been considered in the analysis of the political, economic and social situation, which forms the basis for the Indicative Programme; and
- The priorities as indicated in the CSP/IP coincide to a large extent with the environmental priorities: Agriculture and Rural Development as a focal sector and GBS to support the PRSP implementation.

4.1.3 Implementation of EDF Programmes in the period 2001 - 2005

Reviewing the realisation of the CSP strategy is constrained by the fact that the implementation of the EDF 9 has hardly commenced. By the end of 2005 a total of € 217 million has been committed, but only € 58 million has been disbursed, of which € 50 million on General Budget Support (GBS). Programmes and projects implemented in the period 2001 – 2005 are largely from former EDFs (6,7 & 8).

Relative importance to environmental relevant sectors

The indicative budgets for the sectors as described in the CSP have changed over time. Firstly the Mid-Term Review (MTR) of 2003 recommended a transfer from former EDFs and Stabex funds and utilisation of the B-Envelope in favour of GBS. The total indicative budget increased, but budget allocations for the focal sectors (agriculture & rural development and roads) remained the same.

Furthermore, with the commitments made to-date and the commitments in the pipeline, the recent Evaluation Mission[17] of EC's Support to Kenya, estimated that the most likely distribution of allocations over the sectors will be the following: (i) General Budget Support: 53% - 58% (€ 125 – 150 million), (ii) Agriculture & Rural Development: 6% - 7%[18], (iii) Transport, Roads, Infrastructure: 23% - 28% and (iv) Non-focal Sectors: 12% - 13%.

The foregoing shows Agriculture & Rural Development can hardly be called a focal sector with only realised commitments of 6-7% of the total budget, while GBS increased considerably, in absolute terms as well as in terms of share of the total budget.

In the period 2001 – 2005 a total of € 531 million has been committed from EDF funds, while € 269 million was disbursed. The distribution of the disbursements over the sectors was as follows: (i) Agriculture and Livestock, 2.6%; Community Development, 9.7%; Private Sector Development & Tourism, 14.5%; Roads, 23.7%, Social Sectors, 11.1%; Governance, 3.0%; General Budget Support, 25.0%; Trade, 1.2% and Others, 9.3%.

Of the environment relevant sectors, 11.5% was spent on agriculture & community development and 11.1% on the social sector.

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15 Idem, page 32.

16 Idem, page 33

17 Evaluation of European Commission's Support to Kenya, Draft Final Report, 3 March 2006

18 In case the Rural Poverty Reduction/Local Government Support Programme (Commitment € 21 million), presently brought under the sector Governance, would be included, the share for Agriculture & Rural Development would be more favourable.

When including the other EC programmes (Stabex, RIP, Budgetlines and EIB), the proportion for the environmental relevant sectors looks slightly better, with Agriculture & Livestock, 7.3%; Rural Development, 8.1% and the social sector 8.8%.

This is mainly because of the existence of the regional programmes in the agricultural, livestock and fisheries sectors.

From the foregoing it may be concluded that the environment relevant sectors, in terms of budget allocation, did not receive the importance as was envisaged in the CSP.

Agriculture & Rural Development

a. Agriculture, livestock & Fisheries
National programmes in the agricultural sector funded with EDF funds (EDF6&7) implemented in the period 2001 – 2005 include the Agricultural Research Programme with KARI focussing on generating knowledge and technologies for the ASAL, Coffee Improvement (SICPP) and sector studies on Coffee, Cotton and Livestock. The majority of the agricultural activities are regional programmes: Association for Strengthening Agricultural Research in Eastern and Central Africa (ASERECA), Pan African Programme for Control of Epizootics (PACE), Farming in Tsetse Controlled Areas (FITCA) aiming at reduction in tsetse infestation and support to Fisheries Research and Management of Lake Victoria (LVFRP and LVFO) and the EC/FAO Food Security Programme run in 20 countries in Africa.

All activities can be considered relevant from the environmental and poverty perspective. Especially the ASAL research and the fishery activities address two key environmental issues: the serious resource degradation in the ASAL areas and the loss of bio-diversity in Lake Victoria. The regional programmes on cattle diseases (Rinderpest CBPP, etc) will contribute to an improved productivity in livestock and agriculture, while the EC support to the coffee sector is considered more important for poverty reduction and employment creation.

However, with EC being a major donor, the extent of activities is considered of relatively little importance. The activities are scattered over a number of sub-sectors and not part of a strategic framework; no sectoral strategy has been developed by the EC. There are many opportunities for EC to play a central role in the ongoing SRA, even though it is already supported by other donors (WB, SIDA).

b. Rural Development
The main programmes are the Community Development Programme I & II, (EDF6, 7&8) the Biodiversity Conservation Project (EDF8) and Community Development for Environmental Management (CDEMP) under EDF-9. The CDEMP will start in 2006 and has two components: (i) Support to NEMA and (ii) the Community Environmental Facility, similar to the BCP.

The rural development projects are considered mainly relevant from the poverty reduction and the social environmental point of view. The CDPII programme resulted mainly in projects related to the social sector (education, health and water supply), while the BCP projects mainly related to biodiversity conservation through community interventions.

The BCP had a greater focus on environment. Its objectives were: (i) Promote activities that create awareness of the need to conserve biodiversity, (ii) Enhancing enterprises that promote sustainable use of biodiversity resources, (iii) Supporting interventions that reduce conflicts between people and biodiversity conservation, and (Iv) Supporting initiatives that reduce threats to biodiversity.

The Mid Term Review (MTR) concluded that the programme significantly contributed to increased awareness among the general public and brought home the understanding of

the relationship and consequences of livelihood activities and the environment. The MTR recommended that protection (conservation) of Kenya's watersheds and forest habitats was key to sustainable biodiversity conservation, and this required an ecosystem wide approach. In addition, it was recommended that such programmes should have wider and stronger linkages/relationships with key stakeholders in addition to the KWS e.g. forest department and key policy makers in the GoK.

Roads

The main programmes under the roads sector include the Northern Corridor Rehabilitation Programme I & II (EDF7, 8, 9 & Regional) and Roads 2000 under Stabex funds. The roads programme is primarily directed at economic growth and therefore may contribute to poverty reduction.

From the environmental perspective, road programmes may have negative impacts. The EC attempts to include HIV/AIDS campaigns as well as water supply programmes (mainly through boreholes) as part of their roads programme. Negative impacts may be, for example, the increase in settlement along roads, increasing the pressure on the surrounding natural resources (land, water, forest, forage) or the danger for erosion when this effect is not adequately accounted for in design and construction. Moreover, roads may be affected by erosion in the surrounding areas, threatening the high investments in roads. A proper EIA is therefore required in the identification and formulation phase.

General Budget Support

The objective of the GBS is to contribute to the Public Sector Reform and the PRSP. The Poverty Reduction Budget Support I (PRBS I) started in 2000 and was linked to the implementation of government reforms. Only 50% was disbursed due to the suspension of the IMF PRGF programme, because of insufficient progress in governance reforms.

Financing agreement for the PRBS II was signed in November 2005. The purpose of PRSB II is to contribute to poverty reduction by supporting the implementation of the ERS. Disbursements are linked to the progress in the outcomes of the reforms. PRSB II focuses on 3 interrelated objectives: (i) Support macro-economic stability and underpin fiscal consolidation, (ii) Support improvements in service delivery in health and income and (iii) Strengthen public financial management.

The total commitments in the period 2000 – 2005 amount to € 226.5 million, while disbursements till December 2005 were € 117.5 million, as is shown in Table 4.1

Table 4.1: Commitments and Disbursements in General Budget Support

GBS Programme	Source	Commitment (million €)	Disbursement (million €)
PRBS I	EDF8	35,000,000	17,000,000
	Stabex	16,000,000	
PRBS II	EDF9	125,000,000	50,000,000
Education	Stabex	18,754,714	18,754,714
Roads	Stabex	21,969,599	21,969,599
Governance	Stabex	9,764,266	9,764,266
Total GBS		**226,488,579**	**117,488,579**

Source: Evaluation Report EDF 9

The ERS is monitored through 29 outcome indicators which are reported annually. Classification of these 29 indicators is shown in table 4.2.

The priorities of the PRSP consultations have not been fully reflected in the ERS: equal importance was given to the social and productive sectors in the ERS, while agriculture

was mainly considered as an economic sector which would contribute to the country's economic growth.

As for the indicators, agriculture is monitored on its sector growth only; the indicators for socio-economic environment (drinking water, health and education) are well represented with nine in number. The two indicators on environment relate to (i) the area of gazetted protected forest, which is targeted, to increase by 13,000 ha annually and (ii) the proportion of public sector projects subjected to EIA, but no targets have been set. Both outcome indicators have not been reported for the progress report 2004/05. It may be therefore concluded that relatively little importance is given to bio-physical environment in the implementation of the ERS

Table 4.2 Performance Indicators in the implementation of the IP-ERS

Indicator	Number
1. Macro-economic/Public Expenditure	6
2. Growth in sectors (industry, agriculture, trade & tourism, incl employment)	4
3. Roads & Infrastructure, incl. energy	3
4. Drinking water supply	2
5. Health	5
6. Education	4
7. Environment	2
8. Absolute Poverty	1
9. Justice	1
	29

Source:

GBS disbursement is linked to the overall macro-economy performance and the performance indicators for public financial management and social sector. GBS therefore will contribute to the improvement of the socio-economic environment (drinking water, health and education), but less to the biophysical environment: the degradation of natural resources and bio-diversity.

Programmes and Projects outside the Focal Sectors

Ongoing activities outside the focal sectors are:

- Democratic Governance Support Programme (DGSP);
- Institutional Capacity Development: Service Support Programme (SSP II), Technical Cooperation Facility, NAO Support Package;
- Private Sector Development: Micro- Enterprise Support Programme (MESP);
- Tourism Sector: Tourism Institutional Strengthening and Market Promotion Programme (TISMPP) and the Tourism Diversification and Sustainable Development programme ((TDSDP);
- Institutional capacity related to EPA Trade negotiations (Keplotrade);
- Health: District Health Services and Systems Development Programme (DHSSDP);
- Education: through the CDP and thematic budget lines; and
- Preservation of Cultural Heritage.

The following programmes or programme components are of particular relevance from the environmental perspective:

a. DGSP: At least two NGOs (Ogiek People Organisation and Law Society of Kenya) have been involved in the land policy formulation and on lobbying on illegal and irregular appropriation of land;
b. Environmental issues are well integrated in the design of the MESP;

c. The TISMPP and TDSDP include eco-tourism and community based tourism. Projects financed through the Tourist Trust Fund aim at development of sustainable technologies and asset preservation. Sector guidelines for EIAs have been drafted;
d. Trade: Consultations with the Government and private sector on safety issues in relation to the horticulture export industry and EC support to the Kenya Plant Health Inspectorate Service (KEPHIS); and
e. The DHSSDP implemented in 20 districts and 2 provinces will contribute to improvement of the socio-economic environment.

Programmes funded through other instruments

Stabex:
Programmes funded with Stabex funds have been discussed in the foregoing section

Budget-lines:
Presently there are five budget-line programmes handled by the Delegation:

a. Co-financing with European Development NGOs
b. Programme on Environment and Tropical Forests in Developing Countries
c. European Initiative for Democracy and Human Rights
d. Programme of Aid for Policies and Actions on Reproductive and Sexual health and Rights in Developing Countries
e. Aid for Poverty-related diseases (HIV-AIDS, Tuberculosis and Malaria) in developing countries.

No detailed assessment could be made of these programmes . Under the Programme on Environment and Tropical Forests in Developing Countries, three ongoing projects are specifically relevant from the environmental perspective:

a. The Loita/Purko Naimina Enkiyo Forest Integrated Conservation and Development Project; This project, managed by the IUCN has as its overall goal: 'The local Maasai community owning and managing the forest to maintain bio-diversity and environmental values'.
b. Transboundary Environmental Project: Conservation of Natural Resources and Sustainable Development in Pastoral Semi-Arid Regions of Eastern Africa (Kenya, Tanzania and Somalia. The project intends to support the establishment of participatory development plans for the management and conservation of national resources in transboundary pastoral areas, both at grassroots and institutional level.
c. The UNDP Improving Market Access for Dryland Commodities in East Africa. This project targets agro-pastoralists and pastoralists in four districts in Kenya, Tanzania and Uganda and addresses the infrastructural conditions, insecurity as well as legislative and policy issues that hinder market access, information linkages and provision of micro-credit.

ECHO:
The EC Humanitarian Organisation is currently active in Kenya, Somalia and Ethiopia as a response to the present drought. Drought response programmes with a total of € 12 million are being implemented.

From the environmental perspective ECHO is addressing the result of poor environmental management in the ASALs which have contributed to the extent and impact of the current drought. ECHO implementation strategy takes the environmental considerations into account: realizing that resource degradation can be partly attributed to often poorly planned water development activities, resulting in settlement and related resource

degradation (water, forage, trees). ECHO's approach in water & sanitation is limited only to rehabilitation of existing water and sanitation facilities.

4.1.4 Integration of Environment in Programmes and Projects

In the following sections the integration of environment in programmes and projects will be reviewed. Firstly the present EC procedures for Project Cycle Management (PCM) will be analysed and secondly the current practice in the delegation.

EC Procedures in PCM

The EC recognizes different PCM procedures for Sectoral Policy Support, General Budget Support and Projects.

The procedures for Sectoral Policy Support and General Budget Support are quite similar:

- In the Identification Phase, the programmes are screened on the seven assessment areas (i) Sector Policy and Strategic framework, (ii) macro-economic assessment, (iii) Medium Term Expenditure Framework, (iv) Accountability and Public Expenditure Management, (v) Donor Coordination (vi) Performance Monitoring and Institutional Capacity Analysis.

  The Identification is concluded with the 'End of Identification Document (EoID). The EoID consists of five sections (i) Consistence with EC Programming, (ii) Development objectives and cross cutting issues, (iii) Key assessments, (iv) Preliminary programme description and (v) Work-plan for the formulation phase.
- Screening of the programme design in the formulation phase is again on the seven assessment areas as in the identification phase;
- During the implementation, the programmes are assessed on their results, progress of activities and inclusion of cross-cutting issues.
- In the evaluation studies environment is part of the cross-cutting issues.

From the foregoing it may be concluded that, according to the EC PCM procedures, integration of environment in the PCM for Sectoral Policy Support and General Budget Support, is limited to the cross-cutting paragraphs in the various PCM stages only.

For projects the procedures are different. The EC distinguishes three types of projects in relation to environment:

Category A: Projects requiring an EIA: mostly large infrastructural projects (roads, dams, irrigation projects, etc.).

Category B: Projects which may require an EIA: projects that are likely to have significant environmental impacts.

Category C: Non threatening projects; not requiring an EIA.

Integration in EC Programmes and Projects

The degree of environmental mainstreaming has been reviewed on the basis of two indicators: (i) the requirement for EIA according to EC procedures and the number of EIAs actually executed; and (ii) The attention paid to environment in the paragraph on cross-cutting issues in the JAOR 2005

No systematic overview of conducted EIAs could be obtained from the Delegation. From the interviews and document review it appeared that environmental screening, including EIAs, was well integrated in the programmes of the BCP, The MED, the TISMPP and TDSDP. According to the EC procedures, EIA would be required for the Roads Programme. It is not clear whether this has been done or not.

In Table 4.3 the review of cross cutting issues in the JOAR 2005 is presented. The table shows that environment is hardly addressed in the paragraph on cross-cutting issues.

Only for two of the eleven sectors is this considered sufficiently; in agriculture it is limited to the KASAL research, while for six sectors there is no paragraph on cross-cutting issues at all.

The foregoing shows that integration of environment in project cycle management is considered insufficient in terms of EC procedures and in terms of the current practice in the delegation. Integration seems to be dependent on the commitment and dedication of programme officers.

Table 4.3: Cross-cutting environmental issues addressed in JOAR 2005

	Sector	Environment in Cross-cutting Issues	Remarks
1.	Rural Development, Agriculture & Environment	insufficient	Limited to KASAL research
2.	Roads & Infrastructure	sufficient	Recognition of involving environmental issues at the proposal stage.
3.	Macro-economic Support	not	
4.	Governance & Legal Reform	No environment	
5.	Institutional Capacity Building	not	
6.	Private Sector Development	sufficient	Environment integrated in MED
7.	Tourism	Not mentioned	But integrated in project design
8.	Trade	not	
9.	Health	not	
10.	Education	not	
11.	Non-State Sectors	not	

4.2 Cooperation funded by other agencies from an environmental perspective

4.2.1 Donor Programmes

An inventory has been made of donor programmes related to environment. The inventory is not comprehensive, but is indicative of current and emerging support for the environment and cross-cutting sectors. Table 4.4 shows the sectors or areas of intervention of the donor programmes, while short descriptions of donor support including a matrix is provided in Technical Appendix 3.

Donor support related to environment has increased over the past five years. Table 4.4 shows that relatively much support is provided to the institutional strengthening of MENR and NEMA. Also much support is given to the water and forestry sectors and coastal environment, while support to the ASALs and Agriculture is relatively small.

Most of the donor agencies have regulations and procedures for environmental screening in place, often based on the national rules & regulations of the donor country or especially developed for the donor agency.

4.2.2 Donor Coordination

Coordination between the donors on environment is currently split into three types of forums, as follows:

i. Donor / Environment meetings. These were chaired by UNDP-PEI and are now chaired by USAID. The meeting schedule is approximately once every quarter.

ii. Sub-Group 1 – Donor - MENR/NEMA/EMCA, 1999 meetings. These are currently chaired by MENR and co-chaired by DfID and to date three meetings have been held.

iii. Sub-Group 2 – Donor – Forestry meetings. These are also currently chaired by USAID and meetings are held approximately once every four months.

One of the fundamental issues emerging from donor coordination is clearly that some donors are more inclined to budget support than others.

It should be noted that each sector has its own donor coordination meetings that are indirectly linked to the environmental meetings. Of special importance is the Kenya Food Security Coordination System (KFSCS) coordinated by the Arid Lands Programme and initiated in 1998. The Kenya Food Security Meeting (KFSM) comprises government departments, UN agencies, donors and NGOs. The KFSM meets regularly and is co-chaired by the National Director of the Office of the President, Arid Lands Resource Management Project (ALRMP) and WFP. The Kenya Food Security Steering Group (KFSSG) is a technical sub-group of the KFSM. The KFSSG has developed a systematic, comprehensive multi agency early warning, food security status monitoring system for Kenya. Furthermore, there are five sectoral working groups (SWG) under the KFSM. Coordination of the SWGs is mainly through the relevant line ministries.

Table 4.4 Donor Interventions in Environment

	Sector/Area of Intervention																
	Governance																
Donor Agency	Government	Civil Society	Private Sector	Institutional Support MENR/NEMA	Water	Forestry	Agriculture	Energy	Watershed Management	ASAL	Livestock Research	Wildlife	Bio-diversity	Tourism	Coastal Environment	Health	Urban/Solid Waste
DFID	■	■	■	■													
DANIDA/SIDA	■	■		■			■								■		
JICA					■	■			■			■					
Finland					■	■		■									
AFD (France)		■										■					■
RNE (Dutch)					■				■								
KfW					■												■
UNDP	■			■				■							■	■	
UNEP				■									■		■		■
USAID				■		■						■	■		■		
World Bank				■	■	■	■		■	■						■	
AfDB						■			■								
CIDA											■						
UNICEF					■												
UNIDO				■										■	■		
Habitat					■												■
UNESCO									■								
WWF										■							■
EU	■	■	■	■			■			■	■		■	■	■	■	

There is a general perception that there is a significant change in policy / interest level to donors investing directly in environment and also in cross-cutting sectors. Examples include Danida-Sida, the World Bank and the Embassy of Finland. There is potential for donor overload in a very needy sector, if Kenyan resources, capacity and interest levels do not match donor levels. The positive angle is that with sufficient donor harmonisation it will be possible for each donor to work on environmental issues in a particular sector without overlap, whether it be water (Danida-Sida, the Netherlands, World Bank, AfDB, JICA etc) or forestry (USAID, the Finnish Embassy, World Bank, JICA etc). Other perceptions include a potential over-reliance on technical assistants to sort out institutional and environmental problems. Lastly, there is an observation of an emerging over-reliance on a national environmental policy to change senior level attitudes on environment in Kenya. Thus, interventions should be considered at all levels and both directly and indirectly in order to achieve the intended objectives.

5. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusions

The foregoing sections contain conclusions regarding the state of environment, the legislation and institutional framework and donor cooperation. The main conclusions will be summarised here:

5.1.1 Key Environmental Issues

- Natural resources (land, water, vegetation cover) degradation is considered the main environmental threat in Kenya.
- Main forces leading to natural resources degradation are the high pressure on these resources, due to increasing population combined with (i) a skewed landownership, (ii) inadequate legislation towards land ownership, land tenure and land management and (iii) poor/weak enforcement of existing legislation, (iv) low productivity in agricultural and livestock systems.
- Main indicators are: (i) loss of vegetation cover (forage); (ii) loss of forest areas; (iii) increase in soil erosion; (iv) decline in soil fertility, (v) reduction in biodiversity, (vi) distortion of the hydrological balance, mainly because of deforestation, resulting in increased intensity and occurrence of drought and floods, (vi) decreasing water levels in the majority of the country's lakes.
- Main effects are: (i) declining growth in agriculture, (ii) declining livestock production, (iii) declining fish production, (iv) increased occurrence of resource conflicts, and (v) increased poverty.
- There is a direct relationship between poverty and environmental degradation: poverty being a cause as well as a result of degradation.

5.1.2 Legislation and institutional framework

- Main environmental regulatory legislation is in place, (EMCA 1999). The main institutions responsible for its implementation are MENR and NEMA. Although considerable progress has been made, substantial support will remain required.
- Policies and strategies of the main sectoral agencies related to environment have been established in the past 5 years. Substantial support will be needed to implement these policies and strategies.
- An exception is the formulation of a comprehensive land policy for regulating landownership, land tenure and land management. Although the new government has taken initiatives in this context, the outcome is unsure at this moment.
- Institutional capacity of most sectoral agencies is still weak; substantial support will be required for effective functioning.
- The financial resources of the sectoral agencies have declined over the past years due to the stagnating economy, governance issues and related decline in donor support. The projection is that the budgets for the line ministries will gradually increase in the coming years; however donor support will be required for the implementation of the planned strategies.

5.1.3 Donor Support

- Donor support has increased over the past three years including the support to environmental relevant programmes. Donor coordination is focussing on harmonisation of donor support. A GoK initiated framework for donor support in the sector is considered a first priority.

- The EC support to Kenya is assessed positively at the strategic level (e.g. the Country Strategy Paper) in terms of choice of focal sectors and attention for environmental integration. At the implementation level, the focal sector "Agriculture & Rural Development" was not given the importance as anticipated in the CSP, environment was insufficiently integrated in the EC programmes (exceptions are CDP, BCP, TTMIP).

5.2 Recommendations

In the following sections the recommendations are discussed around three themes:

a. Integration of Environment in EC project cycle management (PCM),
b. EC- Sectors and Environment
c. Donor Cooperation

5.2.1 Environmental Integration in EC Programmes

Environmental Integration in PCM

One of the conclusions is that environment is not well integrated in PCM. The EC Headquarter in Brussels is currently preparing guidelines for integration of environment in the PCM procedures. A matrix of environmental integration in the different stages of the project cycle for General Budget Support, Sector Policy Support Programmes and projects, is shown in table 5.1.

An important instrument for environmental integration in the case of GBS and SPSPs is the Strategic Environmental Assessment (SEA) (see Box 5.1). SEAs contribute to properly integrating environmental concerns in strategy and policy papers, and define indicators to be monitored during implementation and evaluations. SEA screening and SEA studies are already practiced by other donors (SIDA, USAID) and SEA-screening is recommended by NEMA (See SoE 2004).

As has been discussed in section 3.2, in many of the national policy and strategy papers environment is not well integrated. Environment is often dealt with in an obligate separate chapter and not integrated in proposed actions. It is therefore recommended that the EC utilizes the instrument of SEA as a standard procedure in all its sectoral programmes including GBS, for screening of policy and strategy documents.[19]

Box 5.1: Definitions

SEA: Strategic Environmental Assessment
A systematic process for evaluating the environmental consequences of proposed policy, plan or programme (PPP) initiatives in order to ensure they are fully included and appropriately addressed at the earliest stage of decision making on a par with economic and social considerations.

SEA Screening
Screening refers to the decision to undertake an SEA. SEA's are necessary for all PPP that, when implemented, are likely to produce negative impacts on the environment.

SEA Scoping
Scoping refers to the identification and clarification of issues to be addressed by the SEA. Scoping should take into consideration the concerns and value judgements of stakeholders, in order to ensure that these are addressed in the SEA Study.

EIA: Environmental Impact Assessment
Ex-ante environmental assessment of a project, involving a systematic assessment of its potential environmental impacts in order to propose measures to enhance them (positive impacts) or mitigate them (negative impacts).

[19] In the hindsight one may conclude that if the ERS had been subjected to SEA, environmental concerns would have been better integrated in the ERS and in the outcome indicators.

EIA Screening
Screening refers to the decision to carry out the EIA, based on national legislation, the nature of the project and the sensitivity of the environment.

EIA Scoping
Scoping is the operation used to define the aspects that need to be covered in the EIA Study, such as the key environmental issues to consider, timeframe, geographical scope and specific methodologies to be employed.

Institutional Capacity at the Delegation

Introducing environmental integration in PCM will require adequate institutional capacity within the Delegation, which is presently not available. It is therefore recommended to have an environmental specialist within the delegation with sufficient decision-making power, who has the responsibility to:

- Screen planning and strategy documents and project proposals on environmental integration;
- Identify the requirement for SEAs and EIAs;
- Commission SEA and EIA studies;
- Monitor environmental integration during implementation; and
- Integrate environmental issues in evaluations.

5.2.2 EC-Sectors and Environment

Relationship EC-Sector and Environment

Table 5.2 presents the relationship between the EC sectors and environmental themes. The table shows that:

- Governance and macro-economic support relate to all themes. It is clear that for all themes appropriate laws, rules & regulations must be in place, and more importantly, enforced. Similarly, the institutional capacity to enforce the policies and implement development programmes and projects must be in place.
- A sound macro-economic environment is a condition for any development investment.
- As has been shown in this report, the sector Food Security & Rural Development relates strongly with most of the environmental themes.
- Within the sector Trade & Environment, there is a strong relationship between Tourism and Lands & Forests, Biodiversity and Marine Pollution.
- There are a number of environmental themes which require regional cooperation; this especially refers to the environmental issues in Lake Victoria and the ASALs due to the trans-boundary character of nomadic pastoralism.

In Table 5.3 the main environmental issues, the opportunities for support and the key issues for environmental integration are shown. In the following sections, the main recommendations will be discussed for each sector.

Table 5.1: Environmental integration in EC programmes and projects

Programme Phases	Sector Policy Support Programmes (SPSP)		General Budget Support (GBS)	Projects
1. Identification	a. Preliminary review of 7 SPSP assessment areas[20]) b. SEA-screening -> decision on SEA study c. Review of EoID		a. Preliminary review of 7 GBS [1]) assessment areas b. Review of SEA, if existent, on quality and EC conditions c. Review of EoID	a. Environmental Appraisal of Project proposals b. EIA Screening -> decide on EIA c. Review of EoID
2. Formulation	<u>Sector not requiring SEA:</u> d. Include SEA screening conclusions in SPSP design (ToR for formulation studies) e. Integrate environmental conclusions and indicators of formulation study in 7 SPSP assessment areas	<u>Sector requiring SEA:</u> d. Conduct SEA: - environmental baseline PPP - potential environmental impacts - alternative PPPs - monitoring indicators e. Integrate SEA Conclusions in the 7 SPSP assessment areas	d. Comprehensive assessment of 7 GBS assessment areas; e. Recommend on SEA requirement f. Incorporate SEA (+ possible additional recommendations in GBS g. Include environmental indicators in Financing Proposal	d1. No EIA: Integrate environmental issues in TOR feasibility/design. d2. Prepare TOR for EIA e. Integrate environmental issues in final design & financing proposal
3. Implementation	f. Regularly assess indicators against set benchmarks		i) Regularly assess indicators against set benchmarks j) Include environmental issues in policy dialogue	f. Regularly assess indicators against set benchmarks
4. Evaluation	- Was SEA required? - If yes, was it properly carried out? - Have SEA recommendations been followed up?		- Did GBS contribute to sustainable development? - Have environmental issues successfully been integrated?	g. Integrate environmental issues in main evaluation criteria (relevance, effectiveness, efficiency, sustainability, impact)

[20] The seven Assessment Areas: (1) Sector/National development or Reform Policy and Strategy; (2) Macro-economic Assessment; (3) Budget & Mid Term Expenditure Frame work; (4) Public Financial Management, (5) Performance Monitoring and Result Indicators, (6) Donor Coordination; (7) Institutional & Capacity Analysis

Institutional Development, Good Governance and Rule of Law

a. Further strengthening of Environmental Policy Formulation and support to MENR and NEMA.

   Considerable efforts have been made in the past years to develop the environmental legislation and to establish the environmental institutions (MENR and NEMA). There is still ample scope to continue providing support to these institutions, especially in environmental policy formulation, further strengthening of the institutional capacity in the implementation of the legislation.

   In Technical Appendix 2 (chapter 5) detailed suggestions are made for support. The suggestions are grouped under the following headings:
   1. Strengthening Policy Formulation;
   2. Strengthening NEMA: the EIA and Audit Process;
   3. Strengthening of Environmental Communication and Information Systems; and
   4. Institutional Support for the environmental profession and training.

b. Comprehensive Land Policy

   The lack of a comprehensive land policy (and its enforcement) is one of the key issues in land degradation; and often mentioned in policy and strategy documents as a major constraint (see for example NEMA, SoE 2004). The EC could consider supporting the process of policy formulation, through support to the Ministry of Lands & Settlement and/or support to advocacy groups.

c. Support to Sectoral Institutions

   The institutional capacity of sector agencies is still weak, especially at provincial and district level; any sectoral programme or project should have a strong institutional capacity building component.

Food Security & Rural Development

There is a strong relationship between this sector and most of the environmental themes (Table 5.2). From the environmental (and poverty) perspective, it is recommended to include food security and rural development as a focal sector. As compared to the 9th EDF, the investment in the sector could be substantially increased. As a first step a vision & strategy for EC support should be elaborated, in collaboration with the GoK and other partners in the sector.

Opportunities for programmes and projects are many, to mention some:

a. ASAL programmes:
   - To expand on present KARI activities and link with extension;
   - Link with WB ASAL programme and invest in part of District Action Plans; and
   - Expand on livestock activities (regional programmes) and participate in livestock development investments (ASAL strategy 2005 – 2015).

b. Continue and strengthen the support to the KFSG under the Arid Lands Project and the EC/FAO Food Security Programme

c. Support to the implementation of the Agricultural Recovery Strategy:
   - Include/finance/ environmental sound techniques in extension; and
   - Stimulate watershed management programmes.

d. Support the implementation of the Forestry Strategy.

e. Continue and expand on the present BCP.

TABLE 5.2

Relationship Environmental Themes and EC Sectors

		ENVIRONMENTAL THEME																			
		Land & Forests				Biodiversity				Seas, Marine Polluton & fisheries				Socio - Economic						Hazardous Substances & Waste	
	EC-SECTOR	Land	Water	Forest	Energy	Forest	Wildlife	Wetlands	Aquatic	Lakes	Fisheries	Mangrove	Coastal Fisheries	Land Tenure	Poverty	HIV/AIDS	Health	Drinking Water	Population	Mining	Urbanm Waste
I.	Institutional Development, Good																				
I.1	Governance																				
I.2	Institutional Development																				
I.2.1	National level																				
I.2.2	Local level																				
II.	Food Security & Rural Development																				
II.1	Agriculture																				
II.2	Livestock																				
II.3	Fisheries																				
II.4	Forestry																				
II.5	Integrated Rural Development																				
II.6	Land Use Planning																				
III.	Social Sector																				
III.1	Health																				
III.2	Education																				
IV.	Transport																				
	Roads & Railways																				
V.	Trade & Environment																				
V.1	Tourism																				
V.2	Manufacturing																				
VI.	Macro-Economic Reform																				
VII.	Regional Cooperation																				

Strong Relationship
Medium
Weak Relationship

TABLE 5.3: Addressing the key Environmental Issues

Sector		Main Issues	Opportunities for Support (to Stakeholders)	Key Issues for Environmental integration	Priority
I.	Institutional Development, Good Governance and Rule of Law	1. Key Institutions Environment Policy and Regulation established, but still weak	Strengthen main institutions MENR, NEMA,	National Environmental Policy (NEP)	1
		2. Comprehensive Land Policy lacking	Provide support to Ministry of Lands & Settlement	Ensure linkages with EMCA, 1999 and future NEP	
		3. Enforcement of legislation weak	Support *gazettment* of Env Q Standards		
		4. Institutional capacity of main sector agencies still weak, especially at provincial and district level	Include capacity building components in projects/programmes	Training of key agency officers at national, provincial & district level in environment	
		5. Local government institutions still weak	Strengthen local authorities - env divisions	wrap into one planning & environmental functions	
II.	Food Security & Rural Development	1. Main Sector Agencies still weak	1. Support implementation ARS	Develop linkages between ARS and environmental policy	1
		2. Strategies Agriculture, Forestry, Livestock, Forestry, ASAL in place	2. Support implementation Forestry Strategy	Use WB funded SEA to guide on mainstreaming environment	1
		3. Improvement of productivity in agriculture and livestock key issue	3. Support implemention ASAL policy and strategy		1
		4. Integration of environmental sound practices required: soil& water conservation, agro-forestry,	4. Support to KFSM	Continue / expand support for phytosanitary regulations	1
		5. Rehabilitation and new forestry areas required in: gazetted forests, private lands, villages.		Support coordination between NEMA & new WRMAs & WSB (ie. Standards for water)	1
			4. Expand on CDTF		
III.	Social Sector	1. Low, but reversing social indicators	1. Continue support to social sectors	Mainstream environment through education at all levels. For health sector start with sound water & waste management.	2
IV.	Transport	(Rural) Roads required for commercialisation agr. produce especially in ASALs	1. Continue Roads 2000 projects	1. EIA required for possible negative impacts of projects. Consider SEA for sector.	
			2. Support Roads Proposals in ASAL		
V.	Trade & Environment			Support for Europgap & ACP Trade Negotiations (particularly demystifying through locals press)	2
		Growing pressure on natural resources	Consider support to ESOK	EIA required in any tourist support project. Conduct SEA for Mara & Samburu ecosystems	
VI	Macro-Economic Reform			1. Conduct SEA of ERS	1
				2. Include indicators in ERS monitoring + link with env committments in National Development Plan (targets)	
VII	Regional Cooperation	1. Lake Victoria (shared resource)	Continue and upscale support to Lake Victoria Environmental Programme	Minimise overlaps. Consider use of SEA	
		2. Transboundary nature of pastoralist nomadism	Link with ASAL Programmes in Countries of Horn of Africa		

Social Sector
From the environmental perspective, the socio-economic environment is considered as a second priority. The social sectors are, however important from the poverty perspective. It is recommended that the present support to health and education continues through GBS and the specific programmes.

Transport
Roads and especially rural roads are important from the poverty perspective (marketing agricultural and livestock produce, access to inputs) and will therefore contribute to increased productivity. Roads are mentioned as a first priority in the ASAL Policy.

It is therefore recommended that the Roads Programme (especially rural roads) is continued and expanded to the ASALs.

Trade and Environment
Tourism is and will likely continue to be an important and growing economic sector with potentially positive as well as negative environmental impacts. The environmental integration in the EC programmes (TDSDP and TISMPP) has been assessed positively. It is therefore recommended that support to this sector continues and further expands.

The relationship between manufacturing and environmental themes mainly refers to avoiding and mitigating negative environmental impacts (Table 5.2). Environmental integration therefore entails the proper integration of EIAs, EMPs in project planning and implementation.

Macro-economic Reform
As GBS is the main focal sector of EC support in terms of investments, it is recommended that the EC consider integration of environmental indicators in the monitoring of the ERS implementation and to make disbursements conditional to these outcome indicators. An SEA would be a first step in identification of environmental outcome indicators. Possible indicators are:

- Preparation and enactment of a comprehensive land policy;
- Indicators for enforcement of existing land policies;
- Area brought under forestry (apart from the gazetted forests); and
- Areas of implemented soil & water conservation areas.

Regional Cooperation
The two key regional environmental issues are the shared resources of Lake Victoria and the trans-boundary nature of nomadic pastoralism.

The EC programmes on cattle diseases have been quite successful and should continue, while the Trans-boundary Environmental Project (EC Budget-line) has just been initiated. If successful, one may consider upscaling this project. Similarly, continued support and up-scaling of the Lake Victoria Environmental Project is recommended.

5.2.3 Specific Recommendations on Donor Cooperation

- A more systematic approach or rationale should be considered by the donors for coordination in Kenya. From the discussions it appears that the current emphasis is on Nairobi and Western Province. This may be a true reflection of priority needs in early 2006, but after the current drought, reassessment of activities in the ASAL areas is likely to be required. Ideas for initiating a more systematic approach could include a matrix which places issues on a hierarchical scale versus interventions in the eight provinces. This should be examined and evaluated by the MENR and formal comments requested. In addition, it should be shared with other Ministries and Local Authorities to increase exposure to both MENR's and NEMA's major roles as

coordination bodies. Brief guidelines could be developed on the basis of increasing financial assistance that corresponds to increasing district and division coverage cross referenced with prioritised issues.

- The donor coordination meetings have been taking place for at least three to four years on an approximate quarterly basis. Consideration should be given to a more formal coordination and tracking system in Kenya. This is particularly necessary at this juncture given the change in level of donor aid that is either entering or about to enter Kenya for environmental programmes.
- In a number of documents[21] references have been to the donors developing a Joint Assistance Strategy during 2006. This should be undertaken and every effort should be made to include potential donors that do not normally join the donor coordination meetings. This is suggested because overlap of projects or programmes is most likely to emanate from donors or their organisations (MS, SNV, MSF, Oxfam, and Care) outside the normal donor meetings. This can be done once every quarter by email with the priority focussing on the EC and each and every member first, followed by other donors.
- Active participation in and strengthening of other donor coodination groups directly related to environment is recommended and viewed of equal importance. In this respect the further strengthening of the Food Security Donor Groups (see 4.2.2) is of special importance.

[21] Environmental policy formulation , development and co-ordination in Kenya by Andrew McCoubrey, 2005

ANNEXES

TECHNICAL APPENDICES

I. Environmental Maps of Kenya

II. Environmental Policies & Strategies and Legislation and Opportunities for Support to MENR and NEMA

III. Donor Cooperation On Environment

TECHNICAL APPENDIX I: Environmental maps of Kenya

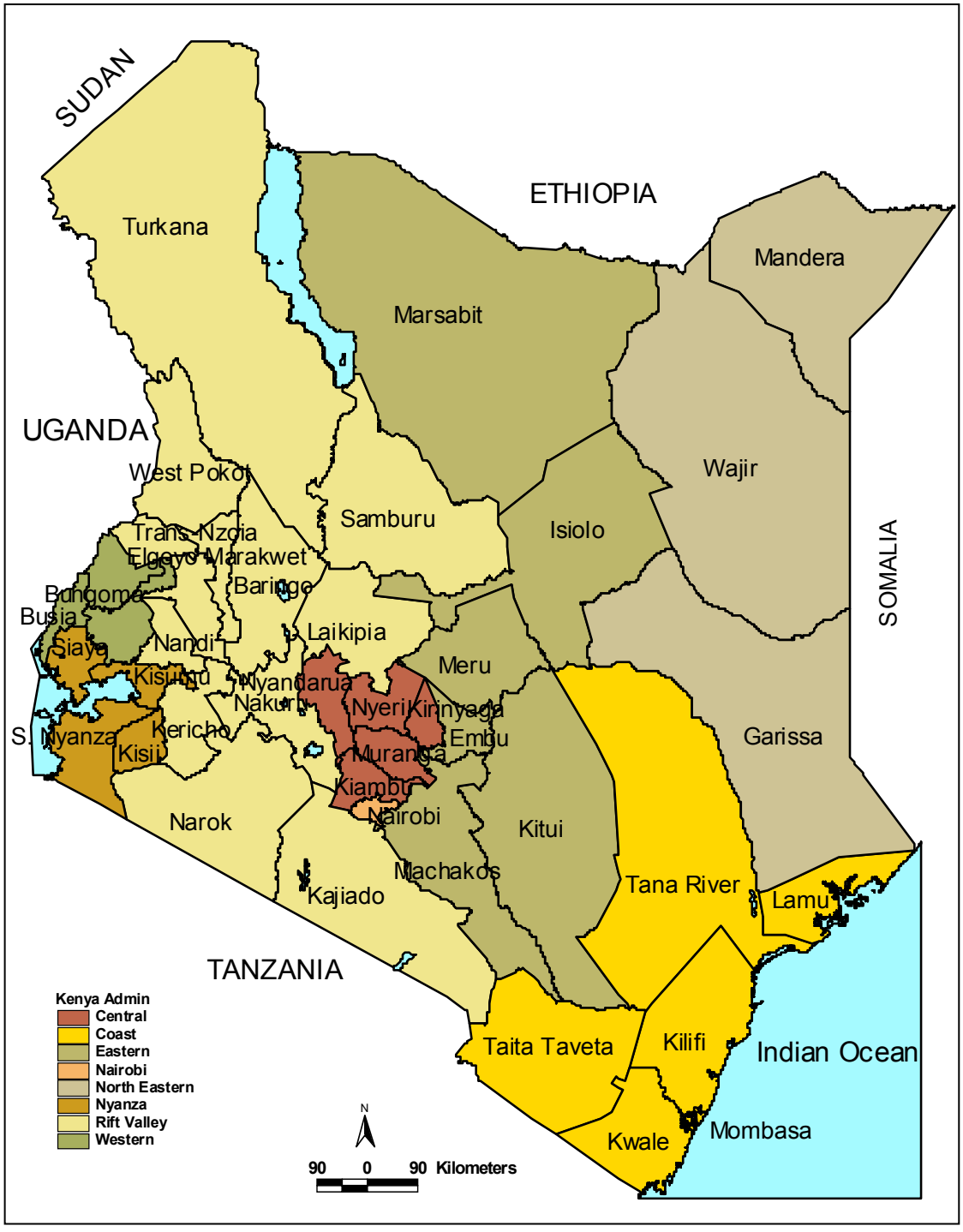


Fig 1. Kenya Administrative Boundaries

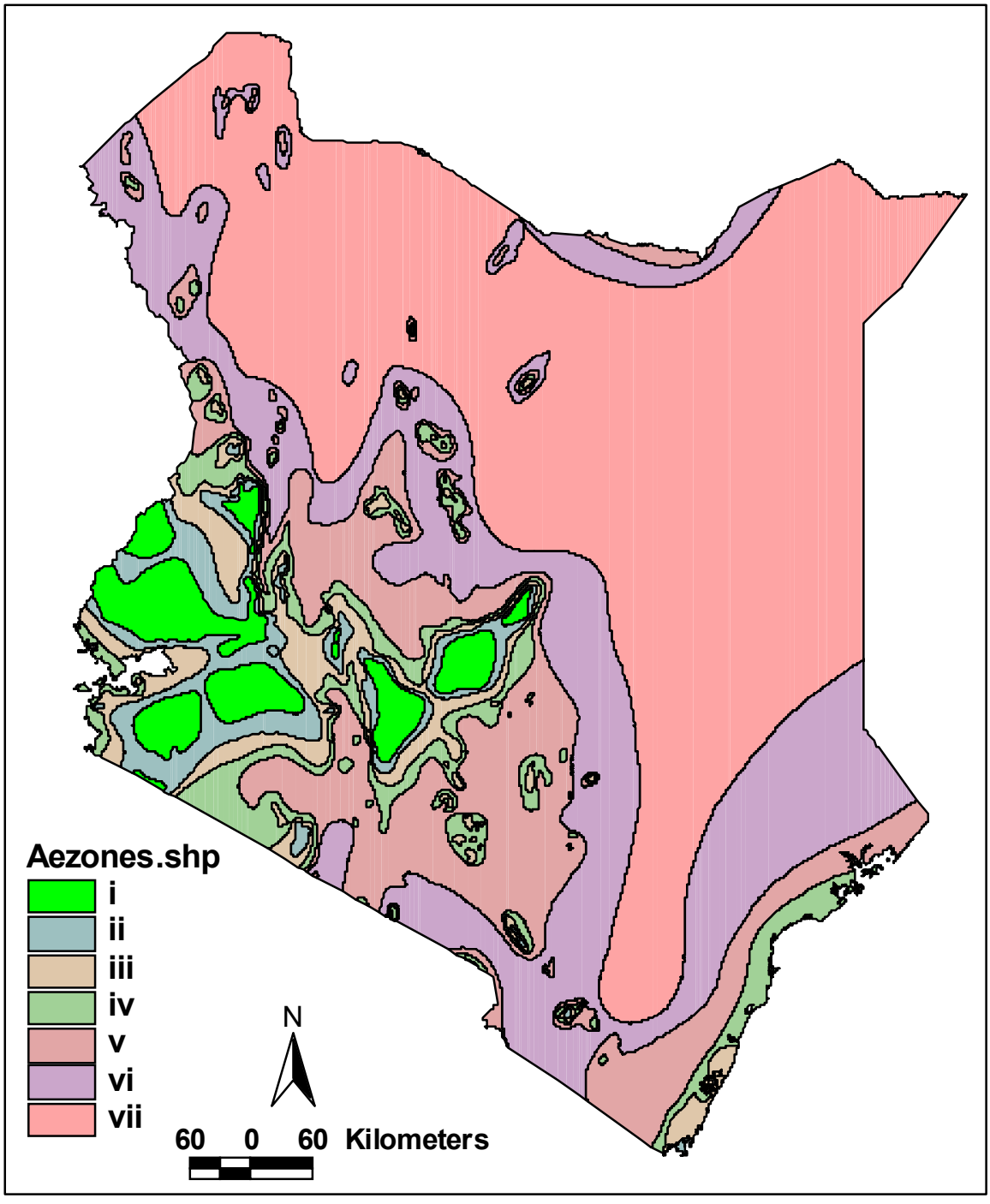


Fig 2. Agro-Ecological Zonation

National Parks and Reserves of Kenya

- ✓ Aberdare National Park
- ✓ Amboseli National Park
- ✓ Arabuko Sokoke National Park
- ✓ Arawale National Reserve
- ✓ Bisanandi National Reserve
- ✓ Boni National Reserve
- ✓ Buffalo Spring National Reserve
- ✓ Central Island National Park
- ✓ Chyulu National Park
- ✓ Dodori National Reserve
- ✓ Hell's Gate National Park
- ✓ Kagamega Forest National Reserve
- ✓ Kamnarok National Reserve
- ✓ Kisite-Mpunguti Marine National Park
- ✓ Kisumu Impala Wildlife Sanctuary
- ✓ Kora National Park
- ✓ Kuinga Marine National Reserve
- ✓ Laikipia Plateau Reserve
- ✓ Lake Bogoria National Reserve
- ✓ Lake Nakuru National Park
- ✓ Losai National Reserve
- ✓ Maasai Mara National Reserve
- ✓ Malindi-Watamu Marine National Park
- ✓ Malka Mari National Park
- ✓ Marasabit National Reserve
- ✓ Meru National Park
- ✓ Mkogodo Forest Reserve
- ✓ Mombasa Marine National Park
- ✓ Mount Elgon National Park
- ✓ Mount Kenya National Park
- ✓ Mount Longonot National Park
- ✓ Mwea National Reserve
- ✓ Nairobi National Park
- ✓ Ndere Island National Park
- ✓ Ol Donyo Sabuk National Park
- ✓ Ruma National Park
- ✓ Saiwa Swamp National Park
- ✓ Shaba National Park
- ✓ Shimba Hills National Reserve
- ✓ Sibiloi National Park
- ✓ Tana River National Primate Reserve
- ✓ Tsavo East National Park
- ✓ Tsavo West National Park

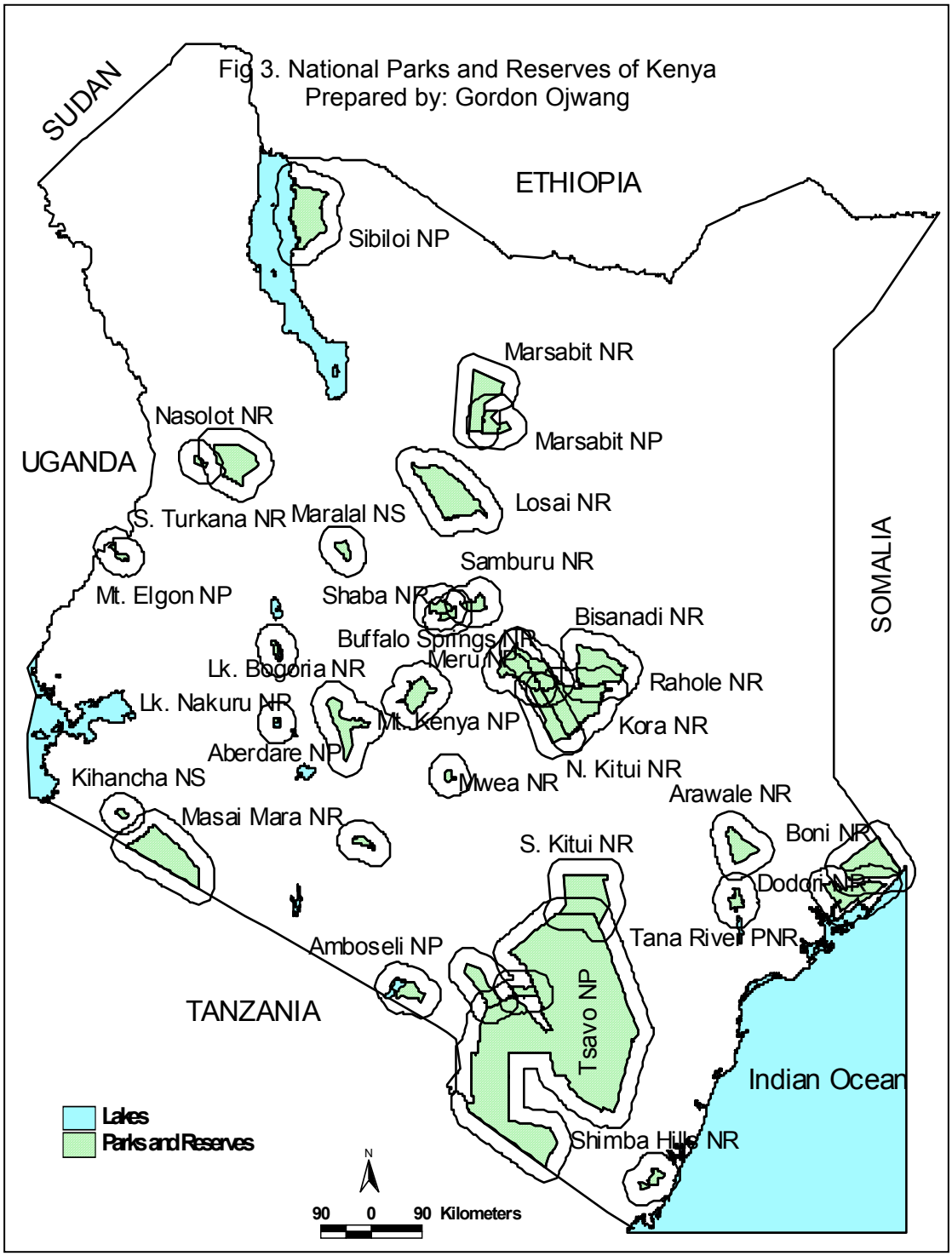


Fig 3. Kenya National Parks and Reserves and their dispersal areas

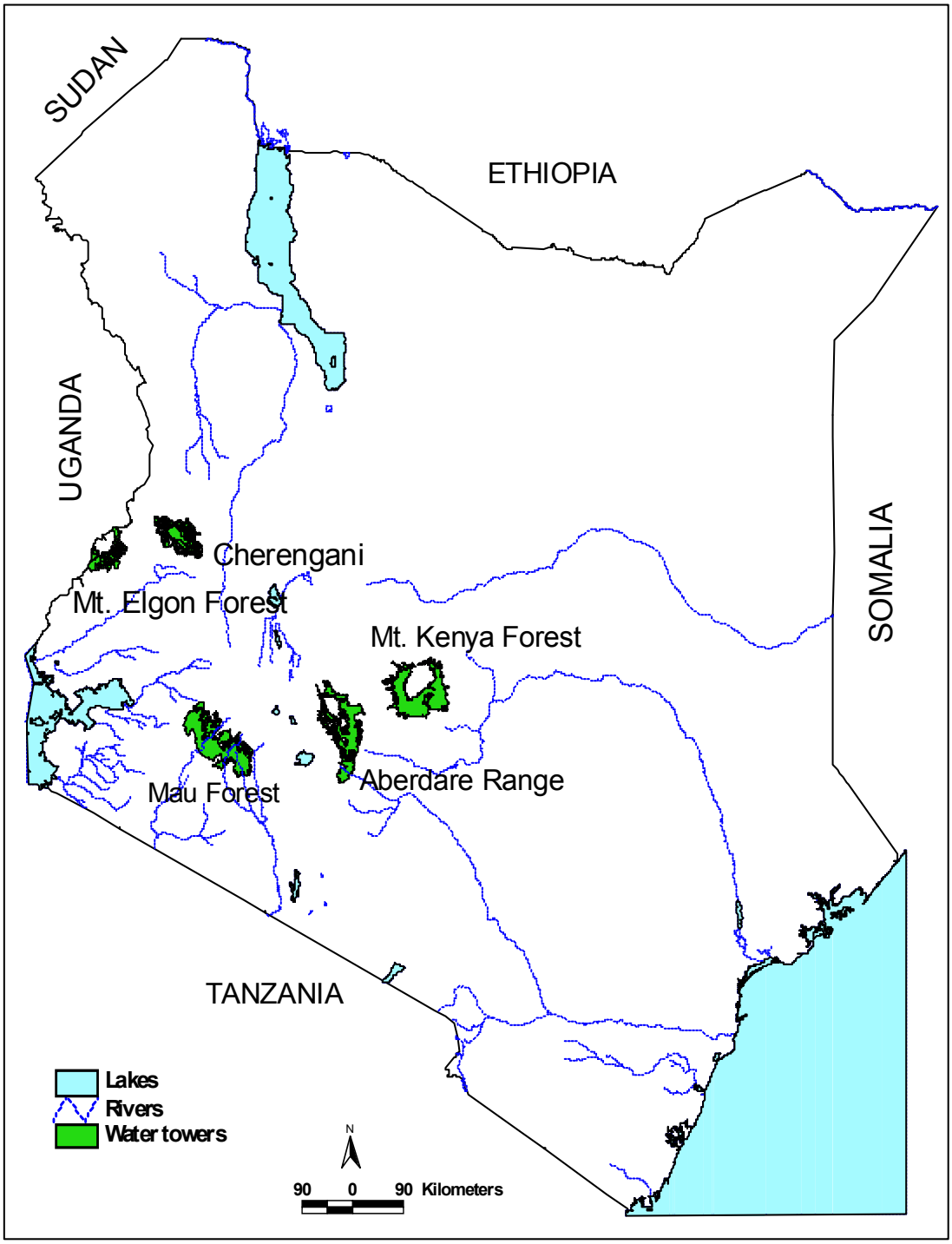


Fig 4. Major Water Towers of Kenya.

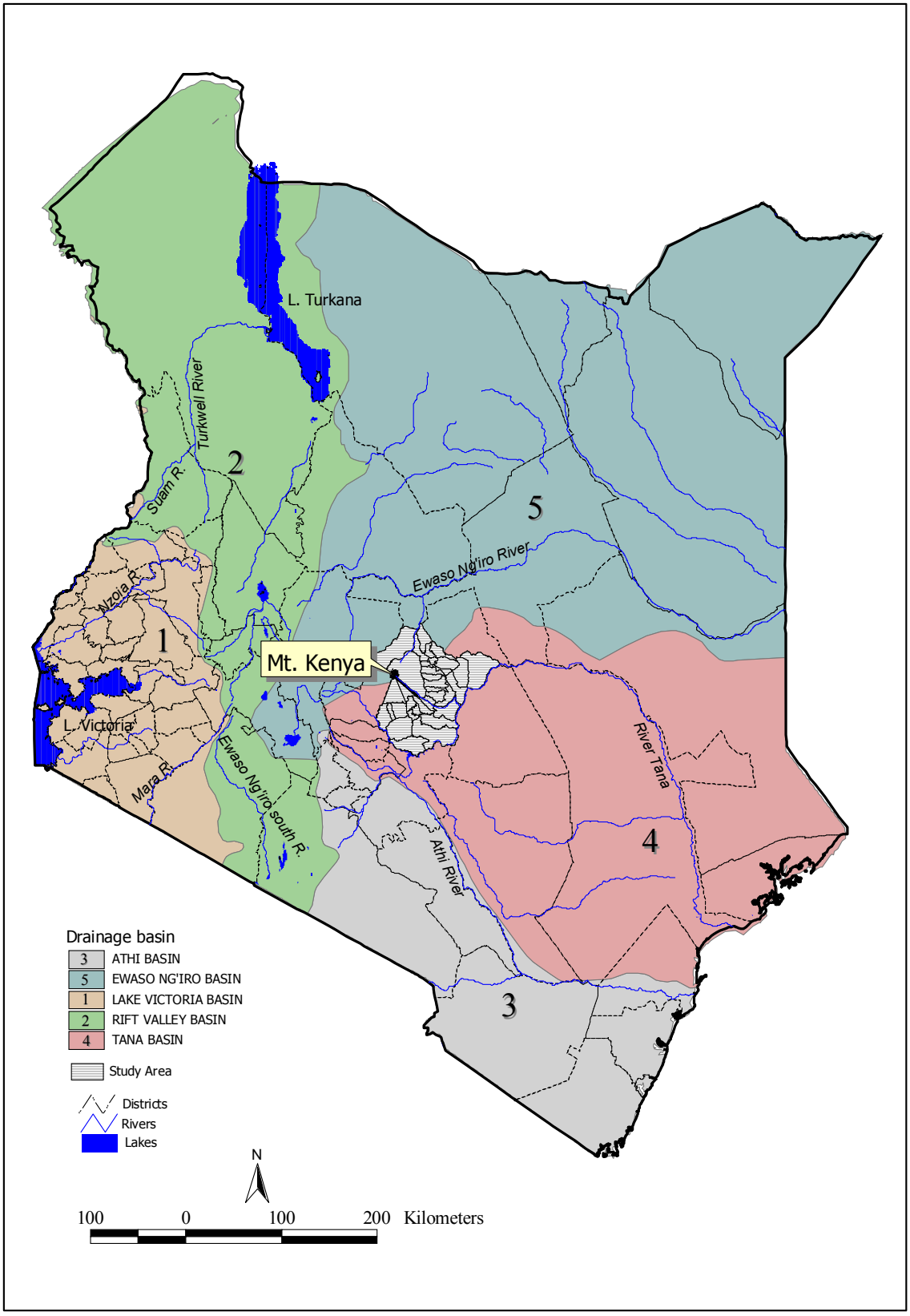


Fig. 5. Major Drainage Basins in Kenya

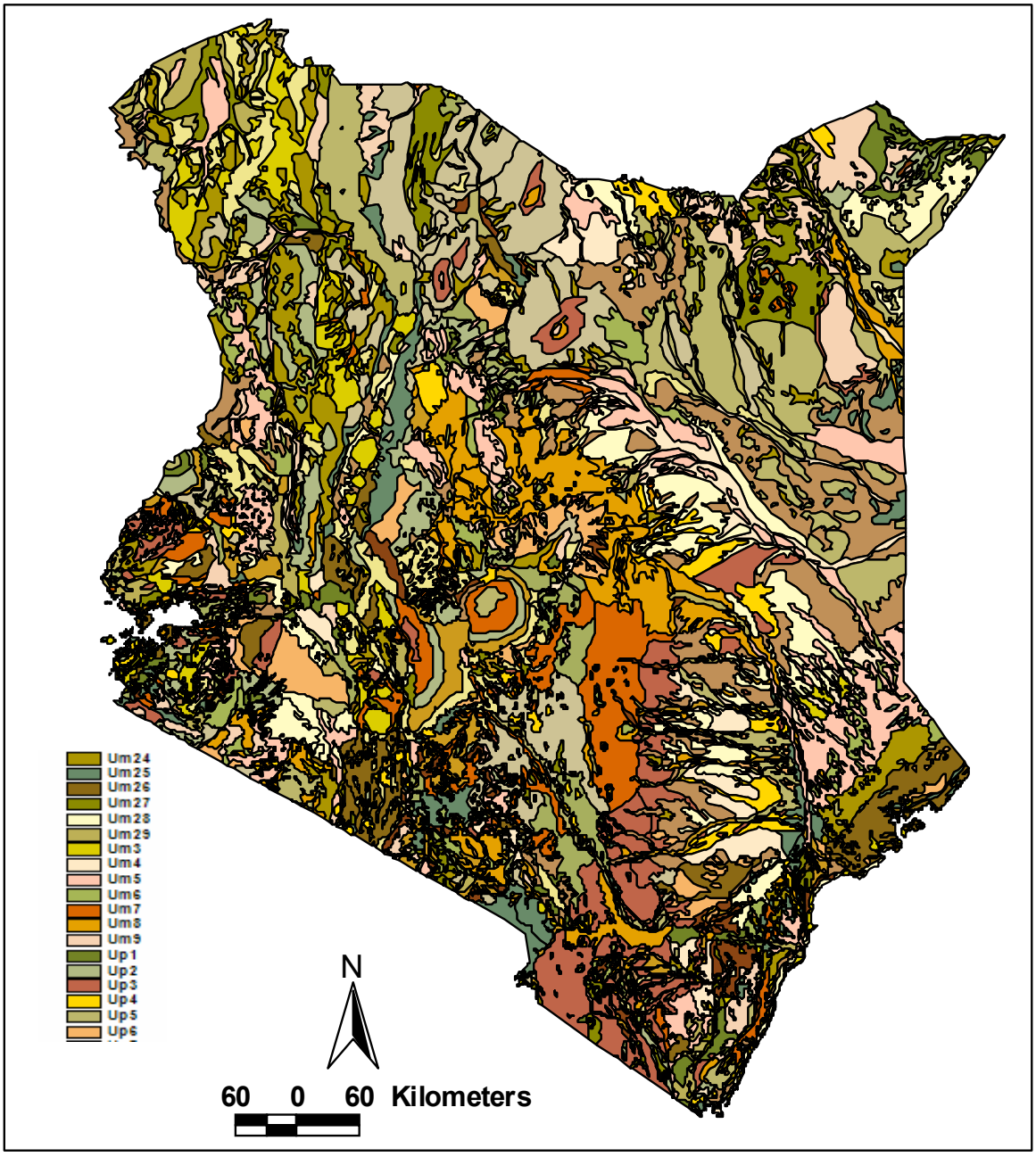


Fig 6. Major Soils Types of Kenya. *(Note the legend is too large to be shown entirely)*

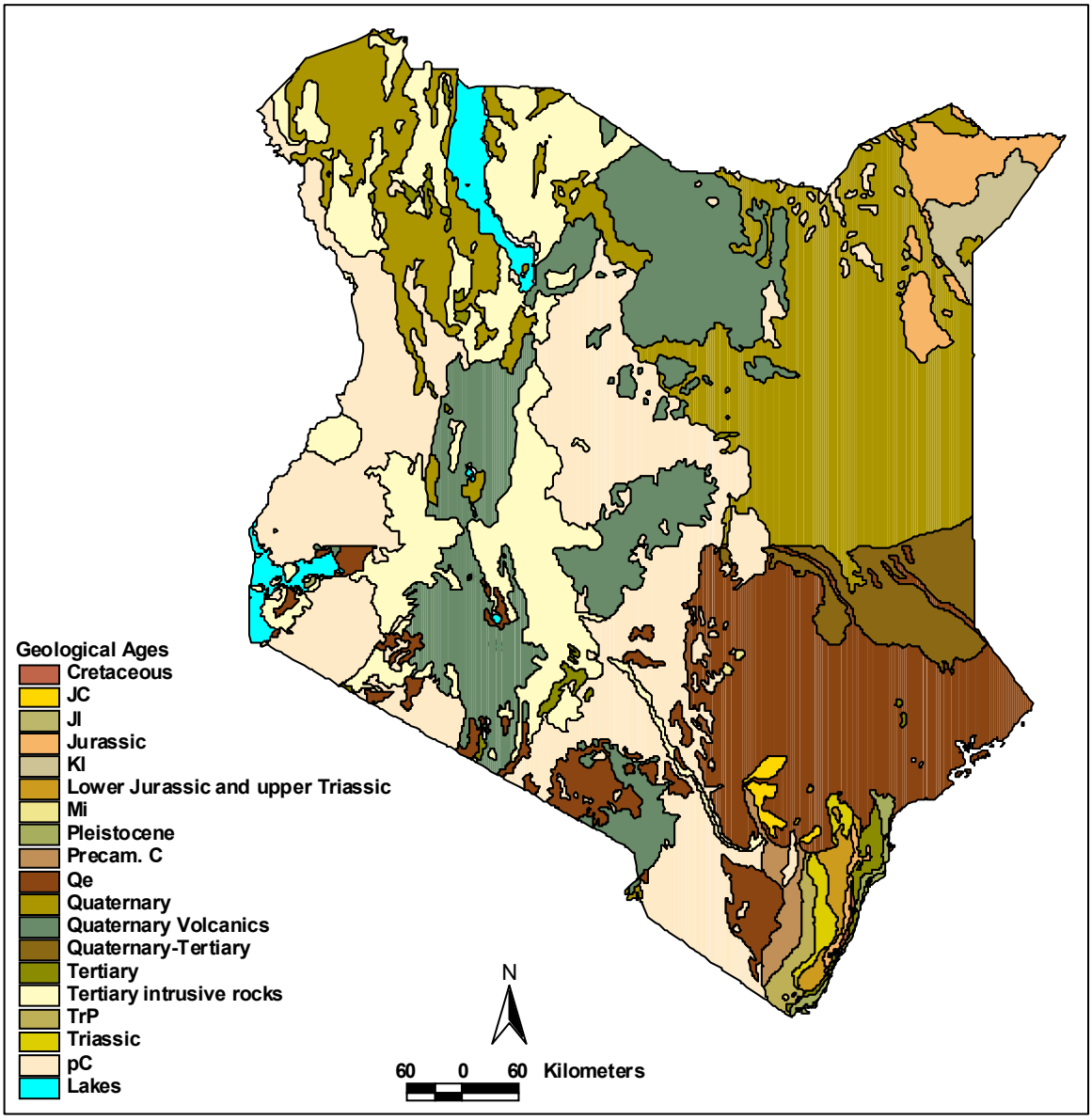
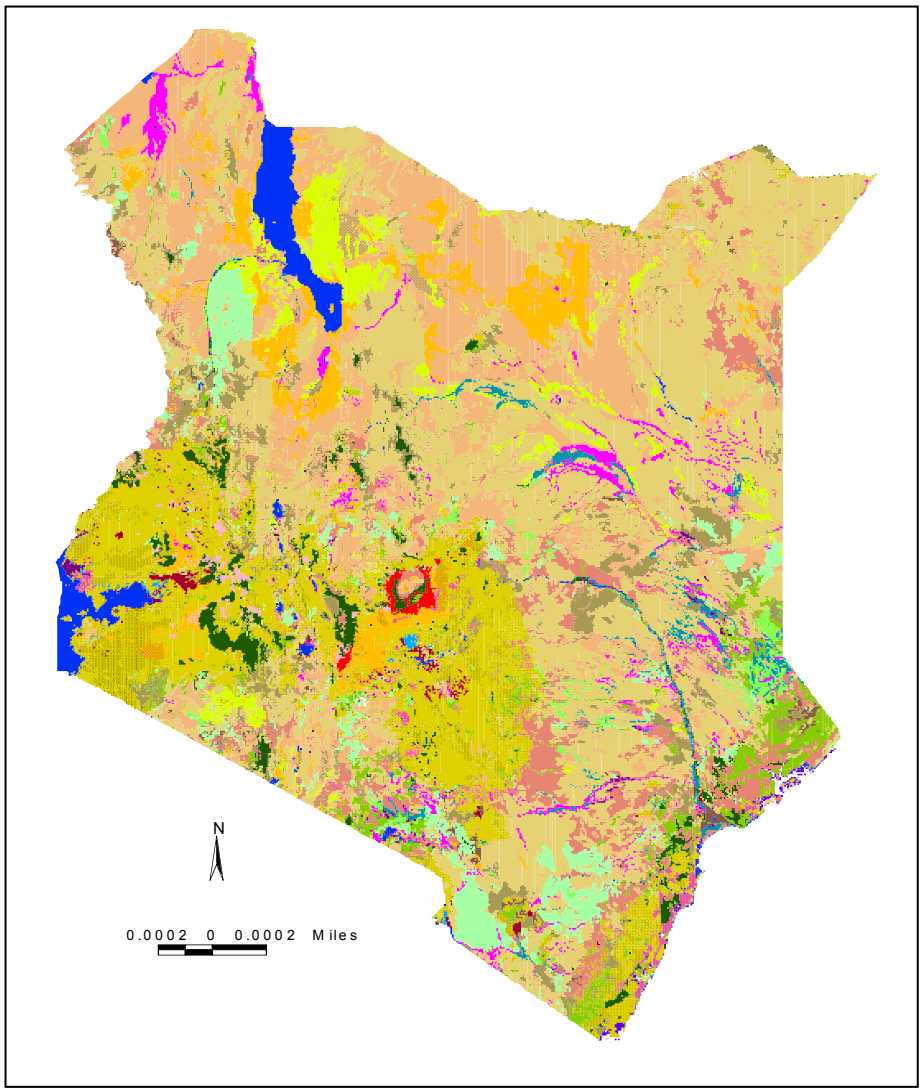


Fig 7. Geological Formations of Kenya
Source: GIS AFRICA



Landcover (Africover)
- Rainfed herbaceous crop
- Scattered (in natural vegetation or other) Rainfed herbaceous crop (field density 20-40% of polygon ar
- Isolated (in natural vegetation or other) Rainfed herbaceous crop (field density 10-20% polygon area)
- Irrigated herbaceous crop
- Rainfed shrub crop
- Scattered (in natural vegetation or other) Rainfed shrub crop (field density 20-40% of polygon area)
- Isolated (in natural vegetation or other) Rainfed shrub crop (field density 10-20% polygon area)
- Forest plantation - undifferentiated
- Rainfed tree crop
- Scattered (in natural vegetation or other) Rainfed tree crop (field density 20-40% of polygon area)
- Rice fields
- Multilayered trees (broadleaved evergreen)
- Closed trees
- Open trees (65-40% crown cover)
- Very open trees (40-15% crown cover)
- Closed to open woody vegetation (thicket)
- Closed shrubs
- Open shrubs (45-40% crown cover)
- Open low shrubs (65-40% crown cover)
- Closed to open trees and shrubs on temporarily flooded land
- Mangrove (Trees)
- Open to closed herbaceous vegetation
- Shrub savannah
- Trees and shrubs savannah
- Sparse shrubs
- Open to closed herbaceous vegetation on temporarily flooded
- Closed herbaceous vegetation on permanently flooded land
- Natural waterbodies
- Bare areas

Fig 8. Kenya Land Cover Types
Source: Africover landcover classification system

TECHNICAL APPENDIX II:

Environmental Policies & Strategies and Legislation and Opportunities for Support to MENR and NEMA

Contents:

1. Objectives & Strategies for a National Environmental Policy as formulated in the NEAP

Objectives

a) Facilitating optimal use of the national land base and water resources in improving the quality of the human environment;

b) Promoting sustainable use of natural resources to meet the needs of the present generations while preserving their ability to meet the needs of future generations;

c) Treating environmental conservation and economic development as integral aspects of the same process of sustainable development

d) Generating income and meeting national goals and international obligations by conserving biodiversity, reversing desertification, mitigating effects of disasters and maintaining the ecological balance of the earth.

Major strategies to realise these objectives were summarised as:

a) Enhance the harmonisation, implementation and enforcement of laws for the management, sustainable use and protection of the environment

b) Provide economic incentives and penalties to encourage sustainable use of natural resources and to minimise pollution.

c) Assess and evaluate in economic terms the value of standing, unexploited natural resources and ecological functions. For example, a standing tree should be worth more than a cut tree.

d) Institutionalise the process of environment impact assessment and monitoring for public and private projects and programmes.

e) Provide strong and effective environmental coordination and monitoring by creating a single autonomous organisation.

f) Enhance the involvement of the local communities in the management of natural resources and their living environment. In addition, promote the participation of all parties – local communities, district committees, business, industry and NGOs in projects and programmes for conservation and development.

g) Enhance environmental management capacities by training professionals and raising awareness at all levels.

h) Conduct research in a wide range of disciplines, including biodiversity, biotechnology, indigenous knowledge, waste management, gaseous emissions, disaster management, human settlements development and alternative forms of energy.

i) Maintain the system of protected areas and create others to conserve biodiversity, generate income and provide recreation.

j) Address underlying causes of desertification including socio-economic factors and establish mechanisms to mitigate the effects of drought.

k) Formulate a comprehensive land use and settlements policy to regulate human activities in order to minimise their negative impacts on the environment.

l) Improve decision-making processes by developing an efficient national environment education and information system within easy reach of users in all parts of the country.

m) Enhance cooperation with regional and international environment programmes, and treaties and agreements.

2. Environmental related Policies and Strategies

There is a large number of national policies and strategies that incorporate environmental components or are closely related to the key environmental issues. In the following sections these policies and strategies will be shortly discussed under the following headings:

a. Agricultural development related Policies & Strategies

b. Other Sectoral Policies & Strategies

c. National Plans & Policies

A. Agricultural Policies

There are six main known policies in Kenya relate to agricultural development that have a broad ranging impact on the sector. These are the SRA, the Livestock policy, the Fisheries policy, the Rural Development Strategy, the Food Security and the ASALs policy.

- **Strategy for Revitalizing Agriculture 2004 – 2014, (SRA) March 2004**

  The SRA builds on the ERS of 2003 and identified five critical areas to revitalise the agricultural sector. The main key areas included: (i) reform of the legal and regulatory framework governing agricultural operations; (ii) promotion of research and technology development; (iii) reform of the extension service system to create an effective linkage between research, extension and farmers; (iv) establishment and development of a market-based agricultural credit and input system; and (v) promotion of domestic processing of agricultural produce to increase opportunities for value-adding, employment creation and foreign exchange earnings. With regard to livestock, the SRA promotes integrated livestock and crop production, improved range land management, enforcing livestock movement and animal health regulations, diversification on the Arid and Semi Arid Lands (ASALs[22]), etc. The government therefore takes seriously efforts aimed at revitalising the sector as outlined in the Strategy paper.

- **National Livestock Policy**, **2006**

  The first ever draft national policy on livestock was produced in February 2006 with the overall objective of contributing to the MDG-1 and aims at addressing the critical challenges in the livestock sub-sector including sustainable management, effective conservation of animal genetic resources, management of animal diseases and pests, research, marketing, quality standards and cross cutting issues like land, water, environment, HIV/AIDS, wildlife and security among others.

  This policy largely addresses livestock production in the higher potential areas; little mention is made of extensive livestock production. Moreover, the policy is largely silent on other livestock types apart from cattle. Environmental concerns are made in passing – no concrete measures are proposed to ensure sustainable environmental health despite the livestock industry being a major user of the environment.

  A dairy sub-sector draft dairy policy (March 2006) has also been developed to replace the one of 1993; this draft policy addresses the emerging macroeconomic and global dynamics and challenges. For the first time, the policy encompasses developments in the ASAL areas and other dairy livestock other than cattle. Key ingredients of the policy are: (i) increased production and consumption of dairy products, (ii) enhanced livelihoods of dairy producers, (iii) quality & trade and (iv) environment.

- **Fisheries Policy, 2005.**

  The first draft policy paper on fisheries was released in November 2005. The policy is firmly anchored on the MDGs, the SRA and the ERS. It aims to create an enabling environment for a vibrant fishing industry providing optimal and sustainable benefits, alleviating poverty and creating wealth. Key elements of this strategy include (i) responsible and sustainable utilisation of fishery resources with special consideration of he environment, (ii) acceptable fish handling and preservation measures and technologies, (iii) encouraging value addition, marketing and fair trade in the country's fisheries products globally, (iv) promoting efficient and sustainable investment in the sector and, (v) promoting active involvement of the fishery communities in the management of the sector. The policy proposes to strengthen the institutional framework wit a proposed Fisheries Development Authority. Clear proposals on promoting integrated environmental management, biodiversity conservation and protection of fragile ecosystems of the sector have been elaborated. Cross cutting issues in the sector have been enumerated in sufficient detail.

[22] Diversification from livestock into: tree crop production (pecans, dates, medicinal plants and forages), game ranching, beekeeping, etc.

- **Kenya Rural Development Strategy (KRDS) 2002 – 2017.**

  KRDS was developed in 2002 for a 15 year period and guided by the short-term planning and implementation documents including the PRSP and the National Development Plans. However, this strategy was not accepted and many issues have been dealt with under the ERS. The strategy identified agriculture as the key sector for growth and development in the rural areas. Significant in the strategy was the proposal to establish the Kenya Rural Development Strategy Trust Fund (KRDSTF) to be designed along the lines of the successful EU funded Community Development Trust Fund (CDTF).

- **Food and Nutrition Policy**

  Kenya first developed a food policy in 1981 through session paper No. 4 of 1981 whose major objective was to maintain a position of broad self-sufficiency in major foodstuffs and ensure equitable distribution of food of nutritional value to all citizens. This policy was revised in 1994 and the revised draft of July 2005 aims at updating and integrating the dynamics in the macro-economic landscape and global economy, especially taking cognizance of the emerging constellation of economic and political blocks. The overall objective of this policy is to ensure availability of food in quantities and quality sufficient to satisfy the dietary needs of individual, free from adverse substances, and acceptable within a given culture, and accessible in ways that are sustainable and do not interfere with the enjoyment of other human rights.[23]

  Underpinning in the policy is the 'wise use' of land based natural resources with a clear proposal to accelerate land adjudication, adoption of appropriate land lease and tenure systems, sustainable land management and environmental utilisation. It also proposes the strengthening of safety nets for the vulnerable in times of emergencies. Attention is focused on smallholder production with proposals to improve the trade environment, marketing and distribution, curtailing unfair trade practices and facilitating adoption of established standards.

  The July 2005 policy received widely criticism: the policy is too much focused on the production side of food security and insufficiently on the access to food, marketing aspects, price policies, etc. . Production in the high potential areas receives more attention than the more vulnurable ASALs.

- **ASALs Policy, 2004**

  A draft National Policy for the Sustainable Development of Arid and Semi Arid Lands was produced in December 2004, which was followed by the National Vision and Strategy on Natural Resource Management (2005 – 2015) in July 2005. The ASAL Policy Document gives highest investment priorities in (i) Roads & Telecommunication (ii) Livestock & Agriculture, (iii) Water, (iv) Environment.

  The Strategy Paper elaborates an investment of KSHS 65 billion over the 10 year period. It has used a bottom's up approach to amalgamate the scattered policies that address sectoral issues into one coherent policy with the aim of easing the burgeoning poverty in these areas. The strategy envisages enhanced collaboration and partnerships between the government and stakeholders including development partners, civil society and the private sector.

B. Other Sectoral Policies & Strategies

- **Energy Policy – Sessional Paper No 4 of 2004**

The broad objective of the current energy policy is to 'ensure adequate, quality, cost effective and affordable supply of energy to meet development needs, while protecting and conserving the environment'. This emphasises the need for integrated energy planning to ensure that all significant sectoral concerns are addressed, including protecting and conserving the environment. Environmental issues are integrated into the Energy Policy and this sector appears to be progressive. However, the cross-cutting issue of energy from biomass (fuel-wood and charcoal) appears to be insufficiently prioritised and supported.

[23] Draft Food and Nutritional Policy July 2005.

The renewable energy sub-sector, including such energy resources, such as solar and wind, among others has remained largely under-exploited. However, there is growing national interest to set up efforts to mainstream the development of these sources into national energy development programmes. For example, the Ministry of Energy recently completed a National Wind Resource Atlas and Kenya is second to New Zealand in development of geothermal resources.

- **Forest Policy, 2004 and Forest Act, 2005**

The Forestry Policy of 2004 and Forest Act of 2005 are new pieces of sensitive legislation.

Unlike in the past where the Government was directly responsible for management of the state forests, the new Act establishes the Kenya Forest Service (KFS). This is a semi-autonomous authority with the responsibility to formulate policies and guidelines regarding the management and utilisation of all types of forests in Kenya.

The new Act provides various incentives for the establishment of private forests including recreational parks, arboreta and a botanical garden of trees. The new Act also provides several avenues through which communities around forests can participate in their management and ways in which they can negotiate for rights and privileges including the *shamba system* or as it is referred to in the Act, non-resident cultivation. Under this system, people have been allowed to grow crops while assisting to establish and maintain plantation forests. The country has been sub-divided into 8 forest conservancies in the country.

- **Water Act, 2002 and associated Policies**

Kenya has recently embarked on radical water sector reforms. The reforms are largely built on separation of water services and water resource management with clearer identification of roles and responsibilities. Kenya adopted a new Water Act in 2002 which was largely driven by Sessional Paper No 1 of 1999 on water issues. The country has now been sub-divided into 6 major catchments/basins. The formation of Water Service Regulatory Boards is currently underway as is the formation of Water Resource Management Authorities for each of these catchments/basins. At the municipality level water service providers are gradually becoming registered and water user associations are beginning to organise themselves at the grass roots / community level. Nanyuki already has an active water users association and Naivasha is likely to follow. Proposed charges are in the process of being put forward particularly for commercial users of water for more that $100m^3$/day.

In addition, Kenya has a Draft Sessional Paper on National Wetlands Conservation and Management, 2002. Wetlands in Kenya are approximated to be 1400 km^2 and between 3 – 6% of the Country's land surface. Interestingly, the Policy states "*Absence of a national integrated resource management policy has also resulted in the intervention failure, in the form of inter-sectoral policy inconsistencies leading to wetland destruction or degradation. The interface between agricultural conversion and intensification of food production policy in wetlands is an obvious example of an intervention failure."* Furthermore, it states "*Given the past and the on-going rate of wetland losses in Kenya, a national framework for wise use of wetlands is a priority requirement and thus the need for this National Wetlands Conservation and Management Policy".* Environment is clearly an integral part of this Policy. However, it remains in draft form apparently due to institutional rivalry.

- **Wildlife Conservation and Management (Amendment) Act, 1989**

This Act (the original version of 1979) called for establishment of the Kenya Wildlife Service (KWS) in the 1980s. There is a need to update this Act and associated policies and integrate environment. A policy process was underway in 2005 through USAID, but has been temporarily put in abeyance following de-gazettment of Amboseli National Park.

Consumptive uses (culling, hunting etc) of wildlife and the role of communities in wildlife dispersal require debate at the national level.

- **Mining Act and Policies**

The Mining Act, 1940 (Chapter 306) is under legislative review. This 65 year old Act requires updating and amending in many aspects, but in particular to integrate environment. CIDA funded a

revision of the Mining Act into a new Mining and Minerals Bill which is to be reviewed by Parliament. The new Bill sets out procedures for exploration licenses, prospecting licenses, mining licenses, and royalties, in addition to licenses for transporting and dealing in controlled minerals, which include gemstones. The proposed Mining and Minerals Act includes employee health and safety regulations and environmental protection and reclamation guidelines and includes provisions for regular inspections to enforce. It is understood that this review by Parliament has been pending for a number of years now (possibly more than 5). No known policies have been drafted on Mining in Kenya since the old Act of 1940.

C. National Plans and Policies

- **National Development Plans**

Kenya has routinely produced national development plans. The 1974-1978 National Development Plan for the first time had an explicit section on the environment and its conservation. This progressed to a section entitled *Environment Management Policy* in the 1979-1983 NDP. It essence it stated that the prevention of harmful effects is less costly than subsequent correction. By 1982, NES had drafted a National Environmental Enhancement and Management Bill but it is reported that it never reached Parliament because it got stuck in the power play between various ministries who feared to loose too much. The 6th NDP (1989-1993) included an environmental component in various resource sectors. The 1994-1996 NDP confirmed the Government's commitment to integrate environmental considerations in development programmes and projects.

The 1997-2001 NDP stressed the importance of integrating environmental considerations with industrial development. Specific strategies to promote these considerations included coordination between the MENR, international agencies and other stakeholders. Similar policy objectives were published in Sessional Paper No 2 of the 1996 on Industrial Transformation to the year 2020.

The NDP 2002 – 2008 dedicates a whole chapter to environmental management. The chapter starts with "*Environmental and natural resource degradation constitute a major challenge in Kenya's development process. The degradation is mainly as a result of pollution, poor waste management, deforestation, water catchment destruction and desertification and poverty."* The Government makes extensive commitments in this chapter but with no target dates or prioritisation of the environmental issues.

- **Economic Recovery Strategy for Employment and Wealth Creation (2003-2007).**

The ERS is the Government's focal strategy. The Strategy has been developed under the new government; the NARC Election Manifest as well as the PRSP priorities formed the basic inputs for the ERS. The ERS addresses macro-economic and public investment reforms. Review of the ERS document reveals that equal importance is given to the productive (agriculture & roads) and the social sectors (education, health), while agriculture is viewed from an economic growth perspective rather than from the environmental point of view.

However, the ERS does partially address environmental issues through discussion of water resources management, EIA and forestry. The ERS is due to be revised in 2006/7 and therefore this represents a distinct opportunity to integrate environmental issues more fully into such a key national policy.

3. Environmental legislation

3.1 Existing environmental legislation

Kenya currently has a sound environmental legislative framework in place which is being built upon. Major existing regulations include:

- The Environmental Management and Coordination Act, 1999. The main function of the EMCA is to provide for the establishment of an appropriate legal and institutional framework for the management of the environment. The Act is administered by the National Environmental Council and implemented by the National Environmental Management Authority (NEMA)

- The Environmental Impact Assessment and Audit Regulations, 2003. The Environmental (Impact Assessment and Audit) Regulations of 2003, contained in Kenya Gazette Supplement No. 56, Legal Notice 101, have been legislated
- The Environment Management (Lake Naivasha Plan), Order, 2004 and the Environmental Committee for the Implementation of EMPN, 200X).
- The Forest Act, 2005
- The Water Act, 2002
- Approximately 77 sectoral and other laws (e.g. Agriculture, Mining, Factory Acts etc.)

Regulations in draft form include:

- The Environmental Impact Assessment Guidelines, 2004
- Environmental Quality Standards, 2004 (for Land degradation, water quality, waste quality, chemicals, biodiversity, economic instruments and air emissions)
- Sector Guidelines for EIA, 1997

3.2 Environmental Management and Coordination Act, 1999

Kenya passed the Environmental Management and Co-ordination Act (the Act) in 1999. The main function of the EMCA is to provide for the establishment of an appropriate legal and institutional framework for the management of the environment. The Act is administered by the National Environmental Council and implemented by the National Environmental Management Authority (NEMA). The Act has the following contents:

Part I	Preliminary.
Part II	General Principles.
Part III	Administration.
Part IV	Environmental Planning.
Part V	Protection and Conservation of the Environment.
Part VI	Environmental Impact Assessment.
Part VII	Environmental Audit and Monitoring.
Part VIII	Environmental Quality Standards.
Part IX	Environmental Restoration Orders, Environmental Conservation Orders & Environmental Easements.
Part X	Inspection, Analysis and Records.
Part XI	International Treaties, Conventions and Agreements.
Part XII	National Environmental Tribunal.
Part XIII	Environmental Offences.

First Schedule
Schedule I lists the ministries that should participate in the National Environmental Council, Provincial Environmental Committees and other aspects of the Act.

Second Schedule
Schedule II lists the types of projects that are required to have an environmental impact assessment undertaken.

Third Schedule
The third and final schedule of the Act lists the institutions in the country that are represented in the National Environment Action Plan Committee and the Standards and Enforcement Review Committee.

Generally it is agreed that the Act is well formulated and drafted. It is modelled on the World Bank framework environmental law that has been applied in many less developed countries. For example, similarities can be drawn between the Ugandan and Kenyan environmental Acts. This also appears to be backed up by a general lack of criticism of the Act, with the exception of a number of lead agencies where the criticism appears to be more related to changes in responsibilities and structures, rather than the formulation of a poor or inadequate law.

3.3 EIA & Audit Regulations, 2003, Draft General and Sector Guidelines

a. EIA & Audit Regulations, 2003

The Environmental (Impact Assessment and Audit) Regulations of 2003, contained in Kenya Gazette Supplement No. 56, Legal Notice 101, have been legislated. For example, part IV, p247 lists the contents of an EIA final report as follows:

- Project location.
- National Environment & Legislative Framework.
- Project objectives.
- Project technology, procedures and processes.
- Materials to be used.
- Products, by-products and waste.
- Potentially affected environment.
- Environmental effects / impacts of the project.
- Alternative technologies and processes.
- Analysis of alternatives.
- Environmental management plan (EMP) / Action plan.
- Occupational health.
- Knowledge gaps.
- Economic and social analysis of the project.
- Any other matters as the Authority (NEMA) may require.

Schedule I lists forms I – 16 on various aspects of the regulations.

Schedule II outlines issues to be considered in an EIA.

Schedule III outlines general guidelines for carrying out an EIA.

Schedule IV outlines criteria for environmental impact assessment experts.

Schedule V outlines fees for environmental experts, examining the register, EIA licence fees (0.1 % of the total cost of the project) and surrender or transfer of environmental impact assessment license.

These regulations are perceived as being as well written and are clear on responsibilities and corresponding time-frames. Nevertheless, some of the time-frames appear to be unreasonably long, particularly for fast track projects. For example, it is stated clearly that NEMA has *a full 3 months* from receipt of an EIA before being obligated to give the go-ahead or require further studies to be conducted, or in exceptional circumstances to decline the project.

Furthermore, while it is clear that *lead agencies have 21 days* within which to respond on any EIA, apparently few lead agencies actually responded particularly in the beginning of this process but gradually they are being brought on board. Notable exceptions occur where the individuals responsible for receiving project reports have had environmental training, such as in the Ministry of Agriculture and Energy. A number of interested parties have suggested that these Regulations should be reviewed in the future, for example, in July 2006 and thereafter intermittently, as required.

b. Draft General EIA Guidelines, 2004 and Sector Guidelines, 1997

General EIA Guidelines and Administrative Procedures, 2004 have been developed, but are not yet available to the public as they are being edited.

In 1997, sector guidelines were *drafted* for projects in Kenya, but were never legislated. These are in the process of being updated by NEMA. The 1997 sector guidelines, produced checklists for the following types of projects:

1. Agriculture;
2. Industry;
3. Transportation;
4. Human settlement and infrastructure;
5. Water resources;

6. Mining;
7. Forestry;
8. Energy;
9. Wildlife management and tourism; and
10. Fisheries, mariculture and aquaculture.

It is likely that these guidelines, if updated, will be adequate and useful in terms of guiding projects within the various sectors on how to approach EIA. Over the last decade many countries and their ministries, agencies and departments have developed sector specific guidelines. Thus, the legislating of the Kenyan sector guidelines, assuming they are legislated in 2006 is likely to be perceived as an additional and useful tool to an array of existing guidelines. Nevertheless, legislation needs to be accompanied by training for the line Ministries. It will not be sufficient to merely train two or more individuals in the line Ministries without providing additional training to senior staff who are in position to buy into the process and allocate the necessary resources.

3.4 The Environmental Management (Lake Naivasha Management Plan), Order, 2004

Legal notice 108 on the Environmental Management (Lake Naivasha Management Plan) Order, 2004 is the first piece of environmental legislation that has been passed through EMCA, 1999. Unfortunately, it had been taken to Court by approximately three parties which apparently contested that there was insufficient stakeholder involvement. However, in some Kenyan circles and some regional and international fora it has been cited as an excellent example of community inclusive and led legislation. It is understood that both the Minister for the Environment and Director General of NEMA were to be taken to Court but the most recent information suggests that this case has been dismissed.

In addition the Chairman and the Secretary of the gazetted Committee were also taken to court, however, it is also understood that this specific case has now been dismissed from court. The Committee was gazetted on 1st October 2004 and provides for representation from 15 major organisations working in the catchment ranging from the Water Ministry to the Lake Naivasha Fisherman's Cooperative Society. Terms of reference are indicated as are rules and regulations including the review of the Plan at least once every 5 years.

It has been suggested that this indicates that the judiciary are insufficiently trained on environmental issues; otherwise the case would have been immediately dismissed. This is particularly worrying given the fact that this is the first piece of legislation emanating from EMCA, 1999 and a precedent may be set that laws once gazetted can be readily contested and therefore their implementation halted indefinitely by citizens. Furthermore, the costs associated with going to Court are a serious drain on NEMA's constrained resources.

3.5 Task forces on Draft Environmental Quality Standards, 2006

Part VIII of the EMCA, 1999 deals with environmental quality standards. It establishes a Standards and Enforcement Review Committee whose functions include the formation and legislation of standards for all environmental media.

Discussions with NEMA in March 06 revealed that there are *six task forces* for the following environmental subject areas:

1. Land degradation
2. Water quality
3. Waste quality
4. Chemicals
5. Biodiversity; and
6. Economic Instruments.

Out of the six task groups, the first five have achieved a draft standard which is currently awaiting Permanent Secretary signature and subsequent gazettment (March 2006).

Unfortunately the economic instruments task force has not been able to complete the drafting of a standard. This in fact may be totally understandable as is involves fiscal incentives etc which, if not

carefully designed (and even if carefully designed, but insufficiently monitored) can be open to manipulation.

Furthermore, NEMA has established a task force that is dealing with the draft standard for air and noise pollution. Unlike, economic incentives, numerous examples exist for air and noise pollutions guidelines and standards that can be adopted by Kenya. Thus, it is likely that the task force will achieve their intended objective, in a relatively short time-frame.

4. NEMA Strategic Plan 2005 – 2010 - Directives and Level of Implementation

Strategy directive (2005-2010)	**Assessment of Level of Implementation**
Demonstrated enforcement of the Environmental Management and Coordination Act (1999).	Implementation is ongoing since 2003, but actual enforcement of EMCA, 1999 is not yet widespread or systematic.
Produced an annual State of the Environment Report.	Two annual SoEs have been produced for 2003 and 2004 and launched. These are sound documents with useful data. The one for 2005 is currently underway. However, these documents have not formerly been presented to Parliament by the Minister of Environment for discussion. It has been reported that this is a major setback or omission that requires resolution in order for NEMA to continue to be eligible to receive funding for such useful documents.
Completed a nation-wide public awareness programme on EMCA, 1999 by December 2005.	NEMA reports that progress is on-going but this is not in any performance contract. Thus, it unclear exactly how this has been structured and is being conducted. Evidence can be found in the print media on various NEMA issues but no radio or TV media have been used, to date. Regular opinion pieces by senior NEMA or MENR staff should be considered to increase the profile of critical environmental issues in Kenya even if this is not a priority for 2006.
Established effective financial management systems by December 2005.	This has been completed according to schedule and is currently being monitored.
Established effective institutional, legal and other collaborative mechanisms with Lead Agencies and other stakeholders by December 2005.	On-going. There is collaboration with all line Ministries on EIAs
Finalised and gazetted environmental standards, regulations and guidelines by December 2005.	This critical process was stalled for over one year, apparently because the Kenya Bureau of Standards, the organisation that is mandated with producing standards for Kenya was insufficiently involved in the consultative process. The most recent information is that all 5 standards have been agreed upon and are awaiting signature and gazettment. This is one of the most important tools that will provide NEMA with the necessary teeth to enforce EMCA, 1999 and implement its function of a regulator.
Reviewed and submitted for gazettement a wetlands policy by December 2005.	Unfortunately, the Wetlands Policy has not yet been gazetted according to schedule. It appears that this is due to institutional rivalry between Kenya Wildlife Service, NEMA and other key parties.
Established fully functioning District and Provincial Environment Committees by December 2005.	Provincial, district and in the case of Nairobi divisional environmental committees have been gazetted. However, they clearly lack resources which means that they are dependent on either the Provincial or District Office good will and or public goodwill in order to function.

Strategy directive (2005-2010)	Assessment of Level of Implementation
Produced NEAPs, PEAPs and DEAPs by December 2005.	This is expected to be done in 2006 starting at the district level and then feeding all district EAPs into the province level, culminating in the 1st NEAP since 1994.
Provided inputs into Disaster Management policies, programmes and projects by September 2005.	On-going. Working in collaboration with DfID on a Policy.
Established a major environmental awards process with prizes and profile by June 2005;	This has been delayed by approximately one year.
Developed an effective strategy to minimise plastic bags production and use by December 2005	A number of workshops and consultations have been held and KAM is an active partner. Progress as of Feb 2006 is that plastic manufacturers have been given a 3 year time period (which started in 2005) to sell or dispose of all old stocks.
Developed an environmental education strategy for sustainable development by December 2005	The Acting Director General is yet to nominate the head of this department.
Developed a national network of environmental research institutions and individuals by June 2006.	Plans are underway according to NEMA and on target for end 2006.
Enforced sectoral water quality regulations, guidelines and standards to ensure clean water for by December 2006.	On-going
Documented a national register of MEAs and other relevant agreements by December 2006.	Office for POPs has been wound up but work on climate change, ozone and indigenous vegetation is on-going.
Produced guidelines on safe use of chemicals to ensure protection of human health and the environment; and environmentally sound disposal of hazardous wastes and chemicals by December 2006.	Not yet
Developed and published an integrated coastal zone management plan by December 2006.	On-going
Enforced sectoral waste management regulations, guidelines and standards to ensure clean and health environment for all by 2006.	On-going
• Promoted and enforced use of EIA in all projects as per the schedule in the EMCA by December 2007. • Developed a policy for mainstreaming indigenous knowledge and practices by 2007 • Promoted and enforced use of annual EAs for all required organisations by December 2007. • Built a head office for NEMA, exhibiting environmentally sound principles and in an accessible location by December 2007 • Developed benchmarks of performance for local authorities and published a ranking evaluation of local authority performance by end of 2007; • Developed economic instruments by 2007	Some progress has already been put in place towards achieving these specific objectives by 2007. For example, EIA is now widely used, there are a number of Policies on IK and annual EAs are also widely used. NEMA has plans to relocate next door to the former NOC offices by April / May 2006. NEMA has approached the donor community to assist with the drafting of a Standard or Guideline for Economic Instruments.
• Influenced 60% of Kenyans to adopt a positive attitude towards sustainable environmental management by 2008 • Ensured environmental sustainability is in line with MDGs targets for 2015 by 2010.	On-going

Strategy directive (2005-2010)	Assessment of Level of Implementation
• Enforced sectoral chemical waste regulations, guidelines and standards to ensure clean and healthy environment by 2010. • Enforced sectoral air and noise regulations, guidelines and standards to ensure clean and health environment for all by 2010. • Developed sustainable development indicators by 2010 • Developed guidelines for natural resource valuation and incorporation into national accounts by 2010	

5. Recommendations for Environmental Policy Formulation and Institutional Strengthening.

A. Strengthening Policy Formulation

Strengthening Kenyan mechanisms

The existence of the Parliamentary Select Committee on Environment in Kenya has been mentioned in previous chapters. One activity that the EC could consider sponsoring is a meeting between Environmental Parliamentarians working with the EU and the team in Kenya. This could be tied to elevating the priority of environmental issues in Kenya to a much higher and active level. It could further be tied into promoting the idea of UNEO and a number of strategic issues, that should be debated and selected. Discussion by Kenyan Parliamentarians of the latest SoE, 2003 and 2004 is a much needed exercise. This should also be accompanied by excellent media coverage and again the EC could support such an initiative by putting Kenyan and African environmental issues on the world centre stage through EU media houses.

At the next level there is a need to support the MENR and NEMA in a balanced and strategic way. Neither organisation can operate effectively without the other. Previous chapters have indicated that a number of donors are currently interested in supporting MENR and detailed plans of how to operationalise this are currently being unrolled with MENR's Strategic Plan to be issued by the end of March 06. The EC could consider supporting the revival, revision and formalisation of Sessional Paper Number 6 on Environment and Development. It could encourage the MENR to draft a strategy for review by the National Assembly within a given time-frame followed by a number of senior level opinion pieces in popular print and other media.

In addition, a balance should be struck between supporting the different departments that exist within MENR[24]. This is important to keep the reforms on track equally, for example for both the forestry and mining sector. With the former, immense progress has been made within the last few years, while the latter requires renewed attention. The EC has indicated support to NEMA to implement their Strategic Plan for 2005-10. At the same time the other organisations linked to NEMA, such as the PPC, the NET and the NCC require encouragement and/or support to fulfil their roles and functions adequately.

EMCA, 1999 is considered to be an excellent framework law but the rate of enforcement of this Act has been slow. In part, this is due to a lack of gazetted standards but in part this is also due to a low desire to enforce because enforcement does not have to be based on standards, it can be based on Presidential *decree*, orders from Ministers etc. Thus encouragement of NEMA's regulatory function must be supported at all levels.

Strengthening donor mechanisms

A more systematic approach or rationale should be considered by the donors for coordination in Kenya. This will avoid any perceptions that some districts and ethnic groups or particular types of

[24] MENR – comprises Forestry Department, KEFRI, DRSRS, NEMA and institutions (NEC, PCC & NET) and Mines & Geology

projects are more favoured by donors than others. Ideas for initiating a more systematic approach could include a matrix which places issues on a hierarchical scale versus interventions in the 8 provinces. This should be examined and evaluated by the MENR and formal comments requested. In addition, it should be shared with other Ministries and Local Authorities to increase exposure to both MENR's and Nema's major roles as a coordination body. Brief guidelines could be developed on the basis of increasing financial assistance that correspond to increasing district and division coverage cross referenced with prioritised issues. From, the discussions it appears that the current emphasis is on Nairobi and Western Province. This maybe a true reflection of priority needs in early 2006, but after the current drought reassessment of activities in the ASAL areas is likely to be required.

The donor coordination meetings on environment have been taking place for at least three to four years on an approximate quarterly basis. Consideration should be given to a more formal coordination and tracking system in Kenya. This is particularly necessary at this juncture given the change in level of donor aid that is either entering or about to enter Kenya for environmental programmes.

In a number of documents[25] reference has been to the donors developing a Joint Assistance Strategy during 2006. This should be undertaken and every effort should be made to include potential donors that do not normally join the donor coordination meetings. This is suggested because overlap of projects or programmes is most likely to emanate from donors or their organisations (MS, SNV, MSF, Oxfam, and Care) outside the normal donor meetings. This can be done once every quarter by email with the priority focussing on the EC and each and every member first, followed by other donors. For example, Irish Aid while not currently active in Kenya may become active in the future and thus information should be provided before scoping missions are undertaken etc. In addition, existing donors attending the donor coordination meetings can take on the responsibility of keeping informed one or two other donors who are not represented in Kenya and yet work in Kenya or who work through banks or CBO, CSOs and NGOs. Examples could be for the World Bank to liaise directly with the AfDB and report on their activities on behalf of AfDB to the donor meetings and for one UN organisation, possibly UNICEF or UNEP to report on all other UN organisations environmental work in Kenya. This JAS should evolve into mechanisms for pool or basket funding.

The EC used to have a senior representative based in UNEP and Habitat who would report on coordination of international and some regional environmental agreements to the EC. This position is no longer functioning and consideration should be given to revitalising it as one of the clear observations is confusion regarding UN activities.

B. Strengthening NEMA: the EIA and Audit Processes

Processing of EIA's and Audits

It is known that NEMA has received approximately 400 EIAs and 5,000 EAs to date. Some comment has been sent back to organisations by NEMA – typically requesting additional information or tests. In many instances the request for additional information has not been sufficiently focused and as such has eroded some of the goodwill of the many organisations in Kenya who submitted their EAs in good faith. For example, part of the request maybe an order for wastewater sampling while it is known that no Kenyan standards exists on wastewater and NEMA does not provide any direction or guidance on which alternative guidelines should be used in the absence of Kenyan standards.

Thus, the EC could provide support to the formation of an up-to-date NEMA database unit. Part of the task would be to ensure that each organisation that had responded to the EA directive receives a focused and specific response even if it is acknowledgement and merely to continue sending an update on their environmental management plan (EMP) on an annual basis. Part of the task would also be to cross-reference information from the Ministry of Trade and Industry against information from the Registrar of Companies with information collected from Provincial and District Environmental Offices. This should be then synthesised into an overall database and the relevant components of the database shared with PEOs and DEOs. This database would also provide the

[25] McCoubrey A, Environmental policy formulation , development and co-ordination in Kenya by Andrew McCoubrey, 2005

basis for identifying organisations that have not yet submitted their EA for follow up by trained NEMA Inspectors and Compliance Department staff.

In addition, the process of how to deal with violators should be documented and agreed upon by all Inspectors in advance. The approach of NEMA Inspectors is critical to the perception of NEMA by the Kenyan private sector and public. Thought should also be given to visiting known organisations that have innovative environmental practices taking place and congratulating them on these activities. Additionally, this provides balance for Inspectors who have a tendency in all countries to focus predominantly on violators.

At the same time, it would be useful to try to assess the top 5 performers in Kenya through their EA submissions and NEMA should consider awarding these top performers with a nominal prize to increase their exposure on environmental issues in Kenya and that their request for EAs was valued.

Regarding the EIA process an analysis and critique of submitted EIAs is required. Apparently only one EIA has been rejected out of the 400. And rumours currently exist in the private sector, particularly the tourism sector that the very tool that is supposed to protect conservation areas, such as the World famous Maasai Mara and Samburu are not being adequately implemented. That is to say that possibly too many EIA licenses have been given by NEMA for new developments in these highly fragile and potentially overcrowded ecosystems. One professional suggests that the Maasai Mara will collapse without adherence to a SEA in less than 10 years.

Specific assistance for NEMA: Economic Instruments Draft Standard

There is a distinct need for a Standard on Economic Instruments and NEMA has been clear that any assistance in this area would be extremely welcome as the task force working on this Draft Standard in 2003/4 stalled due to the difficulties involved in designing appropriate fiscal incentives etc. One approach could be to start initial discussions with the Treasury in order to determine their concerns, followed by the reestablishment of the task force on economic instruments with the assistance of a Consultant who is familiar with the drafting of such guidelines and standards.

The positive impact of developing and implementing the first Economic Instruments Standard in Africa cannot be over-emphasised. For example solar panels that are used to generate 'hot water' in Kenya are but one example of a technology that should be exempt from tax and there are numerous other examples. While the NEMA Strategic Plan discusses that this should be completed by 2007, it does not state when it should be started and in order to conclude such an instrument, an immediate start is required.

Support for Decentralisation and EIA/Audit Training of Council and Lead Agency Staff

It appears that there is a clear need to support technical and administrative capacity building in both the municipal councils and the lead agencies. The function of planning permission and environmental impact assessment could be expanded and rolled into one. In the lead agencies, individuals tasked with project responsibilities are likely to be the ideal candidates to broaden expertise to include EIA and audit review and assessment capability. Support for this type of decentralisation is likely to result in reduced costs for EIAs and Audits. For example, ideally a proponent in Nakuru will be able to get a new factory up and running through working with the municipal council in Nakuru. Any public meetings can be facilitated through the municipal council (as all necessary infrastructure already exists at each council) with backstopping performed through NEMA headquarters and by the district and provincial offices. Furthermore, this would enforce the primary role of all PEOs and DEOs which is one of coordination.

C. Strengthening of Environmental Communication and Information Systems

The environmental communication and information systems could be supported and strengthened. One obvious initial area is the NEMA website. This could be significantly enhanced with the addition of all NEMA regulations, such as EMCA, 1999, the EIA & Audit Regulations of 2003, all current and future planned policy directives, lists of projects that have had EIAs and environmental audits completed, lists of environmental experts, a list of key MEAs and in-country progress etc. As a general statement it appears that support to NEMA in order to increase its advisory role capacity, would enhance the Authority's effectiveness, however the primary role for NEMA must remain regulatory.

The EC could support the strengthening of a number of key partnerships (NEMA-KAM, NEMA-ESOK-KTB-KATO, NEMA-PIEA, NEMA-KFC-FPEAK-LNGG, NEMA-FKE NEMA-CSOs, NEMA-NGOs etc) on environmental policy, regulation development, communication to their members and on being able to critique EIAs, audits etc. It should always be remembered that NEMA's key function is as a regulatory body and if it pursues a strategy of regulation and negotiated compliance, it will succeed.

Medium to long term support to environmental communication and information systems could include support to the development of a national environmental information centre (as stated in the Strategy for 2005-2010) and support to the exchange of environmental information with neighbouring African countries, assuming that the website and other essential documents are already in place. NEMA could be encouraged to develop their environmental indicators. More detailed support could be for regular compilation and publication of the regional environmental information, SoE reports, new Standards etc. The number of protocols, conventions and agreements that Kenya has signed and ratified both in a regional and international context is considerable. Given constrained resources, a prioritisation of these agreements is urgently required over the next 5 years.

An assessment of the civic education process mentioned above should be undertaken at the end of a 5-year period

Support Awareness of Environmental Quality Standards, 2006(?)
There is clearly an opportunity and a need to support improved awareness of the five Environmental Quality Standards once they have been gazetted (*this is now imminent - personal communication, NEMA March 06*). Major private sector umbrella groups (so KAM, ESOK-KATO, PIEA, KFC-FPEAK-LNGG) should be approached in order to inform their members. Part of the awareness training should include '*documented ideas'* for solving any problems identified in the Standards.

This is likely to lead on to discussions on 'negotiated compliance' and result in significant improved awareness on environmental issues at various key levels in NEMA and among the private sector. This process need not take longer than two to three months. The outcome of this and subsequent consultation should indicate whether a lead time of one year prior to *enforcement* of the Standards is in fact a practical way forward.

Review of EIA & Audit Regulations, 2003
Interested parties, primarily environmental practitioners have suggested that the EIA & Audit regulations should be reviewed in for example, once in 2006 and thereafter intermittently. One format suggested is that a review is undertaken followed by a workshop encompassing EIA/Audit practitioners, industry associations (KAM, KNCPC, ESOK, KATO, PIEA etc), NEMA, local authorities, and lead agency environmental officers. The purpose would be to analyse the EIAs and environmental audits and if necessary, streamline and refine the 2003 regulations, particularly any bottlenecks. Thus this would build on the recommendation under (b) (ii).

NEMA-Partner Organisation Communication and Publications
Specifically NEMA partner organisations (KAM, ESOK-KATO, PIEA, KFC, FPEAK, FKE etc) could be supported in the design, drafting and publication (also web hosting) of prioritised environmental documents. Examples could include 'what is an audit, what is negotiated compliance, what are key areas of compliance for a given sector (so floriculture & horticulture, tourism facilities, petroleum facilities, industry, etc), Corporate Social Responsibility (CSR) etc.

Ultimately, these should all be developed with the idea of a paper-free office in mind. Thus, all documents should be available free from the web and at an increasing phased nominal cost when requested in hardcopy form, to encourage the paper-free office in Kenya which is still a relatively new and unusual concept.

Environment Sector 'Think Tank'
There appears to be a need for a environmental sector "think-tank" (unit) on environmental issues which would deal with the effectiveness of voluntary regulation versus mandatory requirements; policy & economic analyses of proposed environmental policies and regulations; streamlining environmental bureaucracy, BATNEEC etc. This could be hosted in MENR, NEMA or alternative

agencies, such as KIPPRA. It could include any number of key organisations from CBOs to CSOs to NGOs etc.

Civic education on environmental issues
There is an urgent need for Kenyans to simply understand their rights under EMCA, 1999. A broad and far-reaching civic education programme is required which the EC could support in any number of ways.

D. Institutional support for the environmental profession and training

Environmental Professional Association
While there is an opportunity for the EC to support the institutional start-up and establishment of an independent environmental professional association, it appears that the formation of an association may have a momentum of its own given time. What is recommended is that the formation of the independent association is followed with interest by the EC over the forthcoming months to assess where and when intervention may be appropriate. Indirectly, its formation could be encouraged through various fora by the EC.

Environmental Audit Training
It appears lead agency departments and municipal council planners should be the priority in addition to enhancing the existing capacity in NEMA at the Provincial and District levels. KNCPC and FKE seem well placed to undertake training for the private sector as do a number of international accreditation bodies, such as SGS, BvQi etc.

Training of Judges, Magistrates and NEMA Expert Witnesses in Environmental Law
PEAK's Output 3: Access to justice and citizens' awareness of environmental rights discusses raising the awareness of judges, magistrates and lawyers on the provisions of EMCA and the institutional framework. It is understood that a number judges and magistrates have undergone training as funded by DfID and UNEP. It is further understood that 20 Inspectors have received some training in NEMA. However, training of lawyers interested in environmental litigations is still required and it is likely that additional training is required for judges, magistrates and inspectors in NEMA.

Support for CBOs, CSOs & NGOs
Consideration could be given to requiring all EC NGOs currently operating in Kenya to actively and deliberately support one known Kenyan environmentally based NGOs, CBO or CSO. This would require an assessment of all known EC NGOs operating in Kenya followed by an assessment of all known Kenyan environmentally based NGOs and communication between the organisations to avoid overlap and duplication.

E. Strengthening the EIA and Audit Processes

Support to Sector Guidelines for EIAs and/or SEAs
As there are at least 10 separate sector guidelines for EIAs, it is likely that it will take time for the lead agencies to develop these in collaboration with NEMA and in an equally balanced and harmonious way between line ministries. EC could facilitate a review and workshop for all lead agencies and NEMA to compare and contrast the various sector guidelines and ensure Complimentarity with sector laws. Key areas to be addressed should include reported overlaps with the new Forestry and Water Acts (although it seems that both Acts have given the overriding regulatory mandate to EMCA, 1999) Factories Act, Directorate of Occupational Health and Safety mandate and municipal council by laws. This support could culminate in the production of a volume on sector guidelines in Kenya. This should also be closely linked with the use of SEAs for various sectors.

Support for Environmental Quality Testing
Support to laboratories that are/will be doing the environmental quality tests. Key support entails ensuring quality control within and between the different laboratories. This is potentially a large project, but a much needed service. It is difficult to define accurately, the exact type of intervention required without the testing beginning to be routinely done. However, a potential project could be collaboration and assistance with an EC laboratory that could quality control a certain number of samples for all the labs.

Technical Appendix III : DONOR COOPERATION ON ENVIRONMENT

A. Description of Donor Programmes

DfID

DfID has a screening process for all planned projects and programmes to try to ensure that environment is mainstreamed from the outset. The main objective is to highlight any future risks and if they are considered to be above a certain threshold, an EIA is required.

In Kenya, DfID has a major programme entitled Pathways to Environmental Action (PEAK) in Kenya where two full-time environmental advisors are employed but this is to be scaled back to one adviser as from April 2006. PEAK was designed and approved in early 2002 and was originally conceived to be a civil society challenge fund arrangement with a total budget of Pounds Stirling 2.2 million to be disbursed over 4 years (April 2003 – April 2007). The money was and is allocated towards activities that are implemented through large grants, consultancies and a seed fund.

There is a Guiding Strategy that was written in 2004 and although it maybe considered out of date, it provides the rationale of the time. This has been followed by a Progress Report completed in November 2005 and an Evaluation Mission Report, date unknown.

In essence PEAK aimed to improve environmental governance in Kenya through partnerships with Kenyan organisations. PEAK interpreted good environmental governance as decision making that is:

- guided by a correct interpretation of the policy and law, which is relevant to contemporary needs and interests,
- informed and evidence based,
- transparent, open to wider public input, scrutiny and to legal redress; and
- Able to deliver equitable and sustainable outcomes.

PEAK has strived to strengthen environmental governance through building accountability for environmental decisions. This entails working with government, civil society and the private sector. There are four distinct outputs of PEAK. Within the scope of each output, PEAK has funded or is currently funding specific activities (or projects) that will contribute to the successful delivery of each output. There are obviously some overlaps between the outputs, but they are listed as:

- Output 1 Government formulating and implementing environmental policy more effectively with closer links to economic and poverty reduction policy;
- Output 2 Civil society better able to hold government, politicians and other agencies to account on environmental matters;
- Output 3 Access to justice and citizens' awareness of environmental rights improved; and
- Output 4 Private sector investment in natural resources that is more socially and environmentally responsible and contributing to pro-poor growth.

In summary DfID has been active in the environmental field in Kenya since 2002/03 and will continue to be active until April 2007. Discussions with PEAK indicated that positive outputs to varying degrees have been realised for 2, 3 and 4 above and are beginning to emerge for Output 1.

The PEAK programme represents between 0.01 and 0.02% of DfID's overall development aid budget to Kenya.

DANIDA and SIDA

Both DANIDA and SIDA have procedures for integrating environment into all programmes and projects.

DANIDA as the lead and SIDA (60:40) are embarking on Environmental Sector Programme Support (ESPS 2006-2011) through the MENR and NEMA. The programme development objective is *Sustainable Environmental Management in Support of Rural Livelihoods in Kenya* and the programme will be implemented through three linked but separate components, namely:

- Environmental Policy Support (EPS)
- Strategic Environmental Management Support (SEMS); and
- Community Based Environmental Management Support (CBEMS).

The budget is approximately 112 million DKK and potentially 45 million SKR including two full-time technical advisers and a number of other specialists. GoK through NEMA and MENR will provide 12 million DKK (as operational funds and capital costs). Direct Danida-Sida support to district environmental management will start with 10 coastal districts.

JICA

All projects since 2004 undergo EIA and JICA works in three main areas: water, environment (in a broad sense) and forestry. Environment is mainstreamed into all development programmes but is still perceived to be an added phase in the project cycle and on occasion causes serious programme / project delays. JICA has been supporting four out of the six Water Service Boards: Tana River, Athi River, Lake Victoria North and Lake Victoria South Services Boards. In addition, JICA is working on the Nyando River: flood management and mitigation. JICA works on community based approaches to flood management that include strengthening the institutional capacity, capacity building and training and the carrying out of studies (to generate information) to test flood management plans.

JICA has also been working on water supply development: both for rural and urban areas e.g. Meru and Nakuru (sewerage and waste management), Kitui, Makueni, Machakos and Kibwezi (ground water development) and in Kapsabet (rehabilitation of water supply). Institutional support has been provided to the management of Lake Nakuru sewage works and surrounding area.

JICA has worked in the forestry sector in Kenya since the 80s with a particular focus on social forestry, training and institutional strengthening through human resource and technological developments.

JICA has undertaken wildlife conservation education for over 30 years and supported KWS in terms of equipment, infrastructure and human resource development.

Embassy of Finland

The Embassy of Finland has environmental screening procedures and guidelines for mainstreaming environment into all development programmes and projects. 2004 resulted in a review in Kenya and the Embassy of Finland agreed to support three sectors: good governance, energy and forestry.

In October 2005, there was a project preparation mission that identified three areas for intervention: institutional reform for the Forest Department into the Kenya Forest Service, forest information systems and a participatory forest management pilot project in the ASALs. The potential budget for forestry programme is Euro 13 million for 4 years but may increase. Agreement with GoK pending. The Embassy of Finland is also working on rural electrification in Kenya.

Embassy of France and Agence France Development Bank (AFD)

The Embassy of France has delegated all donor aid responsibility in Kenya to AFD with the exception of senior lobbying for the transformation of UNEP (United Nations Environment Programme) into an organisation: United Nations Environment Organisation. It is argued that while UNEP remains as a programme it has insufficient mandate and authority. It is further argued that there is an increasing need to rationalise and markedly strengthen *international environmental governance at all levels and in all countries*. It is proposed that UNEO could be financed through a combination of assessed contributions and voluntary ones, thus generating more stable and predictable resources.

It should be specifically noted that the European Union adopted a common stance at the European Council in Brussels on the 16th and 17th of June 2005. The idea of transformation of UNEP into a specialised agency of the UN, with an updated and stronger mandate, based on foreseeable financial contributions, on a par with other organisations of the UN system was tabled and supported.

Most AFD development aid is through the Ministry of Finance. However, there are three specific environmental programmes which are:

- Rehabilitation of Meru National Park – this project was started in 2003 and positive results are already emerging. One component involves translocation of wildlife from areas of conflict to the Park.
- Support to the Greenbelt Movement working in the Abedare Mountains. This programme involves working with community based groups on re-planting of trees in the Abedare Mountains. The project is due to start in June 2006 and is awaiting Government of Kenya approval.
- Plastic recycling in Mombasa and Nakuru. Funding mechanisms yet to be determined.

The Royal Netherlands Embassy

In 2005, the Royal Netherlands Embassy commissioned an identification mission for the return of Dutch aid to Kenya for the water and environment sectors. Overall both the water and agricultural line ministries are perceived to be the priority in Kenya. Two major polices were taken into consideration that are the internal Multi Strategic Plan (2005-2008) and the Cooperation Policy. During this identification mission a careful inventory of the donor collective was done and in broad terms it was perceived that most other donors were found to be struggling in the environmental sector and it has yet to grow and take shape. Thus co-financing possibilities were explored for:

- The PEI of UNDP form an environmental policy oriented perspective;
- The PEAK programme of DfID; and
- Joining the Danida-Sida initiative on a broader assistance programme to implement the NEMA Strategic Plan (2005-2010).
- Considering an extension to the KFWG project and also looking into the other pillars of the MENR, such as mining and the DRSRS.

It was further noted that the Standing Committee in Parliament on Environment in Kenya has yet to emerge clearly as a leader and inspiration on critical environmental and related social issues in the country. This will be extremely important for the future profile of the environmental sector in Kenya.

In the water sector, support is based on Integrated Water Resources Management (IWRM) and Integrated River Basin Management (IRBM). Given that Kenya has embarked on reforms in the water sector, support can be directly channelled. An appreciation of the division of roles and responsibilities between the new Water Service Boards (WSB) and the Water Resource Management Authorities (WRMA) exists and potential support is being considered for:

- Enhancing water service providers in the WRMAs;
- Developing the tendering and appraisal capacity in the WSBs; and
- Facilitating the WSTF.

The approaches that are being considered include:

- Support to the construction of drinking water reservoirs; and
- Investment in flood mitigation.

Two sub-basins have been selected for these approaches, which are:

- Gucha-Migori (both water supply and flood mitigation); and
- The 3 Lakes - Naivasha, Elementeita and Nakuru (focussing more on sound water management principles).

The investments will be spread over 3-5 years from 2006-2009 from € 1.5 million to 4.5 million per year. No other programmes are considered for development cooperation at this time and therefore the investment represents 100% of the total investment. However, there is some existing on-going support to GJLOS and support to a number of regional programmes such as the LVEMP and the NBI.

External to this and as a direct result of a Dutch Ministerial decree in September 2005, four East African countries have been selected to assist them to achieve MDG 7 which is doubling by 2015,

the number of people (to 50 million) that have access to clean drinking water. This assistance of $ 40 million is directly from The Hague and is channelled through UNICEF. In addition, the Ministries of Water and Education in Kenya will also contribute $ 9 million to this programme in tandem with a contribution from the EC which is $ 12 million. The EC is reportedly keen to ensure that the key reforms for the water sector are implemented and stabilised in Kenya. This support is due to start in 2006 and as a result, UNICEF is now invited to the donor platform. The areas identified for this Programme are 22 districts in the ASALs. On environmental mainstreaming each and every proposed water project will undergo an EIA.

UNDP

UNDP has a Country Programme Action Plan (2004-2008) for Kenya which has been signed by both the Resident Representative of UNDP for Kenya and the Ministry of Finance on behalf of the Kenyan Government. Thus, they are in mutual agreement on the contents and outlined responsibilities for the implementation of the country programme. The four strategic areas of cooperation are identified as:

- Promotion of good governance and the realisation of rights;
- Socio-economic impact of HIV/AIDS, malaria and tuberculosis;
- Strengthened national and local systems for emergency preparedness, prevention, response and mitigation; and
- Promotion of sustainable livelihoods through provision of energy services together with sustainable use and protection of the environment and natural resources.

A major environmental programme in UNDP (also funded by UNEP and DfID) is the Poverty Environment Initiative (PEI). The objective is the integration of environment into district, provincial and national planning processes. National plans have been reviewed and donor coordination improved.

UNEP

One of the main UNEP interventions in Kenya is through the Bali Strategy Plan (BSP). This plan looks at capacity building and technical support through Ministries. A consultant has been hired to assess the capacity in terms of personnel and the institutions of the different departments under MENR: DRSRS, Forestry Dep't, KEFRI and Mines and Geology and NEMA and EMCA institutions and the report should be available soon. The legislative instruments and policies in each of these departments will be assessed for gaps and weaknesses and subsequently programmes designed to address any weaknesses.

Another Project is the Nairobi River Basin Clean-Up. Phase II is underway. It incorporates environmental and urban planning and the relationships between the two.

At the regional level there is a Project on biodiversity. This examines the biodiversity and water catchment functions of the East African montane systems. WCMC Cambridge and WWF-Regional Office are involved.

A new project is under development between East and Southern Africa that will take about 1.5 years. The focus is on 'what is meant by protected areas' and the definition should incorporate forestry areas and lead to a review of all protected areas.

There are also a number of projects related to biodiversity in the W. Indian Ocean.

USAID

USAID has currently 5 programme areas in Kenya:

- Population/Health/HIV AIDS
- Education
- Economic Growth/Agriculture
- Environment
- Democracy and Governance

USAID involved in environment and natural resources management especially in wildlife management and conservation. Wildlife takes 60% of the programme budget. The rest goes to

Forestry 35% and Marine issues 5%. The NRM is an integrated programme that is incentive based. The programme creates incentives and supports communities to participate in conservation. Among the activities include:

- IGAs for communities
- Support to GoK systems
- Legal instruments e.g. through KWS
- Strengthening institutional capacity
- Problem animal control – translocation of elephants
- Strengthening the management of parks

Support to nature based enterprises e.g. cultural centres, Curios, and building management capacity of NGOs. CBOs are sensitised and given capacity to advocate and lobby for key issues affecting them. Example is the civil society input into the wildlife bill

Forestry sector: Also incentive based and a more diverse programme. Forests provide additional space for wildlife. The interventions target the biodiversity hot-spots. (Mt Kenya, Mukogodo forest and Arabuko Sokoke forest). In future it may expand to Mau forest.

The programme also helps to create capacity within the government to manage the sector better. Supported reform of the sector – especially the forestry sector (Forest bill) and putting in place basic infrastructure e.g. transport, ICT. Supporting the forestry secretariat especially issue of co-management of the forests (refer to forest bill)

World Bank

The World Bank is embarking on a new Country Environmental Assessment (CEA) that is to be completed by end 2006. A draft concept paper is available and research is on-going. In addition, an SEA of the Forestry Sector has just been commissioned.

Current/future projects in the environmental sector or cross cutting sectors include:

- LVEMP II – this is a follow on to LVEMP I which had a 5 year duration and LVEMP II is expected to have a 10-15 year duration. The funds to be allocated are currently unknown as the scoping mission is taking place.
- Integrated Ecosystem Management Project in Nyando Catchment (support to Nyando, Yala and Nzoia) of Western Kenya with $ 4.1 million.
- Kenya Agricultural Productivity Project (KAPP) - $ 40 million – blend of loans and grants. This is linked to the GEF Sustainable Lands Management Project of $ 10 million. The work sites include the Taita hills, Cherengani hills, Kinale forest, Baringo and Nandi Hills.
- Kenya Arid Lands Management Project – Phase II for 22 districts – approximately $ 60 million. The first Phase lasted 10 years (1992-2002).
- Western Kenya Community Driven & Flood Mitigation Project focussing on the whole of Western Province. For example, flooding in Budalangi. $ 90 – 120 million from WB, RNE & others and counter-part funding ($ 10 million).
- Kenya Natural Resource Management Project - $ 60 million including co-financing and counterpart funding (~$ 40 million from WB). This is earmarked to support the reform processes in the water and forestry sectors.
- Bio carbon Fund Project with Green Belt Movement in the Aberdare Mountains. Criteria include that the area must be un-forested as of 1989. Site selection on-going. Benefits to come on line by 2012. $ 1 million.

Other Donor Agencies

Where information is known to exist on donor aid programmes which are either pure environmental, or known to have a significant environmental component, a brief summary is provided. The objective is to trigger further communication and dialogue with the respective donor agency to counter check and elaborate on the information.

- ***AfDB:*** The AfDB has allocated $ 23 million (part loan and part grant) for working in the Rift Valley Water Catchment through the Water Services Board. It is further understood that the

AfDB maybe considering funding an irrigation project in Homa Bay, Nyanza and some interventions in Kisii. Furthermore, the AfDB is currently working in forestry – the Green Zones Development through the Nyayo Tea Zone in collaboration with the Forest Department. It is understood that the budget for this project is $ 25 million and is based on a concept of enrichment planting in forests.

- ***CIDA***: CIDA is considering pledging Canadian $ 30 million towards a Bioscience Facility for East and Central Africa (BECA) to be housed in ILRI (International Livestock Research Institute), Nairobi. The objective is to facilitate African scientists to do vaccine research for livestock and non-GMO/GMO research on plants. An EIA and SEA has been completed and is currently being reviewed by NEMA.
- **UNICEF**: As mentioned under consultation with the Royal Netherlands Embassy, through Dutch Ministerial decree, assistance in the order of $ 60 million will be channeled through UNICEF for achieving the MDGs in water and sanitation in four East African countries. Overlap with the LVWATSAN should be avoided.
- ***UNIDO***: During 2005, UNIDO in conjunction with the world tourism organisation lead a GEF PDF-B project development process for a regional project on the reduction of environmental impacts from coastal tourism. The project covers nine countries in east and West Africa, and key components include capacity development, information systems and GIS, ecotourism and environmental management systems. Kenya is one of the nine countries and is also likely to host the regional office of the project once it is in the implementation phase. Kenya also hosts NEPAD's coastal and marine secretariat (COMSAR), which is a key agency in the process along with other partners such as UNEP and SNV. Part of the project will look at how to integrate tourism destination planning into overall coastal zone management planning. The PDF-B proposal is due for submission to the GEF, with approval expected in September this year. The project will last for five years and will be implemented in Cameroon, Ghana, Nigeria, Senegal, The Gambia, Kenya, Mozambique, the Seychelles and Tanzania. The focal points in all these countries are the environment agencies (in Kenya's case, NEMA) although each country was also obliged to have a representative of the tourism ministry also participate in the project development.
- ***HABITAT***: In 2005 and 2006 Habitat has been working on the Lake Victoria Region Water and Sanitation (LVWATSAN) Initiative in 17 secondary towns in the Lake Victoria catchment to help achieve the MDGs related to water and sanitation and reduce the pollution load entering the Lake. The towns selected on the Kenyan side of the catchment for intervention are thought to include Homa Bay, Kisii, Migori, Siaya and Bondo. It is understood that this is either partially or fully through and EC grant.
- ***UNESCO***: It is understood that a concept paper has been submitted to UNESCO and GEF with a view to undertaking riparian and catchment rehabilitation in the Nakuru catchment.
- ***WWF*** has selected Karagita in Naivasha through the Water and Urban Sanitation Initiative (WSUP) to pilot improved water supply and sanitation to the people's settlement with an ultimate aim of progressing towards the water and sanitation MDGs. WSUP is a consortium of 7 participating organisations. Karagita has been selected in Africa while another settlement has been selected in India for Asia to pilot the feasibility study. It is thought that a settlement has also been selected in Latin America or will be in the near future. WWF is also considering undertaking afforestation in the Naivasha catchment.

B. Donor Support to Environmental Sector / MENR and NEMA (Incl. ICZM) / Based on Danida Working Paper, November 2005

DONOR PROGRAMME	AMOUNT	TIME FRAME	AREA FOCUS	INTERVENTIONS	IMPLEMENTATION STATUS
DFID (i) **PEAK** **Programme** (Pathways to Environmental Action in Kenya)	2.2 mill £	Apr 2003 – Apr 2007	Nationwide (MENR (through PEI) NGOs and NEMA)	Four Main Outputs: 1. Strengthening government capacity (NEMA) (250.000 $) 2. Interest groups monitoring and advocacy. 550.000 £ 3. Citizens access to justice 300.000 £ 4. Incentives to encourage a responsible private sector 308.000 £	• Channeled through PEI (see below) • Ongoing support to 2 forest NGOs • Ongoing support to legal advocacy through ILEG • Ongoing training for magistrates and judges • Ongoing support to Compliance and enforcement dept. NEMA • TA in NEMA (2 years, started Sept 2006) Review ongoing Nov 2005
UNDP **PEI 1st phase** (Kenya Poverty Environment Initiative) Co-funding UNEP. UNDP, DFID,	US$ 720.500	Aug 2005- Jul 2006	National (MPND MENR NEMA) (Three districts Bondo, Meru south and Muran'ga (NEMA)	Integration of environment into National and District Planning processes Review of national plans Improved donor coordination	• Cross-sectoral Steering Comm. (chaired by MPND) • Initial support to Environmental policy process (workshop etc.) Inter-ministerial committee • 4 studies to be available Jun 2006 (on existing PEI activities on community level, on macro-economic aspects of NRM and on PRSP and environment • Implementation through Capacity 21 Office • TA in MPND • Planning of new phase to be initiated beginning of 2006

DONOR PROGRAMME	AMOUNT	TIME FRAME	AREA FOCUS	INTERVENTIONS	IMPLEMENTATION STATUS
USAID	US$ 1 million	2003-2007	NEMA 3 Districts	Initial support to NEMA incl. finance management and operational support Capacity building for 3 DECs in 3 Districts	• Finance management training carried out • vehicles and computers purchased • 5 commissioned studies to be finalised early 2006 (on EIA, DEC capacity and economic instruments Project review planned for Feb. 2006. USAID support to NEMA expected to be phased out
EU (Community Development and Environmental Management Programme (CDEMP))	13 million EURO	2005-09	National NEMA (focus on 8 districts) Local communities	New project to follow up on BCP. Two components: 1. Capacity building in NEMA (4 mill EURO) 2. Support to Community Environmental Projects through grant facility (CEF) as part of CDTF (8 mill EURO)	• ToR for TA to NEMA developed. • CEF criteria under development • Expected 1st advertising for community project under CEF Jan 2006
DANIDA **(**ESPS Programme)	100 mill DKK -indicative	2006-2011	National, MENR NEMA Local communities	Tentative plan : Programme with two components: 1.Strategic environmental management and policy dev. (MENR and NEMA headquarter and decentralised – including support to ICZM framework) 2. Decentralised and community based environmental management (support to community groups, public – private partnerships and NGO advocacy	Programme document under finalisation. Expected desk appraisal Jan 2006. Expected start July. 2006 Two full-time TA's expected. One in MENR and one in NEMA

DONOR PROGRAMME	AMOUNT	TIME FRAME	AREA FOCUS	INTERVENTIONS	IMPLEMENTATION STATUS
SIDA	45 mill SKR -indicative	3 years Probably start 2006	?	?	Sida currently considering cooperation with Danida programme
RNE **Support for water sector reforms around Lakes Naivasha, Nakuru & Elementeita** **Support for flood mitigation – Gucha- Migori**	1.5 – 4.5 million EURO	3-5 years 2006 - 2009	Long term intervention likely focus on Lakes Nakuru, Naivasha & Elementeita – IWRM Also focus on Gucha-Migori – flood mitigation	Principle of Integrated Water Resource Management (IWRM) – progressive water sector reforms. -Enhancing water service providers in the WRMAs; -Developing the tendering and appraisal capacity in the WSBs; and -Facilitating the WSTF. The approaches that are being considered include: -Support to the construction of drinking water reservoirs; and -Investment in flood mitigation.	At formulation stage
WB	• LVEMP II – this is a follow on to LVEMP I which had a 5 year duration and LVEMP II is expected to have a 10-15 year duration. The funds to be allocated are currently unknown as the scoping mission is taking place. • Integrated Ecosystem Management Project in Nyando Catchment (support to Nyando, Yala and Nzoia) of Western Kenya with $ 4.1 million. • Kenya Agricultural Productivity Project (KAPP) - $ 40 million – blend of loans and grants. This is linked to the GEF Sustainable Lands Management Project of $ 10 million. The work sites include the Taita hills, Cherengani hills, Kinate forest, Baringo and Nandi Hills. • Kenya Arid Lands Management Project – Phase II for 22 districts – approximately $ 60 million. The first Phase lasted 10 years (1992-2002). Phase II will including community planning linking up to DEAPs in 22 arid districts. • Western Kenya Community Driven & Flood Mitigation Project focussing on the whole of Western Province. For example, flooding in Budalangi. $ 90 – 120 million from WB, RNE & others and counter-part funding ($ 10 million). • Kenya Natural Resource Management Project - $ 60 million including co-financing and counterpart funding (~$ 40 million from WB). This is earmarked to support the reform processes in the water and forestry sectors. • Bio carbon Fund Project with Green Belt Movement in the Aberdare Mountains. Criteria include that the area must be un-forested as of 1989. Site selection on-going. Benefits to come on line by 2012. $ 1 million.				

DONOR PROGRAMME	AMOUNT	TIME FRAME	AREA FOCUS	INTERVENTIONS	IMPLEMENTATION STATUS
AfDB	• $ 23 million loan for the Water Service Board in the Rift Valley Catchment. • Possible Irrigation Project in Homa Bay, Nyanza – no details. • Possible intervention in Kisii – no details. • $ 25 million for Green Zones Development to be implemented by Nyayo Tea Zones. Concept based on enrichment planting of forest areas.				
CIDA	• C$ 30 million potentially for a Biosciences Facility for East and Central Africa (BecA) to be housed at ILRI, Nairobi.				
UNICEF	• $ 60 million through Dutch Ministerial decree to be channelled through UNICEF to help achieve MDGs in water and sanitation by 2015.				
HABITAT	• Lake Victoria Water & Sanitation Initiative for 17 towns in the Lake Basin. The five towns in Kenya include Homa Bay, Kisii, Siaya, Bondo & Migori. Funding partially through EC grant.				
France through AFD	• Rehabilitation of Meru National Park – this project was started in 2003 and positive results are already emerging. One component involves translocation of wildlife from areas of conflict to the Park. • Support to the Greenbelt Movement working in the Aberdare Mountains. This programme involves working with community based groups on re-planting of trees in the Aberdare Mountains. The project is due to start in June 2006 and is awaiting GoK approval. • Plastic recycling in Mombasa and Nakuru. Funding mechanisms yet to be determined.				
JICA	• Water Resources Management & Water Resources Provision. Support for water supplies, sewerage planning and development of Integrated Flood Management Plan for Nyando River Basin 2006-2008 • Biological Resources Conservation & Management – strengthening wildlife conservation 2005-2008 (with KWS & NMK) • Water Quality Management & Pollution Control – improvement of environmental management capacity in Nakuru Municipality & surrounding area. Also evaluation of greater Nakuru Water Supply / Sewerage Rehabilitation & Expansion 2005-2009. Collaboration for World Lakes Conference in Kenya in 2005. • Basic Design for Rehabilitation & Expansion of Kapsabet Water Supply (proposed)				
JICA **Embassy of Finland** **Belgium** **IFAD** **FAO**	Support to various aspects of the forestry sector under MENR. • JICA's support consists of intensified social forestry project for semi-arid areas, JICA scholarships and country training (2004-2009). Collaboration with KEFRI & ICRAF. • Embassy of Finland – Euro 13 million for 4 years (2006-2009/10) – based on institutional reform for the forest sector but agreement with GoK pending. The first year of the work plan will define the rest of the intervention. Support will include strengthening of forest inventories and data systems among other issues. • FAO – National Forest Programme – Euro 300,000				
KfW	• Major donor in water and slum upgrading				
UNEP	• Bali Strategic Plan – capacity building and technical support through MENR • Nairobi River Clean-Up – through Habitat, MENR and planning authorities • 3 Regional Biodiversity Programmes – Montane ecosystems, protected areas and a number of Projects in W. Indian Ocean				

DONOR PROGRAMME	AMOUNT	TIME FRAME	AREA FOCUS	INTERVENTIONS	IMPLEMENTATION STATUS
WWF-EARO	• Lake Naivasha-Malewa River Basin Integrated Water Resource Management Programme (June 2006-June 2008) - Identified Karagita, Naivasha as Africa's pilot site for intervention into water and sanitation by WSUP – a consortium of 7 partners. Bangalore is selected site in India, Asia. 6 month feasibility started for Karagita. E 500,000 from WWF the Netherlands for catchment reafforestation and related activities. CARE Kenya and Care Austria have applied for E 1 million for social & economic work. GTZ in ecosan and MSF may also be involved.				
Specifically on ICZM					
USAID	US$ ½ million for next 2 years	Ten year support to CDA/ICAM continued for at least 2 years	Coastal Region	Support to ICZM through CDA/ICAM	• ICAM enhanced as coordination body • Pilot projects carried out Programme review planned for Feb. 2006. ICAM/CDA support expected to continue in some form
UNEP **Nairobi Convention** Regional programme	US $ 24,000 for Kenya	7/2005-9/2006	Coastal zone	Prepare status report for coast/ marine resources	• Inter-sectoral team incl NEMA preparing coastal SoE report at the coast. First draft expected ready in May, Final report expected Sept
GEF/UNEP **WIO-Lab** **(Funded by GEF, UNEP, Gov. of Norway)** -Addressing land based activities in the Western Indian Ocean This appears to be the same project as the **UNIDO** one	11,4 mill$ For seven countries (includes 3 mill from the seven countries involved)	2004-2008	Regional covering: Kenya, Tanzania, MozambiqueSouth Africa Comoros, Madagascar Mauritius Seychelles	Three project objectives: 1. Reduce stress to ecosystems by improving water and sediment quality 2. Strengthen regional legal basis for preventing land based sources of pollution 3. Develop regional capacity for sustainable less polluting development	Expected activities in Kenya: • Dev of institutional task force • Demo projects: wastewater-artificial wetlands, Mangrove rehabilitation • National coastal action programme (with NEMA)
Planned: **EU regional Programme for the sustainable management of the coastal zones of the countries of the Indian Ocean**	18 mill EURO for seven countries -indicative Probably max 1 mill EURO for operations in Kenya	6 years Still in planning phase – no starting date decided	Comoros, Seychelles, Mauritius, Madagascar, Kenya, Tanzania and Somalia	• Monitoring, conservation and sustainable management: monitoring tools, support to MPA • Training through Regional Centres of Excellence • Sensitisation (incl. media coverage)	Programme still in planning stage

DONOR PROGRAMME	AMOUNT	TIME FRAME	AREA FOCUS	INTERVENTIONS	IMPLEMENTATION STATUS
				• National ICZM drafted, adopted and available • Support to Multilateral env. agreements • Active involvement of non state actors – "Call for Proposals Scheme" • Regional policy consensus "regional sectoral policy platform	
UNDP **Development of Environmental Sensitivity Atlas** **For Coastal Area of Kenya** PHASE II Kenya Marine Oil Spill Contingency Plan	28.000 $ plus consultant fees	2004-2006	Coastal area of Kenya	• Coastal resources map sheets • Shoreline sensitivity maps • Operational and Logistics maps (based on aerial photography and satellite oceanography.	Under implementation by Danish Institute GEUS in corporation with KEMFRI (and NEMA) Digitalised maps and data base should be finalised early 2006
UNOPS **Tsunami damage Projection** **Coastal Area of Kenya** PHASE II of the Environmental Sensitivity Atlas Coastal Area of Kenya	150.000 $ plus consultant fees	9 months 2006	Coastal area Of Kenya	• Create an atlas of areas at risk of tsunami • Provide GoK with a disaster preparedness tool for tsunami response management • Build capacity of GoK and key institutional stakeholders	Under implementation by Danish Institute GEUS in corporation with KEMFRI (and NEMA) Atlas and disaster preparedness tool ready by end 2006

ADMINISTRATIVE APPENDICES

I. Study Methodology

II. Consultants' Itinerary

III. List of Persons/Organisations consulted

IV. List of Documents Consulted

V. Curricula Vitae of the consultants

VI. Terms of Reference for the Country Environmental Profile

ADMINISTRATIVE APPENDIX I: Study Methodology

Introduction

The outline of the final report, as is provided in the ToR, has been used as the starting point for the elaboration of the methodology. The methods and steps used throughout the exercise were based on the scope of work and the proposal submitted to the EC.

The study approach was participatory and, in accordance with the ToR, conducted in three phases: (a) Briefing and Desk review of available documents and literature, (b) Consultations, Discussions and interviews with various stakeholders (using semi-structured interviews and other participatory approaches) at various levels, (c) Field visits to selected areas and (d) Data analysis, reporting and a feedback workshop to discuss the findings.

Phase I: Briefing and Desk Review

- During this phase, previous Country Environmental Profiles and Country Strategy Papers, evaluation reports with respect to environmental issues on development and economic co-operation produced by NEMA, other government bodies, EC or other agency sources, environmental literature, other evaluation reports, environmental policy and legislation framework, legislation and regulations and enforcement relating to environmental issues, action plans, and progress reports were reviewed. Use was made of EC and other relevant websites in the search for information. Also, a checklist of environmental concerns and other relevant information was prepared to guide collection of additional information during this process.
- An introductory meeting was held with the staff at EC where the team was briefed and a common understanding of the assignment was arrived. The EC provided additional literature for review.

At the end of this phase an inception report was complied on the basis of data collected from the review of literature and discussions during the briefing sessions and submitted to the EC. This report outlined the list of persons and institutions that will be contacted and consulted during Phase-II to collect missing information, verify the information, gain consensus on the key environmental issues and draw conclusions and recommendations.

Phase II: Consultations, Discussions and Interviews with various Stakeholders - including field visits

During this phase, consultations, semi-structured interviews and focused discussions were held with various stakeholders listed in Administrative Appendix III including:

- Ministries,
- National Environmental Management Authority (NEMA) ,
- Development Authorities,
- Other relevant national institutions, e.g. Tourism Trust Fund
- Key international funding agencies operating in Kenya e.g. UNDP, USAID etc
- International Development Agencies in the environmental field, UNEP..
- Relevant projects/programmes, including regional programmes such as Lake Victoria Environmental Management Programme (LVEMP; Kenya component under KARI).
- National and international civil society actors (national and international NGOs, FBOs and CBOs) operating in the environmental field.

During this consultation phase, consensus was obtained on key environmental concerns and environmental performance indicators.

Phase III: Data Analysis, Reporting and Feedback Workshop

Compilation of the preliminary draft of the Kenya Country Environmental Profile took place concurrently with task implementation at all the above phases. After compilation of the draft Environmental Profile, a half-day rapid feedback workshop/working session was held with the EC to present and discuss the conclusions and recommendations on the key environmental concerns.

Following the feedback session, the final draft report was compiled and submitted to the EC for comments and discussions. These comments were incorporated in the final report submitted to the EC.

During the entire study, the team briefed and maintained close contact with the EC officer in charge, holding at least five meetings in additional to continuous email and telephone contact. Continuous exchange of information ensured that the Client was kept informed as much as possible, of the progress made and obstacles met.

The assessment of donor cooperation has been done through semi-structured interviews using the checklist as shown in Box 1.

Box 1: Checklist for interviews with donor agencies

- ✓ Inventory of past and ongoing programmes/projects
  - Programmes with an environmental focus
  - Programmes with environmental components
  - Environmental mainstreaming (EIAs)
- ✓ Used Channels (GO/NGO)
- ✓ Investments in Environmental Programmes (total and as part of total development budget)
- ✓ Results & Outcomes
- ✓ Strong and Weak points of programmes from an environmental perspective
- ✓ Opportunities & Risks
- ✓ Mainstreaming of environment in programmes/projects (incorporation of EIA and EMP)
- ✓ Plans regards environmental programmes & mainstreaming
- ✓ Donor Coordination

Sources of Information

The resource persons and institutions and the documents consulted are listed in administrative appendices to be consulted are listed in Administrative Appendix III and IV.

ADMINISTRATIVE APPENDIX II: Consultants' Itinerary

	Date		Consultant PZ	SG	VM	BO	Time	Activity
Week 0	13-Feb	Mo		X		X		Collection of Documents, Inventory of contact persons/institutions
	14-Feb	Tu		X		X		
	15-Feb	We		X		X		
	16-Feb	Th		X		X		
	17-Feb	Fr						
	18-Feb	Sa						
	19-Feb	Su	X					Travel to Nairobi
Week 1	20-Feb	Mo	X	X	X	X	09.00	Team Meeting
			X	X	X	X	14.00	Briefing Meeting EC-Delegation
			X	X	X	X	15.00	Introduction Meetings with EC Delegation Sections
	21-Feb	Tu	X	X	X	X		Document Review, Elaboration Methodology
	22-Feb	We		X	X			Drafting chapters 2 and 3
			X			X		Document Review, Elaboration Methodology
	23-Feb	Th	X			X		Document Review, Elaboration Methodology
	24-Feb	Fr	X			X		Document Review, Elaboration Methodology
	25-Feb	Sa	X					Document Review, Inception Report
				X	X			Drafting chapters 2 and 3
	26-Feb	Su	X					Writing Inception Report
Week 2				X	X			Drafting chapters 2 and 3
	27-Feb	Mo	X		X	X	09.00	Discussion Draft Inception Report & finalisation
			X					Planning, Programming, Document Review
	28-Feb	Tu	X			X	09.00	Meeting at EC Delegation, discussion Inception Report
			X		X	X	15.00	Meeting at SIDA
	1-Mar	We	X	X		X	09.00	Meeting with Kenyan Forestry Working Group
			X	X	X	X	14.30	Team Meeting
	2-Mar	Th	X	X	X	X	10.00	Meeting with NEMA, Mr Maurice Mbegera
				X			14.00	USAID: James Ndirango
				X			14.00	Meeting with DFID
	3-Mar	Fr	X	X			09.00	Meeting with Netherlands Embassy
	4-Mar	Sa	X	X		X		Write-up chapters 2 and 3
	5-Mar	Su	X	X		X		Write-up chapters 2 and 3
Week 3	6-Mar	Mo	X	X			08.30	NEMA
				X			14.00	Finnida
				X			15.30	French Embassy
			X				14.00	EC: Liesl Inglis (2.00), Rikka Torp, Aadrian Sullivan (ECHO)
	7-Mar	Tu	X	X			9.00	Donor Meeting (8.40 at EU)
					X		8.00	TARDA
			X	X			19.00	Meeting with Danida/Sida Mission
	8-Mar	We		X			10.00	UNDP, Charles Nyandiga
			X				10.00	EC Brian Kelly; 10.30 Maria Pia Palleschi
			X	X	X	X	14.00	Team Meeting
	9-Mar	Th				X	10.00	Maji Na Ufanisi (NGO)
			X	X			14.00	Progress Meeting EC Delegation
	10-Mar	Fr	X	X			10.00	World Bank
	11-Mar	Sa	X	X				Write-up chapter 4
	12-Mar	Su	X	X				Write-up chapter 4

	Date		Consultant PZ	SG	VM	BO	Time	Activity
Week 4	13-Mar	Mo	X					Write-up
	14-Mar	Tu				X	10.00	Meeting with JICA
			X				10.00	Meeting at ASAL Mr Mohamed Khalekhe
						X	14.00	Meeting with TTF: John Duffy
	15-Mar	We	X	X	X	X	14.00	Team Meeting
	16-Mar	Th	X	X		X	10.00	Presentation Draft Report
						X	16.00	GTZ
	17-Mar	Fr	X	X		X		Finalisation draft report
	18-Mar	Sa	X					Finalisation draft report
week 5	27-Mar	Mo	X				15.00	Meeting with Coast Development Authority, Mombassa
	28-Mar	Tu						
	29-Mar	We						
	30-Mar	Th						
	31-Mar	Fr						
	1-Apr	Sa	X					Final Reporting
	2-Apr	Su	X					Final Reporting
Week 6	3-Apr	Mo	X				14.00	Meeting EC (comments draft report)
	4-Apr	Tu	X			X		Final Reporting
	5-Apr	We	X			X		Final Reporting
	6-Apr	Th	X			X		Final Reporting
	7-Apr	Fr	X			X		Final Reporting, Travel to The Netherlands
	8-Apr	Sa	X					Arrival

ADMINISTRATIVE APPENDIX III: List of Persons/Organisations consulted

Organisation	Name	Designation
1. Government Organisations		
MENR	Dr. Timothy U.K. M'mella	Deputy Secretary
NEMA	Mr. Maurice Mbegera	Compliance Officer
ARID LANDS	Ms. Fatuma Abdikadir	National Coordinator
	Mr. Mohamed Khalekhe	Officer
TARDA	Mr. Peter CHege Kamau	Tana Basin Manager
CDA	Mr. M. Mwaguni	
2. Civil Society Organisations		
Kenya Forestry Working Group	Michael Gachanja	Coordinator
Tourism Trust Fund	John Duffy	Head TTF
	Francis Agoya	Business Advisory Officer
	Wangeci Mwai	Business Advisory Officer
	Sammy Kibet	Tourism Development Manager
3. EC Delegation Nairobi		
	Johan Cauwenbergh	Head of Operations
Rural Development	Otto Moller	Head of Section
Rural Development	Maria Pia Palleschi	Project Officer
Rural Development	David Mwangi Njuru	Project Officer
Tourism/Trade & Private Sector	Riikka Torppa	Project Officer
Tourism/Trade & Private Sector	Vanessa Nagel-Dick	Project Officer
Infrastructure and Water	Derek Fee	Project Officer
Infrastructure and Water	Claus Darmstadt	Project Officer
Budget Support	Brian Kelly	Head of Section
Social and Environment Sect.	Maria-José Pallares Paredes	Head of Section
Social and Environment Sect.	Liesl Karen Inglis	Programme Officer
Social and Environment Sect.	Anna-Carin Kandima	Project Officer Health
Social and Environment Sect.	Heather Elkins	Project Officer, Environment and Community Development
Social and Environment Sect.	Titus Katembu	Project Officer, Education
ECHO	Aadrian Sullivan	
4. Donor Community		
Embassy of Finland	Dr. Antti Erkillä	Advisor Environment & Forests
USAID	James Ndirangu	Teamleader Natural Res. Man. Programme
World Bank	Yuko Kurauchi	Consultant
World Bank	Enos E. Esikuri	Technical Specialist Environment
World Bank	Chris Cornelius	
Netherlands Embassy	André Vermeer	Policy Officer Environment/Water Development Cooperation.
UNEP –	Alexander Alusa,	Deputy Director, Environmental Conventions
	Henry Ndede	Coordinator, Nairobi River Basin
	Nehemiah Rotich	Senior Programme Officer Biodiversity
DfID	Izabella Koziel	
Embassy of France	Marie Cheminet	
UNDP	Charles Nyandiga	
JICA	Elijah Kinyangi	
SIDA	Ulrika Akesson	
GTZ	G. Musungu	Consultant

5. Others

Orgut	Melinda Cuéllar	Formulation Mission SIDA/DANIDA Environmental Programme
Bilashaka Flowers	Hartmut Rötcher	

ADMINISTRATIVE APPENDIX IV: LIST OF DOCUMENTS CONSULTED

1. CDA *et al*. 1996: Towards Integrated Management and Sustainable Development of Kenya's Coast. Coast Development Authority, Mombasa Kenya.
2. Community Development Trust Fund National Conference 2004: Poverty Reduction and Biodiversity Conservation: Emerging Opportunities and the Way Forward Report on the Conference Proceedings.
3. DRSRS, KFWG 2004: Changes in Forest Cover in Kenya's Five 'Water Towers' 2000 – 2003. Kenya Forestry Working Group, Nairobi, Kenya
4. East African Wildlife Society 2005: Programme Areas- Conservation and Sustainable Management of Wetlands in Kenya, 2005. EAWS, Nairobi, Kenya.
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ADMINISTRATIVE APPENDIX V : Curricula Vitae

Family name:	**Zijlstra**	**First names:**	**Pieter Jan**	Year of birth:	1952
Place of birth:	Leeuwarden	Nationality:	Dutch	Civil status:	Married
Present employer:		Consultants for Development Programmes (CDP)			
Years with firm:		Since 1992			

Key qualifications:

Mr Zijlstra is a land and water management specialist with over 20 years experience in participatory irrigation management and rural development. He has an MSc degree in land and water management and a certificate economics, both from the Wageningen Agricultural University, The Netherlands.
Since 1992 he is attached to CDP as consultant and was director for the period 1993 – 2002. In that position he provided management support to six long term projects in Tanzania, Bangladesh, Uganda and Mozambique.
Mr. Zijlstra has conducted over 50 short-term assignments, often in the capacity of team leader or institutional development specialist or land & water management specialist.

Education:

1979 M.Sc. Land and water use of the (sub-) tropical countries at the Agricultural University Wageningen, The Netherlands. Main subjects: Extension and Social aspects of project planning, Irrigation and Civil Engineering, Salinisation.
1990 Certificate Economic Project Analysis (benefit-cost analysis), Farming systems research at the Agricultural University Wageningen, The Netherlands.

Employment record

1992-date Consultant, CDP; 1992 – 2003 Director.
1994-2005 Project Manager, Char Development and Settlement Project, Bangladesh.
2002-date Team Leader, Institutional Water Management Specialist of the Small Scale Irrigation Project, Mozambique for AfDB;
1991-1992 Team leader of Delta Development Project Bangladesh.
1986-1989: Bi-lateral expert (land use planner) Integrated Rural Development Programme Nuwara Eliya, Sri Lanka.
1980-1986 Consulting engineer in the "Empresa Hidráulica de Maputo" of the "Direçcão Nacional Hidraulica Agrícola", Maputo, Mozambique.

Country Experience

Moçambique, Kenya, Tanzania, Uganda, Malawi, Mali, Sri Lanka, Bangladesh, Índia, China, Vietnam, Yemen

Language skills:

	Reading	Speaking	Writing
English	Excellent	Excellent	Excellent
Portuguese	Good	Good	Good
French	Fair	Fair	Fair
German	Fair	Fair	Fair

Family name:	**Okello**	**First names:**	**Bell Dedan**	Year of birth:	1968
Place of birth:	Siaya	Nationality:	Kenyan	Civil status:	Married
Present employer:		ETC East Africa Ltd.			
Years with firm:		Since 2001			

Key qualifications:
Natural resource management scientist with specialisation in community based natural resources management, participatory research and development and rural development. He is a trained ecologist and Ph.D Candidate at the University of Natal with vast skills and experience in good governance, institutional strengthening, organisational development and project management.
Mr. Okello has more than 15 years experience in conducting research, consultancy and implementing natural resource and environmental management related projects and programmes. Working and research experience covers Kenya, Uganda, Somalia, Sudan, India and the Netherlands. He has carried out more than 25 consultancies in various African countries. In addition, he has published several papers on environmental management in respected international journals.

Education:

2006 PhD. Candidate Rangeland Ecology: University of Natal, South Africa. Main subjects: Sustainable management of rangelands and interactions between livestock and wildlife systems.
1999 Course on Development Oriented Research in Agriculture: Main subjects: Participatory Research and Development Methodologies, Project Cycle Management at the International Centre for Research in Agriculture, ICRA, Wageningen, The Netherlands
1996 MSc. Range Ecology: Main subjects: Rangeland and Wildlife Management and Rangeland Economics at the University of Nairobi, Kenya.

Employment record

2006 - Date Consultant, ETC East Africa.
2004 - 2005 Project Manager, Mercy Corps. Twic County Sudan Project for vulnerable Agro–pastoralists, in Bar el Ghazal, south Sudan funded by OFDA/USAID.
2003 -2004 Agriculturalist and Assistant Project Manager: Cooperazione Italiana Nord Sud (CINS INGO), EU funded project 'Promotion of Agricultural Production in Rural Areas of Erigawo District'.
2001 -2003 Consultant, ETC East Africa.
1996- 2000 Resident Manager: Kenya Long–term Exclosure Project, Mpala Research Centre, Laikipia, Kenya
1997 Manager: Cook stove and solar project at Mpala Research Centre
1994-1996 District Range & Planning Officer, and District Livestock Marketing Officer, Kwale District, Ministry of Agriculture.

Country Experience

Kenya, Uganda, South Sudan, Somaliland, South Africa, India.

Language skills:

	Reading	Speaking	Writing
English	Excellent	Excellent	Excellent
Kiswahili	Good	Good	Good

Family name:	**Mwatha**	**First names:**	**Wanjiru**	Year of birth:	1954
Place of birth:	Nyeri	Nationality:	Kenyan	Civil status:	Single
Present employer:		Associate Consultants with ETC East Africa Ltd.			
Years with firm:		Since 2003			

Key qualifications:

Prof. Mwatha is an ecologist with over 15 years experience in consulting and research on biodiversity, environment and natural resources and over twenty environmental assignments successfully completed. She has a Ph.D in ecology from Leicester University in UK and a post-graduate Diploma in Integrated Environmental Management from Brown University, USA. She has extensive experience in biodiversity management plans and policy issues having been involved in the formulation of Kenya's Biodiversity Strategy and Action Plans, Kenya's Wetlands Policy and Biotechnology policies for East and Central Africa. Prof Mwatha has a through knowledge and experience in international environmental policies having been a UNEP sponsored Watson International Scholar of the Environment at Brown University, USA. Prof Mwatha has conducted over 25 short-term assignments, sometimes in the capacity of team and is registered by NEMA as Lead EIA Consultant.

Education:

2004	Post-graduate Diploma in Integrated Environmental Management, Brown University, USA. Main Subjects, environmental economics, global ecological assessment, international environmental health, multilateral environmental governance, social impact assessment and environmental conflict resolution.
1992	Ph.D in Ecology of the Saline Lakes of Kenya University of Leicester, UK. Main subjects: Biodiversity, conservation and utilisation of wetland resources in East Africa.
1981	MSc in Soil Microbiology Nairobi University, Kenya. Main subjects biological nitrogen fixation in farming and non-farming systems in Kenya

Employment record

2003-date	Associate Consultant, ETC- East Africa.
2003-2004	Visiting Professor, University of Wyoming, USA
1989-date	Professor of Ecology Kenyatta University, Kenya
2002-2003	Regional Co-ordinator, African Biotechnology Stakeholders Forum (ABSF) involved in formulation of biotechnology policies in East and Central Africa.

Country Experience

Kenya, Tanzania, Uganda, Malawi,

Language skills:

	Reading	Speaking	Writing
English	Excellent	Excellent	Excellent
Kiswahili	Good	Good	Good
French	Fair	Fair	Fair

Family name:	**Gordon**	**First names:**	**Sharon**	Year of birth:	1966
Place of birth:	Nairobi	Nationality:	Kenyan	Civil status:	Married

Present employer: Associate Consultant with ETC East Africa Ltd.

Years with firm:

Key qualifications:

Ms Gordon is an Environmental Management specialist with over 15 years experience in environment issues including environmental and social impact assessments (ESIAs), audits, health & safety and natural resources studies. She holds an MSc degree in Environmental Management, a BSc degree in mining geology and, certificates in ISO 14001 - Environmental Management systems and waste management. Ms Gordon is proficient in computing with skills in GIS and database management.
She has worked for the private sector in Kenya, United Nations, NGOs and as a freelance consultant. Her work experience covers Kenya, Sudan, Tanzania and the UK. Ms Gordon has conducted over 49 short-term assignments, often in the capacity of team leader. She is currently involved with setting up strategic and operational environmental plans for horticultural produces around L. Naivasha in Kenya.

Education:

1992 M.Sc. Environmental Management at the University of Stirling.
1988 B. Sc. Mining Geology at Imperial College of Science and Technology, London University.
1998 Certificate course in ISO 14001, Lead Auditor Environmental Management Systems, University of Aberdeen
1998 Certificate in Waste Management, University of Aberdeen.

Employment record

2005 - Date Freelance consultant, Associate Consultant ETC East Africa - Kenya.
2002 - 2005 Environmental Compliance Officer, African Trade Insurance Agency - Kenya.
1997 - 2002 Environmental Scientist and Head of the Environmental Division, GIBB (Eastern Africa) - Kenya;
1995-1996 Environmental Management Specialist attached to UNHCS - Tanzania.
1995-1996 Consultant Environmental Scientist - Kenya.
1992-1993 Programme Officer UN-WFP Somalia and Sudan
1988 - 1991 Exploration Geologist, Mackay and Schnellman - UK

Country Experience

Kenya, Tanzania, Somailia, Sudan, UK

Language skills:

	Reading	Speaking	Writing
English	Excellent	Excellent	Excellent
Kiswahili	Good	Good	Good
French	Fair	Fair	Fair

ADMINISTRATIVE APPENDIX VI:

Terms of Reference Country Environmental Profile of Kenya

1. Background

The total area of Kenya is 587,000 km2 (576,000 km2 is land surface and 11,000 km2 is water[26]). Kenya shares its land boundaries with Ethiopia, Somalia, Sudan, Tanzania and Uganda and has an Indian Ocean coastline of 536 km.

Kenya is a presidential republic. Following elections in 2002, Mwai Kibaki of the multiethnic united opposition group the National Rainbow Coalition (NARC) became President. The Kibaki administration faces many problems not least the recent rejection by Kenyans of the new constitution as well long-standing issues of a rundown infrastructure, endemic corruption and poverty. The HPI for Kenya is estimated at 36.7%.[27]

Kenya's most valuable natural assets are rich agricultural land (however only 7% of Kenya's land mass is arable) and a unique physiography and wildlife. The abundant and diverse wildlife are key to the tourism industry. Kenya's water resources are under pressure from an exploding population, expansion of intensively farmed agricultural areas and weak infrastructure as well as destruction of natural habitats which is also having drastic effects on forested areas of the country. The agricultural sector in Kenya continues to dominate Kenya's economy and employs about 70% of the country's population. The forestry and fisheries sectors suffer greatly from resource degradation.

Kenya faces a variety of environmental problems, including deforestation, soil erosion, desertification, water shortages and increasing degradation of the quality of existing water sources, poaching and domestic and industrial pollution.

In 1999 Kenya established the Environmental Management and Coordination Act (EMCA) which aims to strengthen the legal and institutional framework for environmental management. In 2000 the Act created the National Environmental Management Authority (NEMA) as the principal instrument of the Government in the implementation of all policies relating to the environment.

2. Objective

The main objective of a Country Environmental Profile is to identify and assess environmental issues to be considered during the preparation of the coming Country Strategy Paper, which will directly or indirectly influence EC cooperation activities.

The Country Environmental Profile will provide decision-makers in Kenya and in the European Commission with clear information on the key environmental challenges, as well as policies, strategies and programmes designed to address them. This information will ensure that the EC cooperation strategies systematically integrate environmental considerations into the selection of priority focal areas and mainstream environmental considerations into all programmes.

The Profile will establish the key linkages between the environment and poverty reduction. It will constitute an important source of baseline information and contribute to focusing

[26] National Environment Management Authority (NEMA) State of the Environment Report Kenya 2004
[27] Linking Industrialisation with Human Development – Report 2005 UNDP

political dialogue and cooperation with the Country on key areas of concern such as sustainable development as well as raising awareness among policy-makers.

3. Results

The assessment will deliver the following results:

- An assessment of the state of the environment identifying key environmental factors and trends influencing Kenya's development and the responses to these.
- An assessment of national environmental policy and legislation; institutional structures and capacity, and the involvement of civil society in environmental issues.
- An assessment of the integration of environmental concerns in sectors with key linkages with environmental issues.
- An overview of past and ongoing international cooperation in the environment sector.
- Recommendations and, as far as possible, guidelines or criteria for mainstreaming environmental concerns in priority development areas. These recommendations should support the preparation of the Country Strategy Paper and, as far as possible, include guidelines or criteria to be used for environmental mainstreaming in subsequent phases of the operation cycle.

4. Issues to be assessed

The consultants will assess the following issues:

4.1. The state of the environment

This chapter should identify key issues and indicate their level of priority, including facts (pressures, current status and trends) and problems in the following areas:

- **Physical environment:** air and climate, land, water, and natural disaster risks.
- **Biological environment:** biodiversity, ecosystems, biological resources of cultural, social, or economic importance.

Specific issues to be addressed include:[28]

1. Land degradation (Soil erosion, desertification) – Land use planning, land use practices
2. Water resources (water quality, access to water, waste water discharge) – Use and management
3. Biodiversity and wildlife (Local status of globally threatened species, fish stocks, invasive species)
4. Deforestation and fuelwood consumption (forest cover and volume, state of particular ecosystems) – Use and management practices
5. Tourism – Management and impacts
6. Urban areas – The environmental conditions (air and water quality, sanitation, waste management, health) – Public behaviours and practices
7. Poor Policy coordination and level of application/reinforcement of policy legislation

[28] (Points 1, 2, 3, 4 have been chosen with reference to the National Environment Management Authority (NEMA) State of the Environment Report Kenya 2004).

As far as possible the driving forces influencing these pressures should be identified, such as economic incentives, demographic pressure, access rights to natural resources and land tenure systems.

Environmental trends should be assessed with regard to their social and economic impact, including:

Declines in economic production or productivity (agriculture, forestry, fisheries)

- Trade (impacts on the environment regarding production of various commodities)
- Threats to human health;
- Human exposure to environmental disasters (floods, drought);
- Conflicts and security;
- Impact on poverty and on vulnerable groups (including women and children);
- Sustainability of resource use;
- Cultural values

This Chapter should lead to the identification of problems (described in terms of situations, trends or their causes) which are undesirable due to their current socio-economic consequences (fall in productivity, health problems, natural risks, social crises, conflicts...), their future consequences (decline in natural resources, cumulative pollution...) or contribution to global environmental problems.

If appropriate the consultant could refer to appropriate environmental indicators in order to establish a consistent basis for comparison of environmental and sustainable development performance. Attention should be paid to the MDG 7-indicators, (components of) the ESI (Environmental Sustainability Index) and specific indicators related to the particular environmental issues of the country. The indicators selected should facilitate future monitoring and evaluation of the state of the environment and be useful for future environmental assessments.

If appropriate, the information could be organised according to eco-geographical subdivisions with the scale (regional, national, local) of the issues indicated.

4.2. Environmental policy and legislation

A brief description and a review of strengths and weaknesses of the following:

- National policies, environmental strategies and action plans (including, if possible according to the results of 4.1, an assessment of the environmental performance in meeting the objectives and targets).
- Legislation, current and in preparation, by the National Institutions covering development control, requirements for environmental assessments, sustainable use or conservation of natural resources, pollution control, land tenure and land reform. The effectiveness of legislation enforcement. The provision for public participation in environmental issues, procedures for public participation in development control and environmental planning and public access to environmental information. Particular attention should be paid to the legislative requirements and national experience of EIAs (Environmental Impact Assessments and SEAs (Strategic Environmental Assessments).
- National approaches to key international or regional environmental conventions such as those concerning climate change, biodiversity and desertification.

4.3. Environmental institutional framework

- The Institutional structures and responsibilities of the authorities dealing with environmental issues in policy making, legislation, planning, environmental protection, monitoring and enforcement.
- The level of co-ordination between sectoral institutions or ministries involved in environmental or natural resources management issues.
- The major NGOs, institutes or other institutional stakeholders.
- The capacity and financial resources of authorities responsible for environmental management.
- The extent and quality of protected areas (and, if relevant, other land use measures).

4.4. Integration of environmental concerns into the main sectors

The assessment should examine the integration of environmental concerns in the main sectors that have key linkages with environmental issues and might be identified for EC support. Although at this stage it is not evident what the focal sectors will be, we suggest that for Kenya focus for environmental mainstreaming should be for general budget support, in the rural development, health, education and infrastructure sectors.

4.5. EU cooperation with the Country from an environmental perspective

This should cover experience relating to interventions with specific environmental objectives as well as the integration of environment into other sectors, including the application of environmental assessment procedures. Where information is available the environmental impacts of EU cooperation or potential risks should be identified for the benefit of future programmes. The results of existing evaluations/reviews should be incorporated and lessons should be drawn for the future. The implications for the environment of budgetary support or sector wide approaches should be reviewed if applied; consideration of actions taken under the Forest and Environment budget line should be included.

4.6. Cooperation funded by other agencies from an environmental perspective

This should cover involvement of other funding agencies and their experience in Kenya and include a list of recent and planned projects/programmes, with an environmental focus or anticipated impact. Coordination mechanisms between donors and the EC with respect to the environment should be assessed.

5. Conclusions and recommendations

The key aspects of the state and trends of the environment in Kenya including policy and institutional constraints and challenges should be clearly stated. This may be presented in a matrix, crossing environmental concerns and the main sectors or policies.

Based on a comprehensive assessment of available information and consultation with stakeholders recommendations should be made on how best to integrate environmental issues.

The recommendations raised should also clearly indicate which environmental problems they seek to address and furthermore the recommendations should be grouped according to the involved sector or institutional stakeholder.

Recommendations should be easily used in the preparation of the Country Strategy Paper, taking into account the existing Country Strategy Papers (which will provide general guidance on the style and detail required) and already pre-identified options for the next CSP. Nevertheless, useful recommendations can also be made for the

Government, other donors (particularly EU Member States) and the use of EC horizontal budget lines.

The relative priority of the recommendations and an indication of the challenges to their implementation should be given.

Recommendations are likely to cover direct environmental interventions as well as the provision of environmental safeguards for other activities.

Recommendations should also be made as to how best the Commission and the Government can mainstream environmental issues into the next cycle of country strategy papers. Guidance should be given regarding Strategic Environmental Assessment in major sectors and performance indicators if budgetary supports are foreseen.

The constraints to preparing the profile caused by limited information should be described, and an evaluation of the need for additional studies, such as Strategic Environment Assessments particularly in relation to potential focal sectors mentioned in point 4.4 , should be made.

6. Work plan

The work plan should include but not necessarily be limited to the following activities:

- Consultation with EC country desk officers and other relevant officials, , a selection of national and local authorities including the NAO and the Ministry of Planning and National Development, key international funding agencies operating in Kenya, plus key national, international civil society actors operating in the environmental field. One of the results of this consultation will be to obtain a consensus on key environmental concerns.
- Review of previous Country Environmental Profiles and Country Strategy Papers; evaluation reports with respect to environmental issues on development and economic co-operation produced by NEMA, other government bodies, EC or other agency sources.
- Review of environmental literature, evaluation reports, environmental policy and legislation framework, legislation and regulations and enforcement relating to environmental issues, action plans, and progress in implementation.
- Review of environmental performance indicators selecting appropriate indicators from those suggested by organisations such as EEA/OECD/Eurostat, National Environment Management Authority (NEMA).
- A half day working session should be organised and should take place after the submission of the first draft. The aim of this working session will be to consult with key stakeholders and obtain a consensus on key environmental concerns.
- On the basis of the proposed work plan and time schedule outlined in these Terms of Reference, the consultants should provide a detailed work plan in their offer.

7. Expertise required

The proposed mission shall be conducted by a team of two experts who should have the following profile:

- Expert level I or level II with at least 10 years wide experience in environmental issues, including institutional aspects; international environmental policies and management; environmental assessment techniques and experience in rapidly assembling, assessing information and developing recommendations. He/she would be the team leader
- Expert level II with 10 years experience with an environment background complementary to the team leader.

In addition:-

- Previous working experience in Kenya (minimum 2 years) is requested for at least one team member.
- Experts should have an understanding of the EU environment and development policies;
- Experience in undertaking environmental analysis and preparation of development programmes would be an asset;
- Familiarity with Commission guidance on programming, country strategies, PCM, policy mix and integration of environmental issues into other policy areas is desirable;
- Experience of participatory planning processes would be an advantage;
- Experience in producing Country Environmental Profiles would be an added advantage.

The experts should have excellent knowledge of English which will be the working language and the language for all reports.

For each specialist proposed, curriculum vitae must be provided of no more than four pages setting out the relevant qualifications and experience. A template for the CV is attached.

8. Reporting

The study conclusions must be presented in the Country Environmental Profile report in the format given in Appendix 1.

Ten copies of the draft report are to be submitted to the EC Delegation in Kenya within two weeks of completion of the field work. Hereafter the EC Delegation in Kenya will gather comments from stakeholders and present them to the consultants no later than two weeks after the draft is received.

The consultants will take account of these comments in preparing the final report (maximum 40 pages excluding appendices). The final report in English in (30) copies is to be submitted no later than four weeks after the comments are submitted to the consultants.

9. Presentation of the offer

The consulting firms should present their offer by providing the two CVs of the experts (not more than 4 pages each), and the proposed methodology (not more than 4 pages).

10. Time schedule

	Expert I	Expert II
Desk analysis.	2	1
Consultation phase including travel	20	20
Report finalisation	4	3
Final report	4	4
Total days	**30**	**28**

The start date for the consultancy is 15th February 2006.

11. Appendices

Report format for a Country Environmental Profile

APPENDIX TO TOR : STANDARD REPORT FORMAT

Report Format for a Country Environmental Profile of Kenya

Maximum length (excluding appendices) 40 pages.

The following text appears on the inside front cover of the report:

This report is financed by the European Commission and is presented by [name of consultant] for the Government of Kenya and the European Commission. It does not necessarily reflect the opinion of the Government of Kenya or the European Commission.

1. Summary

This is an executive summary of the key chapters of the Country Environmental Profile clearly indicating priority challenges and areas for action at the country level.

2. State of the environment

This chapter will also set out an assessment of the state and trends of the environment as outlined in Section 4.1 of the TOR.

3. Environmental policy, legislative and institutional framework

This chapter will provide an assessment of Kenya's environmental policy, regulatory and institutional framework for pollution control, natural resource use and sustainable development. It will be divided into sections as follows:

3.1. Environmental policy and legislation

This chapter must include an assessment of the key issues outlined in Section 4.2 of the TOR.

3.2. Environmental institutional framework

This chapter should review the roles and capabilities of the main national institutions as outlined in Section 4.3 of the TOR.

3.3. Integration of environmental concerns into the main sectors

This section must include an assessment of the key issues as outlined in Section 4.4 of the TOR.

4. EU and other donor cooperation with Kenya from an environmental perspective

This section must include EC and other donor assistance within Kenya from an environmental perspective covering the issues outlined in Sections 4.5 and 4.6 of the TOR.

5. Conclusions and recommendations

This chapter will present the conclusions on the state and trends of the environment in Kenya, including a summary of the key environmental issues in a table form. Recommendations will be made for major stakeholders (including the Government, the Commission and other donors) with a particular emphasis on how best the Commission can mainstream environmental issues into the new country strategy paper.

6. Technical appendices

I. Environmental maps of Kenya

II. Reference list of environmental policy documents, statements and action plans, and other relevant technical information.

7. Administrative appendices

I. Study methodology/work plan (1–2 pages)
II. Consultants' Itinerary (1–2 pages)
III. List of persons/organisations consulted with their affiliation and contact details (1–2 pages)
IV. List of documentation consulted (1–2 pages)
V. Curricula vitae of the consultants (1 page per person)
VI. Terms of Reference for the Country Environmental Profile