

REPUBLIC OF KENYA



MINISTRY OF ENVIRONMENT AND MINERAL RESOURCES

STRATEGIC PLAN

(2008 – 2012)

June 2009

ACRONYMS

ADB:	African Development Bank
A.I.A:	Appropriations In Aid
ASALs:	Arid and Semi-Arid Lands
CBO:	Community Based Organization
CDTF:	Community Development Trust Fund
DDC:	District Development Committee
DANIDA:	Danish International Development Agency
DoE:	Directorate of Environment (in MEMR)
DEAP:	District Environment Action Plan
KDM	Kenya Meteorological Department
DPM:	Directorate for Personnel Management
DRSRS:	Department of Resource Survey and Remote Sensing
EEZ:	Exclusive Economic Zone
EIA :	Environmental Impact Assessment
E&NR:	Environment and Natural Resources
EMCA:	Environmental Management and Coordination Act
ERS:	Economic Recovery Strategy for Wealth and Employment Creation
EU:	European Union
FAO:	Food and Agriculture Organization
FBOs:	Farmer Based Organizations
FD:	Forest Department
FITC:	Forests Industrial Training Centre
FINNIDA:	Finnish International Development Agency
FY:	Financial Year
GDP:	Gross Domestic Product
GIS:	Geographical Information Systems
HIV/AIDS:	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome
ICT:	Information and Communication Technology
IFMIS:	Integrated Financial Management Information System
IPPD:	Integrated Payroll and Personnel Data
JICA:	Japan International Cooperation Agency
KEFRI:	Kenya Forestry Research Institute
KFC:	Kenya Forestry College
KFS:	Kenya Forest Service
KRDS:	Kenya Rural Development Strategy
LAN:	Local Area Network
MDGs:	Millennium Development Goals
M&E:	Monitoring and Evaluation
MCSRC:	Ministerial Civil Service Reform Committee
MDGs:	Millennium Development Goals
MEAs:	Multilateral Environment Agreements
MEMR	Ministry of Environment and Mineral Resources (current name)
MENR	Ministry of Environment and Natural Resources (preceding name)
MGD:	Mines and Geological Department

MoF:	Ministry of Finance
MIS:	Management Information Systems
MPND:	Ministry of Planning and National Development
MPER:	Ministerial Public Expenditure Review
MTEF:	Medium Term Expenditure Framework
NGOs:	Non-Governmental Organizations
NEAP:	The National Environment Action Plan
NEMA:	National Environment Management Authority
NEPAD:	New Partnership for Africa's Development
NORAD:	Norwegian Agency for International Development
NPEP:	National Poverty Eradication Plan
NRC:	Non-Resident Cultivators
OoP:	Office of the President
PEAP:	Provincial Environment Action Plan
PEI:	Poverty and Environmental Initiative
PESTEL:	Political, Economic, Social, Technical, Environmental and Legal (Analysis)
PCC:	Public Complaints Committee
PFM:	Participatory Forest Management
PRSP:	Poverty Reduction Strategy Paper
PSIP:	Public Service Integrity Programme
PSC:	Public Service Commission
SAGA:	Semi-Autonomous Government Agency
SIDA:	Swedish International Development Agency
SWAP:	Sector-wide Approach
SWOT:	Sector Wide Opportunities and Threats.
UN:	United Nations
UNDP:	United Nations Development Programme
UNCLOS:	United Nations Convention on the Law of the Sea
USAID:	United States Agency for International Development
VAT:	Value Added Tax
WAN:	Wide Area Network
WIT:	Work Improvement Team

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FOREWORD

The government through the Ministry of Environment and Mineral Resources is committed to create an enabling environment for Policy, Legal, and regulatory reforms for the management of the environment and natural resources.

It is important to note that the reforms are being carried within the larger national economic recovery programme that the government is currently implementing in the various sectors of our economy.

We all know that the overall goal of these reforms is to ensure accountability and transparency in the management of public affairs and hence expand further the level of the existing democratic space that Kenyans are enjoying.

In this connection, the Ministry identifies environmental concerns and sustainable management of natural resources as critical priorities for wealth and employment creation during the 2008-2012 Plan period.

The mandate of the Ministry of Environment and Natural resources is to protect, conserve and sustainably manage the environment and natural resources in the country. Through sustainable management of the environment and natural resources, it is expected that economic and social conditions of Kenyans will be greatly improved. The government's commitment to achieving equity, ecological sustainability and economic growth for the overall goal of poverty reduction is clearly stated in the government policies and pronouncements. The Ministry, in addition, is responsible for multi-lateral environmental agreements, signed and ratified by the governments.

The Strategic Plan for 2008-2012 has been revised through an extended participatory and consultative process of internal and external evaluation. In line with the dynamic environmental challenges and re-focusing of priority areas, the Ministry plans to undertake sectoral reforms and institutional restructuring in order to effectively and efficiently deliver services to the Kenyan people.

During this Strategic Plan period, the Ministry plans to address various challenges including deforestation, land degradation, loss of biodiversity, pollution and wise use of mineral resources through careful targeted programmes and projects. The Ministry identifies environmental conservation and sustainable management of natural resources as critical priorities wealth creation an employment in rural during the 2008-2012 Plan period.

Environment and natural resources management issues are-multi-sectoral in nature and require positive engagement of all stakeholders,.

It is therefore, our commitment to implement this Strategic Plan and meet the aspiration of Kenyans to productive life in a healthy environment.

Hon. John N. Michuki, EGH, MP.

MINISTER FOR ENVIRONMENT AND MINERAL RESOURCES

PREFACE

The Ministry of Environment and Mineral Resources plays a key role in advancing the national social and economic agenda on economic recovery and poverty reduction strategies through sustainable management of the environment.

While it has been recognized that environmental resources contribute significantly to the social and economic development, the benefits have not been fully realised mainly due to a weak policy; legal and institutional frameworks and lack of valuation and accounting instruments for environmental resources. Efforts are underway to review and strengthen the environmental policies and legislative frameworks in addition the Ministry will institute appropriate reforms to enhance sustainable management of the environment.

To address the sector challenges, the Ministry of Environment and Mineral Resources is committed to, among other things, the full implementation of the Environmental Management Co-ordination Act (1999) and the reviewing of the Mining Act of 1940 among other legislations. The implementation of the National Biodiversity Strategy and Action Plan, the National Action Plan to Combat Desertification and the National Bio-safety Act (2009) will be prioritised during the plan period (2008-2012). In addition, the Ministry will both articulate and implement the country's commitment to global and regional environmental conventions, including Agenda 21 on sustainable development, the Millennium Development Goals and the NEPAD initiative. The Ministry will also take the lead in advancing a sector-wide approach to sustainable management of environment.

This strategic plan has five key strategic objectives. These objectives address sustainable management of environmental resources; strategic response to climate change optimal exploitation of environmental resources (e.g. mineral resources) and resource mobilization and utilization. The implementation of this Strategic Plan calls for active participation of stakeholders at all levels.

To enhance participatory management, the Ministry commits itself to review current environmental policies (for instance, Sessional Paper No. 6 of 1999) and environmental legislation. Issues and related challenges on environmental resources management, conservation and protection of water catchment areas, Climate Change, gender mainstreaming and capacity building have been captured in a clear and synergistic manner. This will provide a framework within which all the sectors will cooperate and work together to achieve common goals.

Our achievements over the last three years since the inauguration of the 1st Strategic Plan (2006-2010) are the building blocks for this revised strategic plan, which is expected to be from 2008-2012. Having reviewed the progress made so far. It is apparent that much more remains to be accomplished. It is my ample believe that, given the right environment, the ministry together with the staff will ensure the target set in this Strategic Plan will be met over the remaining period. This Strategic Plan has taken to account the aspirations and commitment to excel regionally and indeed globally in environment stewardship and delivery of quality and prompt services to all citizens.

This Revised Strategic Plan has been developed through comprehensive consultative process, mainly with the Departments, Parastatals, Divisions and Sections of this Ministry. We as a Ministry are grateful for the comments and editorial insights provided at the various stages of the preparation process by the stakeholders.

The Minister for Environment and Mineral Resources, Hon. John N. Michuki, EGH, M.P., besides providing the necessary visionary and able leadership, gave invaluable contributions especially on the direction he wanted the Ministry to take.

I would like to thank the staff of this Ministry for their enthusiasm, commitment and dedication in the preparation of this Plan; particularly, the Environment Directorate and Planning Unit for coordinating the process to its completion. I also wish to thank specifically the efforts and roles played by the Development Partners and Stakeholders in diverse areas of Environmental Management, without whose contributions nothing much could be achieved by the Government alone.

Lawrence N. Lenayapa, CBS
PERMANENT SECRETARY

EXECUTIVE SUMMARY

Introduction

In March 2008, the Government developed a new format for Strategic Plans to align them with Vision 2030. Ministries were therefore required to review their strategic plans which had been based on economic recovery strategy for wealth and employment creation whose term expired in December 2007

This revised Strategic Plan (2008-2012) recognises that the environment goes beyond national boundaries and the Ministry has the responsibility of negotiating and implementing cross-border agreements on environmental management (through for example the East African Community). The Ministry also leads in the implementation of international conventions (the Multi-lateral Environmental Agreements or MEAs).

The core functions of the Ministry, therefore, include:

- Policy formulation and harmonization for environmental governance;
- Management of the environment, both through programmes directly, and through ensuring that other sectors include environmental safeguards;
- Supporting mineral exploration and mining; and ensuring resource survey, geo-database development and seismology sensing;
- Meteorological data collection, exchange, processing, analysis, forecasting and dissemination;
- Oversight of major programmes: e.g. The Lake Victoria Environment Management Programme, Nairobi River Rehabilitation, Poverty-Environment Initiative; and
- Coordination of cross-sectoral task forces such as Climate Change, bio-fuels, carbon issues, catchment management.

In the implementation of its functions, the Ministry is faced with numerous challenges including inadequate policies, weak implementation of existing policies, inadequate legal and institutional frameworks and capacity to instigate and sustain change. Some of the identified measures to overcome these challenges include:

- Reform of sector policies, legal, and institutional frameworks;
- Capacity building and institutional strengthening;
- Initiating and sustaining strategic partnerships; and
- Enforcing compliance to environmental standards, guidelines and regulations.

Vision

A clean, secure and sustainably manage environment and mineral resources conducive for national prosperity.

Mission

To promote, conserve, protect, monitor and sustainably manage the environment and mineral resources for national development.

Strategic Objectives

There are five strategic objectives to achieve the mission:

1. To improve institutional, policy, legal and regulatory framework for a sustainable environment that allows effective coordination at horizontal and vertical levels of Government and with the private sector and civil society;
2. To mainstream environmental, climate and mineral concerns into overall planning, implementation and monitoring of Government and partners, so as to reduce environmental degradation and strengthen the role of environment and natural resources in reducing poverty;
3. To ensure that all units within Ministerial departments and partners have clear roles and mandates, with sufficient trained staff and resources to implement and monitor their responsibilities effectively and efficiently;
4. To raise real awareness of the importance of environmental matters within national and local political leaders; stressing social and economic importance as well as ecological consequences. Key issues for inclusion include monitoring, mitigation and adaptation to Climate Change, Water resources development and management, Sustainable Land Management, tap on Carbon markets through carbon trading and Reducing the carbon footprint of Government, etc.; and
5. To generate, disseminate and use knowledge and information for the better conservation and management of environment and natural resources.

Implementation of the Strategic Plan

The implementation of this Strategic Plan calls for mobilization of new and additional resources. This is especially true given the looming challenges of strengthening capacity for monitoring, evaluation, mitigation and adapting to Climate Change and resource mobilization and management. Strategies for Resource Mobilization include:

- i. Efficient and effective utilization of available resources and mobilisation;
- ii. Off- loading of the non-core functions of the Ministry;
- iii. Strengthening of partnerships and especially private sector and other stakeholders involvement in environmental conservation and natural resources management; and
- iv. More effective linkages with donor partners, and offshore funding.

Monitoring and Evaluation

The Ministry has two distinct tasks in Monitoring and Evaluation (M&E). These are:

- The responsibility to ensure that the environment is monitored, and the results of this monitoring are; **a)** disseminated through reports such as the State of the Environment Report, and **b)** that monitoring results feed back into resource management through adaptive management practices and feedback loops.
- Monitoring and Evaluation (M&E) of this Strategic Plan will be undertaken at all levels of its implementation.

1 INTRODUCTION

1.1 Background

The Government of Kenya has embarked on a major process of governance reforms during the past five years. This has culminated in a much stronger results oriented planning framework for all sectors of government. The Strategic Planning process is linked to needs- based budgeting; goal-based annual work-plans and much greater accountability for achieving expected results by sector leaders.

The details of the Ministerial Strategic Plan Process are set out in the directives and guidelines from the Office of the Prime Minister (Ministry of State for Planning, National Development and Vision 2030) dated 11 July 2008. This revises procedures and formats for the Strategic Plans, of which the first were developed in 2005/6 and were expected to last until 2010. The revision of the Ministry's Strategic Plan is meant to incorporate the provisions of Vision 2030, and its component First Medium Term Plan (MTP) of 2008 to 2012. The first Strategic Plan (2006-2010) of the Ministry was anchored on the national framework on the Economic Recovery Strategy for Wealth and Employment Creation (ERS-WEC) 2003-2007. This framework set out sustainable management of environment and natural resources in the provision of an enabling environment for accelerated economic growth and poverty reduction..

The Strategic Plans is the Government of Kenya's main tool for ensuring development effectiveness and will align national development priorities, expected outcomes and general results, with budget levels. It will be the basis for identifying deliverables under the Performance Contracting Mechanism and individual Annual Performance Appraisal.

The Strategic Plan revised is anchored on the Vision 2030's first Medium Term Plan for 2008 – 2012. In revising this Strategic Plans Ministry employed participatory approach, relying on the consensus of stakeholder groups, including civil society, the private sector and donor partners.

As a government requirement Strategic Plans have to be linked to the Medium Term Expenditure Framework's budget process; as well as to Human Resource planning. This will ensure both financial sustainability and human capacity to facilitate successful adoption and implementation.

The Plans should be based on best practice, ability to accommodate risk, and have an adequate Monitoring and Evaluation capability to allow adaptive management and implementation.

1.1.1 The Ministry's Mandate

The mandate is detailed in the Presidential Circular No. 1 of May 2008 as:

“To protect, conserve and manage the environment and mineral resources through sustainable exploitation for socio-economic and political development”

1.1.2 The Vision¹

In developing and implementing this Strategic Plan, the Ministry is guided by the vision:

“A clean, secure and sustainably managed environment and mineral resources conducive for national prosperity”

¹ The developing Environmental Policy has its vision as: “A prosperous Nation where a healthy and ecologically viable environment provides sustained economic and social benefits to all Kenyans both present and future”

1.3 Mission

The mission statement of the Ministry is:

“To promote, conserve, protect, monitor and sustainably manage the environment and mineral resources for national development”

1.1.3 Core Functions:

The core functions of MEMR are:

- Develop and review policies, legislation, regulations, standards and guidelines;
- Protect and Conserve the environment
- Mainstream environmental concerns into sectoral policies, development plans, projects and programmes.
- Enhance sustainable management of the environment.
- Enhance national capacity for environmental management;
- Strengthen detection and early warning systems for improved national disaster preparedness; and
- Generate, manage, monitor, evaluate, and disseminate environmental data and information.

1.1.4 Core Values

In pursuit of the vision and mission, the Ministry will be guided by fundamental values that will define the culture and unity of purpose of the Ministry. These values were stipulated in the Ministry’s Code of Conducts and Service Charter. These core values include:

- Transparency and accountability
- Professionalism
- Team spirit, courtesy, and respect
- Efficiency and effectiveness
- Commitment to results and service

1.1.5 The principles that will govern environmental management include:

1. Right to a clean and healthy environment

All Kenyans are entitled to the social / economic benefits arising from a healthy and clean environment, and are responsible for protecting, conserving and managing that environment.

2. Environment and development

Integration of sound environment management is required within all sectors as well as the adoption of an integrated planning framework within the context of long-term (e.g. Vision 2030) and medium term development plans.

3. True economic value

The full economic value of the environmental goods and services will be incorporated in the national accounting systems, envisioned in this strategic plan.

4. Good governance

It is the responsibility of the Government to create an enabling environment to promote environmental stewardship. All stakeholders must base this on the fulfilment of legislative and

executive obligations and acceptance of authority, responsibility, transparency as well as accountability.

5. Public participation and inclusiveness

The government will ensure that all stakeholders are fully engaged in sustainable management of the environment.

6. Legitimacy of ethical, social and cultural values

Indigenous knowledge and technologies by various communities in the country and its potential in supporting the conservation and wise use of the environment and natural resources will be promoted and utilized.

7. Polluter Pays Principle

The polluter whose actions in a cost to any third party and/or cause environmental damage must meet the cost of environmental restoration and compensation to a third party.

8. Precautionary Principle

The principle embraces the need to apply cautious approach in order to prevent and avert negative impacts on the environment and on other people's environmental rights arising from various activities. The principle will also enhance mechanisms for early warning for disaster aversion.

9. Joint Management of Trans-boundary Environmental Resources

Partnerships for harmonization on environmental policies and laws as well as the sharing of scientific knowledge and information will be nurtured and promoted

10. Access and Benefit Sharing

Equity and access to resources through acceptable models of benefit sharing among stakeholders will be embraced

1.2 Methodology

The Ministry undertook a review 2006-2010 strategic plan in line with aspirations of Vision 2030 and MTP 2008-2012. The following steps were undertaken in the process:

- Situational Analysis
- Political, Economic, Social, Technologies Environment and Legal Analysis- PESTEL
- Stakeholder consultations- internal and external
- Modeling Scenarios
- Risk Analysis
- Validation Workshop
- Launching of the Revised Strategic Plan 2008-2012

1.3 Structure of the Strategic Plan

This Strategic Plan is organized into 8 chapters. This is based on the structure contained in the Ministry of Planning Circular released in March 2008. The chapters have been organized as follows:

- **Chapter 1** presents an introduction which gives background of the Ministry of Environment and Mineral Resources including its mandate, vision, mission, key functions, goals, core values, governing principle, methodology and strategic Plan structure.

- **Chapter 2** gives an outline on key development challenges affecting the environment sector.
- **Chapter 3** presents a discussion on Kenya's development agenda as set out in Vision 2030 and outlines the Ministry's role in achieving them.
- **Chapter 4** undertakes a situational analysis through reviewing of the Ministry's first Strategic Plan 2006-2010 and the current scenario.
- **Chapter 5** discusses lessons learnt through a critique of the previous Strategic Plan.
- **Chapter 6** presents the strategic focus outlining the policy direction over the next 3 years through 2012 by incisive look at intention of strategic plan, focus, goals, linkages and coordination framework.
- **Chapter 7** presents a detailed discussion on resource mobilization, strategies for successful implementation of the plan and resource flows, accountability and risks
- **Chapter 8** discusses the implementation framework, monitoring and evaluation mechanisms and capacity building.

2 DEVELOPMENT CHALLENGES

2.1 Introduction

According to the country's development blueprint (Vision 2030), the country's GDP is targeted to grow at an average rate of 10 per cent per annum. This growth will depend on key sectors such as, agriculture, tourism, manufacturing and energy, which rely heavily on exploitation of environment resources. Major developments as anticipated by Vision 2030 will result in several development challenges including; increased pollution levels, high volumes of wastes, land degradation and overall decline of environmental quality.

Kenya's current institutional framework to manage the environment is still characterized by fragmentation. Various aspects of the environment policy cut across different institutions. Although the Environment Management and Coordination Act (EMCA 1999) was enacted with the primary objective of improving the coordination and management of the environment, legislation of relevant secondary laws and regulations have not yet been completed and harmonized. Policy and institutional reform for stricter enforcement, therefore, poses a big challenge that must be overcome by Vision 2030. Whereas Kenya has in the past made considerable efforts, domestically and internationally, to promote sound environmental policies, the country continues to face the following challenges:

2.1 Sustainable management of environmental resources

Over the years Kenya's population has dramatically increased from 10 million in 1969 to an estimated 36 million in 2009. This population growth has exerted pressure on environmental resources such as, water, land, forests, fisheries as well as depletion of renewable and non-renewable energy resources among others, thus posing challenges to sustainable environmental management and food security. Continued degradation of protected areas and fragile ecosystems like, wetlands, hilltops, marine and freshwater environments, therefore call for focused interventions.

2.2 Sustainable management of mineral resources

The country possesses substantial untapped mineral resources that remain largely under-explored and under-developed, hence the overall contribution of the sector to the GDP is only about 1%. The Government is therefore, finalizing the creation of an enabling fiscal and legislative framework with a view to attracting increased investments in the mineral sector.

2.3 Loss of biodiversity

Kenya has a wide range of ecosystems, including marine, coastal and freshwater lakes rich in biodiversity. These ecosystems are important sources of livelihood (providing food, beverages, medicines and oil production etc) and have a big contribution to make in the economic development process projected in the Kenya's Vision 2030. However, at the moment, they remain largely undeveloped due to lack of a comprehensive policy. Furthermore invasive alien species such as, *Prosopis juliflora* and water hyacinth, continue to be major threats to environmental integrity. Lack of a biodiversity inventory and inadequate procedures for access and benefit sharing for biodiversity remain key challenges for the country.

2.4 Climate Change and Desertification

Over 70 % of natural disasters affecting the country are weather-related. In the recent past, there has been an increase in frequency, magnitude and severity of climate related disasters. Increasing trends of prolonged droughts coupled with unsustainable land use practices particularly in arid and semi-arid areas has given rise to increased rates of land degradation. Consequently, desertification is on the rise.

3 KENYA'S DEVELOPMENT AGENDA

3.1 Introduction

The challenges referred to in Chapter 2, are to be met by a comprehensive Development Agenda that is also set out in the Kenya Vision 2030. In addition, education for sustainable development as well as environmental education and awareness will constitute major approaches for informed decisions and realization Kenya's development agenda.

3.2 Vision 2030 and the first Medium Term Plan

The vision for the environmental sector is "a nation living in a clean, secure and sustainable environment". The Vision is inspired by the principle of sustainable development and by the need for equity in access to the benefits of a clean and secure environment.

In order to deliver on the Vision, four strategic thrusts were identified for the environment sector based on their relationship to the economic and political pillar. The overall goal of this thrust is to conserve the state of environment for economic growth. Concrete goals based on the current status and identified benchmarks were set for 2012. These are as outlined below:-

3.2.1 Economic Pillar

3.2.1.1 Conservation

Conservation of the environment is necessary for assured sustainable flow of environmental goods and services to support national development. Strategies for conservation include rehabilitation of degraded landscape, user compensation for environmental services, promote sustainable and affordable technologies in environmental management, secure wildlife corridors and migratory routes, secure fragile ecosystems and intensify exploration of new minerals, increase sustainable extraction of marine resources, promote education and awareness initiatives for environmental management.

3.2.2 Social Pillar

3.2.2.1 Arid and Semi-Arid Lands and High-Risk Disaster Zones

There are four goals, which are aimed at reducing the effects of desertification and disasters in the country. These are:

- Substantially reduce losses due to floods and droughts;
- Establish national trends and impacts of Climate Change on sensitive sectors;
- Pilot 5 Climate Change adaptation and mitigation programmes;
- Strengthen capacities of communities to mitigate desertification; and
- Improve disaster preparedness and mitigation.

3.2.2.2 Pollution and Waste Management

Reducing hazards related to an unhealthy environment is the main goal. Development of solid waste management systems and up-scaling existing initiatives in at least five municipalities and in the special economic zones will ensure a clean, healthy and secure environment. Regulations on the use of plastic bags and other hazardous products sustained as well as enforcement of environmental regulations will be instituted. Implementation of pollution and waste management programs will be anchored on public/private partnerships.

3.2.3 Political Pillar

3.2.3.1 Environmental Planning and Governance

The Goals aim to integrate planning approaches and improve overall governance of the environment. Specific goals include:

- Upgradation capacity for enhanced information coverage and application;
- Entrenching the development and use of Strategic Environment Assessments and National Environment Action Plans;
- Harmonization environment related laws and policies at National and Regional levels;
- Strengthening institutional capacities;
- Developing and apply incentives for compliance with environmental laws and regulation;
- Strengthening negotiation skills on Multilateral Environmental Agreements (MEAs) and enhancing their co-ordination as well as implementation;
- Enforce all environmental regulations, standards and guidelines; and
- Attracting at least 3 Clean Development Mechanisms (CDM) projects per year in over the next four years.

3.3 Linking Environmental Management Agenda to Vision 2030

The development of Kenya is described in detail in the Kenya Vision 2030. In the vision the Environment Sector is placed under the Social Pillar, and has cross-cutting responsibilities to the other sectors – ensuring environmental sustainability.

In the vision, Kenya's GDP is expected to grow at an average rate of 10 per cent per annum within the next five years as contained in Medium Term Plan 2008-2012. This growth will affect the environment significantly, both positively and negatively. Major developments projected by the vision will lead to increased pollution and degradation of the environment. To address these issues, the Ministry of Environment and Mineral Resources has formulated programmes and projects geared towards sustainable environmental management. These programmes and projects will be implemented in the next four years as outlined in this strategic plan.

3.3.1 National Flagship Programmes

The flagship Projects for the Environment area include:

- The water catchment management initiative;
- Securing the wildlife corridors and migratory routes initiative;
- The solid waste management system initiative;
- The plastic bags initiative; and
- The land cover and land-use mapping initiative.

3.3.2 Specific Environment Programmes

Specific Environment Programmes have been presented in the following table against each flagship project.

National Flagship Programmes	Specific Environment Programmes	Institutions responsible
<i>The water catchment management initiative</i>	<ul style="list-style-type: none"> • Conservation and protection of the five critical water towers that is; Mau Complex, Mount Elgon, Cherangani Hills, Aberdare Ranges, Mt. Kenya. • Restoration of degraded river basin systems (e.g. Nairobi River Basin, Lake Turkana river basin, Ewaso Ngiro and Lake Victoria, Aberdare and Mt. Kenya- Bio-Carbon Initiative) • Development and Promotion of Carbon trading • Promotion of sustainable land management • Mapping, inventory, Protection and conservation of wetlands and fragile ecosystems 	MEMR, DRSSRS, NEMA
<i>Securing the wildlife corridors and migratory routes initiative</i>	<ul style="list-style-type: none"> • Land for money programme aimed at buying out private plots and property constructed along the migratory routes and corridors • Mapping and gazetting wildlife migratory corridors. • Create awareness on migratory corridors. • Promote sustainable use of land adjacent to migratory corridors 	MEMR, NEMA, DRSSRS, MGD.
<i>The solid waste management system initiative</i>	<ul style="list-style-type: none"> • Development and maintenance of sanitary landfills and promotion of safe disposal of solid and liquid waste. • Promotion of reduce, reuse and recycle • Public-Private partnerships in waste management • Environmental Education and awareness on environmental management. 	NEMA, MEMR
<i>The plastic bags initiative</i>	<ul style="list-style-type: none"> • Promotion of clean and sustainable environment through progressive reduction on usage and damping of plastic bags. • Development and promotion of bio-degradable packaging materials 	NEMA, MEMR
<i>The land cover and land use mapping initiative</i>	<ul style="list-style-type: none"> • Resource surveys and remote sensing for sustainable environmental management • Land use mapping • Livestock, wildlife census, and crops forecasting 	DRSSRS, KMD, MEMR
<i>The Meteorological Systems Modernisation Programme</i>	<ul style="list-style-type: none"> • Tsunami early warning systems; • Tidal gauge station, marine automatic weather systems and seismic systems; and • Introduction of dynamic modelling capabilities for prediction of weather and climate. 	KMD, MEMR, DRSSRS, MGD
<i>Weather Modification Programme</i>	<ul style="list-style-type: none"> • Establishment of cloud chamber laboratory for rainfall enhancement. • Hailstone suppression • Enhancing air quality measurement for EIA and pollution management; • Enhancement of flash flood forecasting; and • Strengthen research on fog and frost suppression in the high-ground areas of Kenya. 	KMD, MEMR, NEMA, DRSSRS

<p><i>Mineral Resources Management</i></p>	<ul style="list-style-type: none"> • Geological mapping; • Mineral exploration and evaluation; • Co-ordination and regulation of the mining sector; • Establishment of mineral and mining database; • Geo-hazard mapping; • Promotion of small scale mining and awareness; • Geo- tourism site-mapping; and • Awareness creation. 	<p>MGD, MEMR, NEMA</p>
<p><i>Cross-cutting issues</i></p>	<ul style="list-style-type: none"> • Development and implementation of National Climate Change response strategy; • Development and promotion of Initiatives for mainstreaming poverty reduction in environment programmes; • Developing and implementation of initiatives to combat desertification; • Mainstreaming gender in environmental governance; • Promotion of HIV and AIDS prevention and awareness; • Development and promotion of youth driven environmental conservation initiatives (<i>Kazi kwa vijana</i>); • Development and implementation of volunteer and internship environmental initiatives; • Promotion of school-based partnerships and clubs in environmental conservation and management; and • Awareness creation on prevention of drugs and substance abuse. 	<p>MGD, MEMR, NEMA, DRSSRS, KMD</p>

4 REVIEW OF THE STRATEGIC PLAN 2006-2010

4.1 Introduction

The review of the first Strategic Plan 2006-2010 was necessitated by the adoption of Vision 2030 as the development Blue print for the country and subsequent development of Medium-Term Plan. The re-organization of the Government in 2008 also necessitated revision of the Strategic Plan to conform to the new mandate and structure of the Ministry.

This chapter presents gap analysis, challenges experienced and lessons learnt. Arising from implantation of the first Strategic Plan 2006-2010.

4.1 Gap Analysis

The gap analysis seeks to identify the variance between planned activities and the achievements realized so far in the implementation of the first Strategic Plan. Table 4.1 shows the Weaknesses and Failures and Strengths and Successes and Table 4.2 shows the analysis against each activity previously covered in the Strategic Plan 2006-2010.

Table 4.1 Weaknesses and failures Strengths and Successes of the First Version of the Strategic Plan

Weaknesses and failures of the First Version of the Strategic Plan
1 No clear distinction between the role of the Ministry and the role of Ministerial Departments and NEMA (the only major Parastatal in the Ministry).
2 Lack of logic in the selection and status of Objectives (different hierarchies and statuses).
3 Implementation plans were complex – combining log frame, M&E function, budgets and work-plan.
4 The M & E processes remain largely incomplete, reducing oversight of plan completion.
5 The lack of focus on Climate Change issues.
6 Little linkage to Vision 2030 and to the MTP process.
7 Kenya has yet to internalize ² and implement many of the provisions of the MEAs.
Strengths and Successes of the First Version of the Plan
1 Many achievements including the creation of Kenya Forest Service (now in a separate Ministry),
2 Conclusion of Policy and revision of mining Act for Mines & Geology and are now before Cabinet.
3 Approval of new Ministerial Directorate of Environment and now Directorate is in place.
4 Several high-profile environmental programmes – including Plastic-bag reduction, Clean up of Nairobi River, Phase 2 of Lake Victoria Programme, and Poverty Environment Initiative (PEI) were designed and introduced.
5 NEMA has instituted EIA processes, and developed instruments for environmental governance, and started the process of implementation.
6 There is greater morale and commitment among the Ministry Staff.

² “internalize” is preferred to “domesticate”, meaning to turn global work programmes into relevant national planning processes

Table 4.2 Progress made within the first two years of implementation of the first phase Strategic Plan

Objectives and Activities	Comment
<p>Strategic objective 1: To create an enabling environment through policy, legal and regulatory reforms for management of the environment and natural resources.</p> <p>Outcome 1: Improved institutional, policy, legal and regulatory framework for sustainable environmental and natural resources management.</p> <p><i>Activity 1: Establishment of Environment and Natural Resources Reform Secretariat.</i> <i>Activity 2: Review of the Mining Act (Cap. 306).</i> Activity 3: Develop Environmental Policy <i>Activity 4: Review Forestry Policy</i> <i>Activity 5: Review Minerals and Mining policy</i> Activity 6: Develop natural resource survey information policy and legal framework Activity 7: Restructuring Institutions in the Ministry</p> <ul style="list-style-type: none"> • Forest Department to Kenya Forest Service, • Mines and Geological Department, • DRSRS, • Department of Environment and Policy Analysis, • Department of Administration <p><i>Activity 8: Operationalization of the Forests Act (2005)</i></p>	<p><i>Underway</i></p> <p><i>Much completed</i></p> <p><i>Now the DE</i></p> <p><i>Before Parliament Ready by July</i> <i>Completed now in MFW</i> <i>Before Cabinet Starting complete</i> <i>Starting after Act Starting</i> <i>Now DoE Completed</i> <i>Done</i> <i>Done</i></p>
<p>Strategic Objective 2: To protect, conserve, utilize and sustainably manage the environment and natural resources.</p> <p>Outcome 2: Improved quality of the environment and optimal utilization of natural resources</p> <p><i>Activity 1: Forest protection, reforestation and rehabilitation of degraded areas</i> <i>Activity 2: Promotion of mineral resources development</i> Activity 3: Developing and advocating regional and global agenda on the management of environment and natural resources</p>	<p>This is the purpose of Ministry NOT one Objective</p> <p>Improving</p> <p>Mandate of KFS Within DMG policy Role of DoE</p>
<p>Strategic objective 3: To generate knowledge and technologies towards sustainable management of environment and natural resources.</p> <p>Outcome 3: Improved technological and knowledge base for sustainable management of environment and natural resources.</p> <p><i>Activity 1: Develop geo-databases for sustainable natural resource management</i> <i>Activity 2: Research, develop and disseminate technologies in natural resources management.</i> Activity 3: Collect, analyze and disseminate information on natural resources and environment Activity: 4 Develop information products and distribution mechanisms Activity: 5 Carry out awareness and sensitization campaigns Activity 6: Carry out geological surveys and mineral exploration Activity 7: Establish a national seismological network for detecting earth movements. Activity 8: Regulate use of commercial explosives.</p>	<p>Some progress made to these objectives, tangible outputs were not ready. This started</p> <p>Loss of forestry took away gains (e.g. improved kilns) Collection – yes, analytical output less so. But see good ATLAS of Kenya Environment (with ILRI) Started Routine work</p>

<p><i>Activity: 9. Implement integrated information management systems</i> <i>Activity 10 / 12: Develop a ministerial ICT Strategy, Committee & Infrastructure</i></p>	<p>Delayed Underway Underway, upgrade unit</p>
<p>Strategic Objective 4: To establish and support partnerships with relevant stakeholders. Outcome 4: Enhanced and sustainable partnerships for improved environment and natural resources management.</p> <p><i>Activity 1: Establish and strengthen partnership with communities and other stakeholders on environment and natural resources management</i> <i>Activity 2: Collaborate with stakeholders in promoting appropriate environment and natural resource management using community action plans</i></p>	<p>Partnerships were developing within the forest sub-sector</p>
<p>Strategic objective 5: To strengthen capacity in the environment and natural resources management. Outcome 5: Improved human and institutional capacity in the management of environment and natural resources.</p> <p><i>Activity 1: Enhance staffing levels</i> <i>Activity 2: Train manpower in relevant skills in environment and natural resource management</i> <i>Activity 3: Strengthen Ministerial training centre/ institutes</i> <i>Activity 4: Procure and upgrade existing equipment and facilities</i> <i>Activity 5: Mainstreaming gender in the management of environment and natural resources</i> <i>Activity 6: Sensitize staff on HIV / AIDS</i> <i>Activity 7: Implementing of public service integrity programmes</i> <i>Activity 8: Improve finance mobilization and utilization</i></p>	<p>A number of short-term trainings have been successful. Several officers are on University training for higher degrees.</p>
<p>Strategic objective 6: To mainstream environmental concerns into overall Planning and implementation of programmes and projects Outcome 6: Sustainable management of environment and natural resources that takes cognisance of environmental valuation.</p> <p><i>Activity 1: Strengthen National Environment Action Planning, Provincial and District Planning Committees to mainstream environmental issues into overall planning and implementation of programmes and projects</i> <i>Activity 2: Strengthen use of DEAPs, PEAPs and NEAP</i> <i>Activity 3: Conduct training to Natural Resource Managers on environmental economics and valuation techniques</i> <i>Activity 4: Support the development of sustainable pilot projects. Generate pilot projects to demonstrate both their economic and environmental sustainability</i> <i>Activity 5: Document lessons learnt and best practices</i></p>	<p>Mainstreaming started, the PEI project provides capacity</p>
<p>Strategic objective 7: To integrate and strengthen monitoring and evaluation in the implementation of the plan</p> <p>Outcome 7: A strengthened, integrated, and results-based monitoring and evaluation system for effective implementation of the Strategic Plan.</p> <p><i>Activity 1: Develop a framework to integrate M&E in all activities</i> <i>Activity 2: Develop and maintain a database of all programmes and projects</i></p>	<p>A clear Framework has yet to be put into place</p>

4.2 Challenges Experienced

Several challenges were faced during the implementation of Strategic Plan 2006-2010. Some of these challenges include:

- lack of appropriate mechanisms for implementation of the plan
- lack of individual initiative in implementing operational plans
- lack of monitoring and evaluation system
- inadequate staffing levels
- high staff turnover especially in the departments
- inadequate budgetary allocation and
- Lack of sufficient political goodwill for reforms in the environment sector.

4.3 Lessons Learnt

The following key lessons have been learned in the implementation of the first Strategic Plan:

- Objectives need to be SMART – Specific, measurable, attainable, realistic and time bound
- Activities on the other hand need to be fewer and properly prioritised
- Both staff and stakeholders need to own the plan to ensure its success
- Success of the plan depend on each member of the staff discharging specific duties assigned to the effectively
- The support of other arms of government and stakeholders are critical to the success of the plan
- The Ministry needs to aggressively improve its image rating among the public
- Departmental responsibility for implementation of the plan were not clearly delineated as Departments did not have their own Strategic Plans
- Monitoring and evaluation should be an integral part of the Strategic Plan
- Leadership is essential for any success of strategic planning

These lessons learnt have informed the current Strategic Plan formulation and re-orientation of the Ministry's strategic objectives as discussed in this Strategy.

5 SITUATION ANALYSIS

5.1 Introduction

This chapter provides a detailed analysis of how internal and external environments impact on the operation of the Ministry of Environment and Mineral Resources. It also attempts to analyse key stakeholders and evaluate the Ministry's performance. This is important because all these aspects influence the success of the Ministry in achieving its mandate. The internal environment explores the strengths and weaknesses of the Ministry. It shows the capabilities and competencies the Ministry has accumulated over time and therefore at the Ministry's disposal to apply for the betterment of implementation of subsequent Strategic Plans. The stakeholders analysis assists in identifying those organizations the Ministry depends or interacts with for the successful delivery of its mandate. This is because the Ministry must design strategies that ensure that key stakeholders' interests are addressed for effective and efficient collaboration. It is on this basis that situational analysis on strategic issues and strategic activities are analysed and determined.

5.2 Internal Environment Analysis

The analysis is aimed at identifying the strengths and weakness of the Ministry. This was achieved through a SWOT –Strengths, Weaknesses, Opportunities and Threats analysis.

5.2.1 Strengths

The Strengths of the Ministry include: An institutional structure comprising of specialised technical departments and SAGA(s), a team of qualified and experienced staff, a solid and credible wealth of experience in environment and natural resource management, and a clear mandate to manage environment and natural resources.

5.2.2 Weaknesses

On the other hand, the Ministry has several weaknesses that are capacity and functional- output related, which include: low budgetary allocations, inadequate facilities and equipment, understaffing, weak monitoring and evaluation mechanisms, weak policy framework, weak enforcement of rules and regulations, weak information sharing framework, and weak and unsustainable partnerships with stakeholders. There are hardly any functional cross-sectoral technical committees to deal with key issues such as climate change, bio-fuel, charcoal burning among others and where they exist they are still weak or in formative stages

These weaknesses may be categorized in detail as:

- i. Inadequate institutional and individual capacities within the Ministry;
- ii. Uncertain functions and mandates of the Ministry, with weak ToRs affecting both institution and individual capacities; Overlapping and conflicting mandates within and between the Ministry's institutions and other Ministries arising from unclear ToRs and interpretations;
- iii. Weak and inadequate Environmental and related Policies;
- iv. Inadequate understanding of EMCA (1999) and how it relates to other Sectoral legislations;
- v. Inadequate and effective institutional framework for implementation of environmental management as provided by EMCA (1999);
- vi. The "silo" mentality of individual sections in the Ministry, and a low culture of information sharing;
- vii. Inadequate capacity for monitoring environmental trends;

- viii. Low usage of monitoring and evaluation information in adaptive management, and its application in assessing the effectiveness of the Ministry interventions;
- ix. Inadequate involvement of civil society, institutions of higher learning and private sector in environmental management decision making process;
- x. Weak data collection methodologies, storage and access in the entire area of environment and natural resources;
- xi. Inadequate environmental education and awareness at all levels;
- xii. Conflicts between short-term economic interests and long-term sustainable benefits hence compromising sustainability of the environment;
- xiii. Few domesticated environmental standards and weak enforcement of existing standards;
- xiv. Inadequate implementation MEAs; and
- xv. Relatively low funding to environment sector by the Government.³

5.3 External Environment Analysis

5.3.1 Opportunities

Opportunities for improved and effective performance do exist such as; large mineral and other natural resources base for utilization, large markets for minerals and other natural resources domestically, regionally and even internationally. In addition, Kenya enjoys considerable support from development partners' in environment sector, and of late private entrepreneurs. There are many CBOs and NGOs, both national and international that provide support to the environment sector. Kenya has a history of using and developing appropriate technology and innovations, and there is high potential for private investment in the sector. Kenya is rich in indigenous knowledge and traditional cultural values that promote environmental protection and conservation.

5.3.2 Threats

The Ministry is faced with several threats in the discharge of its mandate. For instance there is high population growth rate, (approximately 3% annually), water and other natural resources. Other threats include: political interference and uncertain political will for environmental conservation, encroachment into conservation areas, HIV/AIDS, high staff turnover, poverty and unemployment, natural calamities- e.g. droughts, floods, etc; unsustainable mining and quarrying activities, natural resource use conflicts, invasive species, wasteful and inefficient technologies, corruption, conflicting government policies and legislations and poor environmental governance.

5.4 Overall summary of SWOT analysis

In fulfilling its mandate the Ministry is faced with threats and weaknesses. During the plan period, the Ministry will take advantage of its strengths and opportunities to address these threats and weaknesses. These strengths, weaknesses, threats and opportunities are analysed below Table 5.1:

³ Ministerial Brief May 2008

Table 5.1 Summary of SWOT Analysis.

Internal environment analysis

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • The Ministry is well empowered by the Presidential Circular No. 1 of May 2008; • The Ministry has a competent pool of professional staff spread across its Parastatals and Departments; • The Ministry has got a well spread web of network throughout the country; 	<ul style="list-style-type: none"> • The Ministry has failed to assert its authority on environmental management and coordination; • The Ministry has poor revenue base; • There is weak legal and institutional framework; • There is poor infrastructure; • Inadequacy of reports, library and research materials • Inadequate institutional capacity, and individual capacities within the Ministry; • This in turn stems from uncertain functions and mandates of the Ministry, with weak ToR • Lack of a comprehensive Environmental and related Policies; • Lack of adequate understanding of EMCA (1999) and how it relates to other sectoral legislations; • Lack of an adequate and effective institutional framework for implementation of environmental management as provided by EMCA (1999); • The “silo” mentality of individual sections in the Ministry, and a low culture of sharing information; • Inadequate capacity for monitoring environmental trends, and using this monitoring information in adaptive management, and little use of evaluation of the effectiveness of the Ministry interventions; • Inadequate involvement of civil society, institutions of higher learning and private sector; • Lack of harmonization of data collection methodologies storage and access in the entire area of environment and natural resources; • Lack of adequate environmental education and awareness at all levels; • Conflicts between short-term economic benefits and long-term sustainable interests; • Few environmental standards, lack of insistence on implementing those existing standards; • Little implementation or sharing of the work-programmes of MEAs; and • Relatively low funding in environment.⁴

⁴ Ministerial Brief May 2008

External Environment analysis

OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Large mineral natural resource base for utilization, large markets for natural resources; • Kenya enjoys considerable support from development partners for environment, benefiting from the presence of UNEP • There are many CBOs and NGOs, both national and international that provides support to the environmental sector • Kenya has a history of using and developing appropriate technology and innovations • There is high potential for private investment in the sector • Regional and international treaties and conventions • Kenya still has a set of cultural values that promote conservation, and has abundant labour 	<ul style="list-style-type: none"> • Basically Kenya has a large and still growing population (3% growth rate) that exerts huge pressures on the finite and limited land, water and natural resource base. • Political interference and uncertain political will for environmental conservation • Encroachment into conservation areas • HIV/AIDS • High staff turnover • Poverty and unemployment • Natural calamities- e.g. droughts, floods, etc; • Internal and external instability • Growing demand for mining permits • Land use conflicts • Invasive species • Wasteful and inefficient technologies • Corruption • Conflicting policies

5.4 PESTEL analysis

These issues are subjected to a “**PESTEL**” (Political, Economic, Social, Technological, Environmental and Legal) review as presented in Table 5.3.

Table 5-3 PESTEL matrix of the challenges

No	PESTEL	Local	National	Global
1	Political	Political will through increased buy-in of district council leadership, via greater decentralisation and improved policies	Revised environmental policies and greater use of EMCA provisions for oversight. More cross-sectoral task forces for Sectoral integration. Ensure revised Sectoral policies and legislation where necessary	Greater use of Multilateral Environmental Agreements (MEAs), and increased application of MEAs working strategies
2	Economic	Increased realisation of use of incentives for conservation, especially by use of Payment of Ecosystem Services (PES) schemes,	Developing policy to have greater use of economic cost benefit analysis and use of economic incentives/disincentives for environmental compliance. Develop investment	Greater input to international funding programmes such as REDD and other carbon funds.

			strategies/frameworks f	
3	Social	Greater use of Poverty Environment Initiative (PEI) principles and programmes, pro-poor policies.	Greater involvement of civil society in partnerships. Increased use of social factors included in decision-making.	
4	Technologies	Knowledge management and adoption of best practises and innovations	Scaling up appropriate technologies, sharing best practices.	Cooperation for technology transfer.
5	Environment	Empowerment of local community and user groups to own and manage resources. Greater use and enforcement of district by-laws. Investment into forest, water and ASAL conservation.	Focus on key issues of water catchments, improved use of ASAL lands and addressing problems of climate change. Harmonisation, conflict between increasing agricultural expansion and maintaining wild lands and watershed catchments	Much greater cooperation with Climate Change processes, including both adaptation and mitigation processes; building REDD partnerships. Cross Border collaboration, in e.g. SLM (Sustainable Land Management
6	Legal	Use of DEAPs (District Environmental Action Plans), use of bye-laws	Greater use of EMCA in oversight mechanisms. Enforce EIA processes, with involvement of civil society. Use of PEAPs, NEAPs and other relevant national legal instruments	

An overarching strategy to deal with these threats comes from the need for capacity to use rapid adaptive management that is built on a functional M& E system. Environmental issues are such as the emerging Climate Change, Carbon and Water issues in the past three years (2006-2009). The Ministry is at the forefront in dealing with these emerging issues.

5.5 Stakeholder Analysis

The key stakeholders are the Ministry staff, Parliament, Ministry of Agriculture, Ministry of Water and Irrigation, Ministry of Lands, Ministry of Fisheries Development, Ministry of Forestry and Wildlife, Ministry of Livestock Development, Ministry of Regional Development Authorities, Ministry of Local Authorities, Ministry of Planning, Ministry of Education, Science and Technology, Local Universities- University of Nairobi, Kenyatta University, Egerton University, Moi University, Maseno University, Masinde Muliro, Jomo-Kenyatta University, Bandari College UNDP, UNEP,EAC,LVBC,LVFO,ASERECA,IGAD,FAO, research institutions including KARI,ILRI,RCMRD, KEFRI, KEMFRI, NMK, KEMRI, and national hospitals- Kenyatta National Hospital, NGOs, CBOs , KEPSA, Kenyan citizens among others.

For successful implementation of this Strategic Plan, the Ministry will work closely with various stakeholders among those listed above. The roles and responsibilities of these stakeholders and their contribution to the Ministry towards the fulfilment of its mandate is analysed in the matrix below

Table 5.1 Stakeholder Analysis Matrix

Stakeholders	Roles/responsibilities	Competitive advantage	Potential contribution to MEMR
Local Authorities	-Management of the environment and natural resources in their areas of jurisdiction	- Own land e.g. municipal lands, trust lands, dumping sites e.t.c, -Have local knowledge, -Collaboration, -Established institutions and infrastructures in place.	-Partnerships.; -Provision of infrastructure; -Enforcement, protection, maintenance, awareness creation and advocacy
Development Partners (through for example GoK- Donor Consulting Committee and its sub-committees)	Programme, Projects and technical support	-Finance, - Technical expertise	-Finance, - Technical advice/expertise -Capacity development - Strategic Initiatives
Private Sector (e.g. Kenya Private Sector Association- KEPSA)	-Resource mobilisation -Management of natural resources - Advocacy	-Entrepreneurship -Investment capacity - Finances -Corporate social responsibility - Ownership of resources	-Resources- Finances -Modern technology - Awareness creation - Capacity building - Conservation and management of Environment and Natural Resources through Ministerial stakeholders forums
NGOs, CBOs, FBOs, CSOs, Communities	-Sustainable management of E&NR -Partnership in management of resources -Customers	-Awareness - Resource mobilisation - Advocacy - Networking -Local knowledge -Resource ownership -Cultural values -Abundant labour	-Linkages - Capacity building - Extension - Dissemination - Lobbying -Partnership - Goodwill - Co-ownership
Professional societies	-Promote professional management of E&NR -Improve innovation	-Ethics and standards -Knowledge, Research, analysis and institutional	-Setting of standards in management of E&NR -Lobbying, networking, Policy

Stakeholders	Roles/responsibilities	Competitive advantage	Potential contribution to MEMR
	-Research and Development Policy Formulation	strengthening	Formulation - Capacity building - Research and knowledge sharing - ICT
Legislators-Parliamentarians	-Legislation - Lobbying on environmental issues - Watch-dog	-Constitutional mandate	-Budgetary allocation -Timely enactment of bills - Political good-will - Advocacy at constituency level - Awareness Campaigns
Regional/International bodies	-Cross border resource management -Facilitating policies and legal frameworks harmonisation	-Finance -Lobbying - Networks	-Capacity building - Finances - International lobbying - Technical support - Campaigns
Natural Resource User Associations	-Customers -Custodians and - stakeholders	-Technical know how -Market	-Compliance - Investment in appropriate technologies - Technology transfer - Finances - Partnerships - Co-management
Media	-Dissemination of information - lobbying - Education and awareness	-Wide coverage and communication network -Public trust	-Whistle blowing - Information dissemination - Lobbying - Partnerships - Capacity - Network
Line Ministries/Govt institutions	-Collective responsibility - Accountability - Enforcement - Policy formulation - Bi and Multi- lateral collaborations	-Institutional mandate -Technical expertise -Capacity -Infrastructure	-Synergies -Capacity building - Information generation and dissemination -Resource mobilisation - Co-management -Enforcement -Lobbying - Policy implementation -Partnerships - Technical Expertise

5.6 Ministerial and Partner Institutions

This section focuses first on the departments and Parastatal(s) within Ministry of Environment and Mineral Resources (MEMR); and then analyses the linkages between other ministries and Ministry's departments; firstly within the Productive Sector cluster, and then outside this cluster.

The "Productive Sector" is a planning group of ministries and departments within the Medium Term Plan MTP) and Medium Term Expenditure Review (MTER)⁵. The productive sector is a successor to the Rural Development sector (Agriculture, Livestock, Water, Environment, Forestry and Wildlife); with the addition of industry and trade. This large sector (49% of GDP)

⁵ The MTER is a reporting process of the past years implementation of the MTP.

can be compared with single Ministry sectors such as education or health. Within the Production Sector there is still the “Rural Development Cluster” and the MTP uses other smaller groupings such as “Environment Water and Sanitation (chapter 5.3 of the MTP). Each Ministry is a “sub-sector” within the “Production Sector”.

5.6.1 The Ministry of Environment and Mineral Resources

This is composed of four technical departments / directorates (Mines and Geology, Resource Survey and Remote Sensing, Meteorology and, Environment) and one support Department of Administration and Finance, and one major Parastatal –The National Environment Management Authority NEMA.

The Ministry has been operating in a constantly changing institutional environment characterized by frequent loss and gain of departments, inadequate policies and legal framework. These weaknesses have hampered investments and subsequent development of vital sub-sectors, such as mineral development, meteorological services, information communication technology, resource mapping, waste management, disaster management, as well as the proper functioning of the Ministry in its oversight role.

5.6.2 The Directorate of Environment

The Ministry initially established an Environment Coordination Division at the Headquarters that has technically qualified people charged with the responsibility of review environmental policy. The division provides co-ordination between the Ministry and various agencies and units such as NEMA, PCC and Regional & International bodies on environmental matters. This Division has now evolved into the full Directorate of Environment (DoE). DoE is involved in policy formulation, development and advice on environmental matters in the Ministry. This directorate works in collaboration with NEMA and acts as an entry point in the Ministry for environmental matters.

5.6.3 The Mines and Geological Department

According to Presidential Circular No. 3 of 2003 on the organization of the Government of Kenya, the functions and responsibilities of the Mines and Geological Department are geological surveys, mineral exploration and mining.

The vision of the Department is to be an efficient geological, minerals and mining information centre while its mission is to generate, manage and disseminate geological and mineral and promote sustainable mineral resources development.

The core functions of the Department are:

- Geological surveys, mineral exploration, mineral inventory, research and maintenance of geo-scientific database;
- Formulation of policy relating to exploration and utilization of the country’s mineral resources, and subsequent articulation of these policies into a system of legislative measures;
- Control and regulation of commercial explosives; and
- Control and direction of exploration and mining activities.

5.6.4 Department of Resource Surveys and Remote Sensing

The department maintains a rich database dating back to 1977 on natural resources covering the following thematic areas:

- land use assessment and monitoring;
- land degradation mapping and assessment;
- desertification assessment and monitoring;
- vegetation mapping and monitoring;
- wildlife and livestock numbers, distribution and trends;
- crop yield forecasting and early warning; and
- mapping impacts of natural disasters.

However, the following has hampered data collection:

- outdated equipment;
- inadequate policy;
- low budgetary allocation;
- Inadequate numbers of skilled staff;

In addition there is still a challenge in analysing and disseminating environmental data, and right of access to this data – and at what cost. The department is, therefore, currently formulating a policy and legal framework that will guide on data quality, information sharing, partnerships, intellectual property rights, and early warning systems for food security.

5.6.5 Kenya Meteorological Department

The Department was transferred from the Ministry of Transport in June 2008. It is entrusted with the responsibility of collection, analysis, interpretation, dissemination and archiving of meteorological and climate data. The department has had a long and strong institutional linkage to agriculture (through its weather forecasting and drought early warning systems⁶ etc), aviation and maritime transport. Its importance in providing meteorological information for understanding and responding to Climate Change enhances its mandate within the environment sector.

The objective and purpose of the National Meteorological Services (NMS), as defined by the World Meteorological Organisation (WMO) is provision of early warning information on weather and climate for “Safety of Life, Protection of Property and Conservation of Natural Environment.”

The increasing importance of Climate and Climate Change in the development agenda necessitates the institutional strengthening of the Department of Meteorology, especially in Climate Change Monitoring, Mitigation and Adaptation processes. DM is considering the benefits of SAGA status in order to improve the efficiency and effectiveness of service delivery, including having a legal framework for cost recovery of its services to boost its resource base. Vision 2030 makes increasing reference to adaptation to the rather pessimistic climate scenarios, and the need for increased water and agricultural outputs to meet growing populations.

⁶ The GEF project “Coping with Drought” brings together the Met Department, University Climate Departments, NEMA and Agriculture to specifically strengthen these linkages for the benefit of farming communities.

Improving weather forecasting for the agricultural sector is an immediate priority, as well as provision of improved Meteorological services to aviation, maritime sectors, energy generation and distribution, health and public safety, disaster management, water resources development and management among others.

5.6.6 General Administration and Planning Division

The General Administration and Planning Division comprises the following units; Administration, Planning, ICT, Finance, Accounts, Human Resource Management, Human Resources Development and Procurement. The Division coordinates and support services to the technical Departments for the running of the Ministry.

5.6.7 The Rural Development Cluster (outside Environment)

Forestry Sub-sector

The Forest Sector has been moved to the new Ministry of Forestry and Wildlife. The forest sector was greatly reformed in the last 18 months, in line with the Forest Act (2005), which led to the creation of the now functional Kenya Forest Service. Other reforms include the ecosystem approach in the management of forest resources, which involve the creation of Forest Conservancies and eco-districts. These reforms will ensure direct involvement of a wider range of stakeholders in the management and conservation decision-making.

The Ministry of Environment and Mineral Resources however maintains an interest in the forest sector in many ways, including:

- the oversight role through EMCA
- through resource surveys via DRSRS (fire, wildlife, vegetation cover and mapping)
- through MEMR role in Climate Change, Carbon Sequestration, PES, and invasive species
- through MEMR role in the MEAS, particularly the Convention on Biological Diversity (CBD).

Whilst there is considerable criticism of the past failures of the former Forest Department to curb forest destruction; there is now the political will and the capacity to enforce the law and maintain a vigorous forest cover for national development. The Mau Forest complex offers a test case as to how the EMCA can be used to achieve environmental sustainability, using this essential forest ecosystem (the water tower of western Kenya) as an example.

The past decades have emphasized the fragility of Kenya's small (<2%) amount of land surface with closed forest. Forests have been cleared for land for cultivation, both legally and illegally in the past decade, with Kenya losing over 10% of all closed forest. Further impacts come from over harvesting of wood-fuel as well as timber. Predicted "Climate Change" will reduce forest tolerances and species ranges.

The Wildlife Sector

Like forestry, MEMR maintains an institutional link to the wildlife sub-sector, in that DRSRS is responsible for much of wildlife survey work, and both MEMR and NEMA are accountable through Government for safeguarding the country's biodiversity, including wildlife biodiversity.

The last two years has seen concern at the policy directions for wildlife and land do not offer sufficient incentives to maintain wildlife on private land. And yet few of Kenya's Protected Areas are self-sufficient ecological units – there is a major need to secure the dispersion areas

and migratory routes. This is a major plank of Vision 2030, which wishes to spread and diversify the tourism options in Kenya. Tourism however is a sensitive subject in terms of quality of product. Concern has been reached over the density of tourism investment in the Mara system, and the dilution in quality of a major tourist attraction. There is need to increase the ongoing individual EIA process to a broader SEA looking at the Mara tourism product in totality

Within Vision 2030 the agriculture and livestock flagship projects seek to cultivate one million hectares of unused land and to create disease free livestock zones. These have the potential to impact on wildlife dispersal areas – migratory routes, and so there is a clear need for much policy harmonization (at broad and at localized land-use levels) and further mainstreaming of environmental issues in these Ministries. The EMCA does offer the way forward.

Data documentation by DRSRS has shown the consistent decline in wildlife numbers over the past decades. The reduced value of wildlife (with no opportunity to sell hunting or viewing rights) has increased the rate of decline.

Ministry of Water and Irrigation (MoWI)

The recent MTP includes water and sanitation in a small environment cluster within the Sector. This emphasizes the link between a sustainable and productive environment and the necessary catchment conditions to allow aquifer recharge and maintain dry-season flows.

There are strong relationships between the hydrology sections of MoWI, KMD and DRSRS, in linking climatic data to catchment condition and resultant stream-flow. MEMR will endeavour to increase such technical research collaboration and use this to inform the climate change debate. Technical Task Forces form one way to invoke such partnership.

Globally attention is on water supply, but with 70% of the country being arid or semi-arid in nature water resources are of extreme importance. Yet this decade has seen the continuous loss of water supplies (springs, seepages, wetlands etc) as catchments degrade..

Ministries of Agriculture and Livestock

These are major sub-sectors, with most Kenyans deriving their livelihood from a mixture of crop and livestock activities. Much industry is agro-industry, and this is where much of Kenya's future growth still lies. From an environmental point of view, agriculture has long been seen as a major cause of several ills – including erosion, sedimentation, *eutrophication*, sources of invasive species, and habitat destruction – conversion, through agricultural expansion, often into marginal lands. .

Policy harmonization and mainstreaming issues have been highlighted above under wildlife.

However, the Ministry of Agriculture has been a leading proponent of voluntary EIAs in recent years, with much positive collaboration with the Environment Sector. Further interaction is through the Africa –wide Programme “TerrAfrica” on Sustainable Land Management – focusing on the ASALs. Ministries of Agriculture, Livestock and Arid Lands come together with Environment to develop the Country Strategic Investment Framework (or CSIF), supported by World Bank and other donors. Most human population pressure comes through the agriculture / livestock sector, with overuse and inappropriate use of soil and land resources. Fallow periods shorten and nutrient mining intensifies this pressure.

Ministry of Fisheries

Institutionally the fisheries sector has been placed in several ministries, including Agriculture, Livestock Natural Resources, now it stands alone. The sector is complex, with both fresh-

water and marine components; with challenges in expanding production whilst keeping fisheries within sustainable limits. Impacts on fisheries apart from the obvious over-harvesting, include catchment degradation and pollution, leading to reduced water volumes, increased sedimentation and chemical pollution and *eutrophication*. These impacts are outside fisheries mandate to control – again reinforcing the need for environmental coordination. Climate change will exacerbate an already difficult situation.

A new dimension is the offshore marine fisheries with attempting to control foreign fishing fleets (mainly long line tuna fishing) in the 200 km exclusive resource zone. Fisheries share responsibility for mangrove conservation and for marine conservation (dugongs, cetaceans (whales) and turtles etc) in general with other agencies.

Other Sectors

Outside of this past Rural Development Cluster, there are the newcomers to the Productive Sector: the Ministries of Industry and Trade – and some sectors of Energy.

The Impacts of Industry forces this strategy to consider the browner issues of environment (pollution, toxins, etc) as well as the greener issues described earlier. NEMA has been active in this regard, but the law needs changing to give a greater role to the Ministry (as opposed to NEMA representing the Ministry). The developing Environmental Policy proposes use of the Polluter Pays Principle. The Environment sector is also the custodian of the Persistent Organic Pesticides (POPS) and Ozone Depleting Substances (ODS) Conventions.

The Energy Sector has a main focus on oil and gas and electricity power solution, with little attention to biomass energy, which is totally out of control. An Inter-Ministerial task-force on Charcoal and impacts on terrestrial environment is seen as a priority; as well as setting up safeguards for further oil and gas surveys. Energy, agriculture, environment need collaboration as to how Kenya enters the debate on the use of potentially agricultural land for bio-fuels.

6 STRATEGIC FOCUS

6.1 Introduction

This chapter articulates the strategic issues that the Ministry plans to address in order to achieve sustainable environmental management for development. The strategic issues emanate from the situational analysis discussed in chapter 5. The Ministry has developed strategic objectives to address the issues.. The Ministry's performance against these strategic objectives will be monitored and evaluated against specific outputs leading to expected outcomes. These outputs and outcomes and corresponding activities are presented in this chapter.

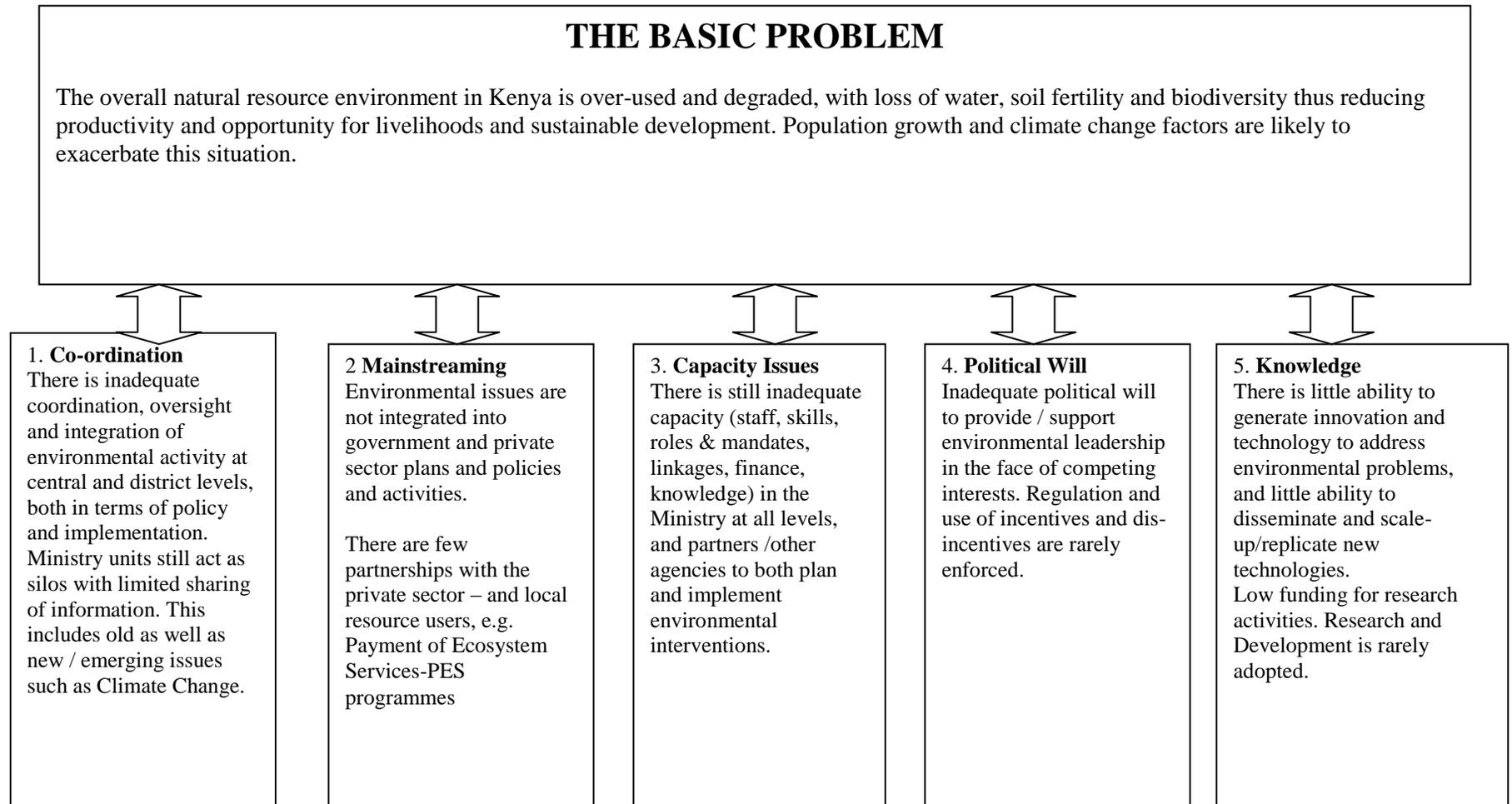
6.2 Strategic Issues Analysis

The fundamental problem is identified as unsustainable use of environmental resources. This is elaborated in the various Environmental planning and governance instruments such as Environmental Policy, National Environmental Action Plan 2009-2013, State of the Environment report and national policy documents like the Biodiversity Strategy and Action Plan, the National Action Plan to Combat Land Degradation, The Kenya Atlas of our Changing Environment, among others.

Unsustainable use of environmental resources is not peculiar to Kenya but it is also a trans-boundary problem. Consequently harmonization of environmental policies, laws and governance instruments as well as international collaborations is necessary to address the issue of unsustainable use of environmental resources. In addition, inadequate budgetary allocations, poor coordination, resource constraints, weak partnerships and limited sharing of lessons learnt hampers sustainable environmental management.

The key challenges arising from the above problems are illustrated in figure 6.1

Figure 6.1 Outlines Key Environmental Challenges



6.2.1 Enhancing Environmental Management

To achieve Kenya's Vision 2030, the Ministry of Environment and Mineral Resources will play a critical role in ensuring of a strategic, enabling environment to achieve sustainable development for all Kenyans. In order to perform to the best of its capability, the Ministry will accelerate reforms to meet the expectations of the public in provision of quality and effective services.

The Ministry's service delivery has been compromised by multiple factors such as inadequate budgetary allocations, human resources and infrastructure. It is important to note that during the plan period, efforts should be made to ensure all the weaknesses highlighted in chapter 5 are fully addressed through well-coordinated strategies. Mechanisms must also be put in place to ensure that any development must adhere to sustainable environmental resources managements.

6.2.2 Improved Image of the Ministry

Over the years, the Ministry has undergone tremendous challenges arising from continuous restructuring. This restructuring process has affected the Ministry in many ways particularly loss of facilities, budgetary allocations and staff; which in turn has always slowed the ministry's efforts to deliver services to Kenyans effectively. The Ministry has identified communication, public relations and branding as key priority areas to enhance the Ministry's image.

6.2.3 Build Capacity in Human Resource and Development

Human resources is the most important resource in the Ministry. However, there are challenges, which hinder optimum performance, development and management. These include: low remuneration, un-harmonized schemes of service, weak implementations of training policy, weak implementation of performance management system, promotion and deployment, lack of gender parity and mainstreaming policy, insecurity and effects of HIV/AIDS and drug and substance abuse by the ministry staff. The ministry aim in this strategic plan is to attract, develop and retain adequate professional staff as well as addressing prevalent disparities in delivery of quality services. These when achieved will contribute tremendously to easing workload and hence improving accelerated efficiency of service delivery.

6.2.4 Improved Access to Sustainable Environmental Resources

Every development must ensure access to equitable and sustainable resources. Environmental management when clearly carried out will achieve the desired results beneficial to all Kenyans. The Ministry will undertake programs on environmental stewardship to ensure improved environmental resources.

6.2.5 Improved Institutional Structure

A supportive institutional structure is one of the objectives to be achieved during the plan period. Most of the activities formulated under this objective were also in the previous Strategic Plan, but were not achieved. The Ministry has undertaken a comprehensive institutional functional analysis and will implement the recommendations during the plan period (2008-2012).

6.2.6 Adopt and Institutionalize Appropriate Information Communication Technology and other Support Facilities

The Ministry cannot keep abreast with changing technologies and global environmental trends without ICT automation. Therefore, adequate resources will be provided to build, strengthen and sustain automated ICT systems.

6.2.7 Enhance and Streamline Financial Management and Procurement Systems

Financial and procurement management systems within the Ministry require a lot of improvement. Strategies will be developed to ensure timely and quality delivery of financial and procurement services.

6.3 Strategic Objectives and Strategies

The problem tree described in Figure 6.1 allows the development of a more logical set of objectives and outputs that are designed to overcome specific barriers and root-causes which have led to the proliferation of environmental problems across Kenya. The Ministry's overall Goal will be met through the achievement of five Outcomes, each with 5 key Outputs with several activity streams. The outputs have targets and can be monitored and verified. The five Outcomes are as follows:

1 Coordination	To improve the institutional, policy, legal and regulatory framework for a sustainable environment; policies in place and harmonized, allowing effective coordination at horizontal and vertical levels of government and with the private sector and civil society.
2 Mainstreaming	To mainstream environmental concerns into overall planning, implementation and monitoring of government and partners, so as to reduce environmental degradation, with natural resources helping in reducing poverty.
3 Capacity Building	To ensure that all units within ministerial departments and partners have clear roles and mandates, with sufficient trained staff and resources to implement and monitor their responsibilities effectively and efficiently.
4 Political Will	To raise real awareness of the importance of environmental matters within national and local political leaders; stressing social and economic importance as well as ecological consequences.
5 Knowledge Generation	To generate, disseminate and use knowledge and information for the better conservation and management of environment and natural resources.

Table 6-1 Outcome by Outputs matrix

OVERALL MISSION (GOAL)
 To ensure the protection, conservation and overall management of the environment; and enable the sustainable utilisation and management of mineral resources and natural resources information for socio-economic development and the eradication of poverty.

Achieved through five Outcomes

OUTCOME 1 COORDINATION OUTPUTS	OUTCOME 2 MAINSTREAMING OUTPUTS	OUTCOME 3 CAPACITY BUILDING OUTPUTS	OUTCOME 4 POLITICAL WILL OUTPUTS	OUTCOME 5 KNOWLEDGE OUTPUTS
1.1 Coordination and Governance Strengthened	2.1 Cross-cutting issues in environmental programmes and projects mainstreamed	3.1 Clear mandates & roles for all units.	4. Awareness campaigns on Environmental stewardship intensified	5.1 Application of lessons learned in environmental management promoted
1.2 New Mining and Minerals Bill Finalized	2.2 Partnerships in mainstreaming of environmental issues in sector policies, plans and budgets promoted	3.2 Staff with TOR and job competencies	4.2 environmental programmes among political leaders designed and promoted	5.2 Partnerships with academia, research institutions, CSO, private sector and media encouraged
1.3 Environment Policy and EMCA Reviewed	2.3 collaborative implementation of environmental Action Plans in all projects and programmes amongst all stakeholders promoted	3.3 Specific Training for staff in MEMR, with key partners	4.3 Lobbying for increased resource allocation for social pillar on environment under vision 2030	5.3 Invest in scaling up and replication of successes, via networks
1.4 Partnerships on environmental management coordination at all levels promoted	2.4 Environmental issues in Sectoral planning incorporated	3.4 M & E process & database is functional	4.4 engagement of MEMR in inter-governmental processes and management of trans-boundary environmental resources strengthened	5.4 Systems and capacities and the use of ICT strengthened
1.5 Natural Resources Information Management Policy and Bill finalized	2.5 Adoption and application of SEA and EIA/EA promoted	3.5 Gender, disabilities, HIV-Aids, Poverty Eradication Initiative in ministry plans and projects, implement guidance & counselling initiatives integrated	4.5 MEAs domesticated	5.5 Mapping of environmental resources as well as sharing of knowledge, data and information strengthened
1.6 All Ministry departments to develop their strategic plans aligned with the ministerial strategic plan supported	2.6 Climate Change response mainstreamed and carbon neutral activities/strategies promoted	3.6 Key Ministry facilities are upgraded	4.6 Political leadership in environmental planning and management involved	5.6 Adoption of innovations and technologies promoted

6.4 Strategic Plan Implementation Matrix

The matrix below gives a detailed implementation framework for the strategic plan, using Log-Frame.
(NOTE: Please outcomes and Outputs in Table 6-1)

Table 6-2 The Matrix for Implementation Framework of the Strategic Plan

	Expected Output/	Activities	Type of Resource	Actor	Time frame	Budget Ksh (millions)				
						08/09	09/10	10/11	11/12	12/13
1.1	1.1 coordination and Governance Strengthened	Establish a fully functional directorate Restructure and harmonize operations of MEMR, her departments and Parastatal Initiate the designation/strengthening environmental desk officers in line ministries	Finance Human	MEMR	08-12	20	25	5	30	30
1.2	New Mining and Minerals Bill finalized	Complete and operationalize Mining and minerals Act	Finance Human	A-G chambers, MEMR	08-12	5	5	5	5	5
1.3	1.3 Environment Policy and EMCA Reviewed	Review Sessional Paper No. 6 of 1999, on Environment and Development, and amend EMCA 1999	Finance Human	A-G Chambers, KMD, MEMR	08-09	5	5	-	-	-
1.4	1.4 partnerships on environmental management coordination at all levels enhanced	Develop and implement partnership strategy	Finance Human	MEMR	08-12	7	10	15	15	20
1.5	1.5 Natural Resources Information Management-NRIM Policy and Bill Finalized	Draft, finalize, and operationalize NRIM Policy and Bill	Finance Human	MEMR all Depts, Districts	08-12	5	15	25	30	30
1.6	1.6 strategic plans for departments aligned to Ministry's SP developed	Prepare and operationalize department SP	Finance Human	A-G Chambers, MEMR	08-12	7	5	5	5	5
1.7	1.3 Environment Policy and EMCA Reviewed	Support approvals and use of SPs for all units	Finance Human	MEMR, NEMA, DRSRs, KMG, KMD	08-12	10	15	15	15	15
Total						54	75	65	95	100

	Expected Output	Activities	Type of resource	Actors	Time frame	Budget				
						08/09	09/10	10/11	11/12	12/13
2.1	2.1 cross-cutting issues in environmental programmes and projects Mainstreamed	Develop and implement Mainstreaming strategies	Finance Human	MEMR NEMA Ministries	08-12	15	15	15	20	20
2.2	2.2 partnerships in mainstreaming of environmental issues in sector policies, plans and budgets Promoted	Develop partnership strategies for mainstreaming	Financial - Human	MEMR NEMA Districts CS, PS	08-12	15	15	20	20	25
2.3	2.3 collaborative implementation of environmental Action Plans in all projects and programmes amongst all stakeholders developed and promoted	Create awareness, Implement and monitor the Environmental Action Plans Review Environmental Action Plans periodically	Financial - Human	MEMR, NEMA Districts	08-12	10	15	15	20	20
2.4	2.4 environmental issues integrated in sectoral plans	Undertake inter-sectoral planning.	-Financial -Human	MEMR NEMA Sectors	08-12	10	15	15	20	20
2.5	2.5 adoption and application of SEA and EIA /EA regulations promoted	Create awareness on SEA and EIA/EA Ensure compliance with SEA and EIA /EA	Financial -Human	-MEMR NEMA	08-12	10	15	15	20	20
2.6	2.6 Climate Change response strategy developed and mainstreamed	Develop and mainstream climate change response strategy	-Human Financial	-MEMR -DRSRS NEMA KMD	08-12	20	20	25	25	30
					Total	80	95	105	125	135
	Expected Output	Activities	Type of resource	Actors	Time frame	Budget				
						08/09	09/10	10/11	11/12	12/13
3.1	Responsibilities of directorates, departments and Parastatal(s) clearly defined.	Implement and upscale the functional analysis study	-Human Financial	-MEMR -DRSRS - MGD NEMA KMD	08-12	10	10	10	10	10
3.2	Optimal staffing levels	Undertake job evaluation	-Human – Financial	-MEMR	08-12	-	5	5	-	5

	Updated schemes of service	Preparation of draft schemes, Constitute stakeholders committees Implementing the schemes	-Human – Financial	-MEMR	08-12	5	5	4	-	-
	Operationalized human resource information system	Design procure system and hardware Train staff, operationalize system Sensitize staff, launch the system	-Human – Financial	-MEMR	08-12	5	5	3	2	2
3.3	Skills and Competencies of staff enhanced	Undertake and implement training needs assessment	-Human – Financial	-MEMR -DRSRS NEMA, MGD, KMD	08-12	10	20	35	45	50
3.4	Functional M & E systems	Develop and operationalize M&E strategy	-Human – Finance	All technical units	08-12	5	20	25	30	30
3.5	Gender, HIV-Aids, Poverty Eradication Initiative integrated in the ministry plans and projects,	Develop and implement strategies	-Human -Finance	Technical Departments &Parastatals	08-12	5	10	15	15	20
3.6	Equipment and facilities up-graded	Prioritise, harmonize and implementation of short, medium and long term upgrading and modernisation plans	-Human -Financial	-MEMR NEMA MGD	08-12	5	15	40	20	25
3.7	Mainstream Performance Appraisal system	Staff sensitisation on target setting Design M&E tools Implement a rewards/sanctions system	-Human -Finance	HRM ALL DEPTTS	09-12	-	-	8	9	10
3.8	Operationalize internship programmes	Establish positions Identify and forge linkages with institutions Implement.	-Human -Financial	HRM ALL DEPTTS	09-12	-	7	8	9	10
					Total	50	102	153	140	162
	Expected Output/	Activities	Type of resource	Actors	Time frame	Budget				

						08/09	09/10	10/11	11/12	12/13
4.1	Awareness campaigns on Environmental stewardship enhanced	Develop and implement Communication and publicity strategy	-Human - Financial	MEMR NEMA -KMD -MGD DRSRS	08-12	10	20	25	25	35
4.2	Environmental education and awareness programmes developed and promoted among political leaders	Develop and implement environmental education and awareness programs for political leaders among others	-Human - Financial	-DRSRS -NEMA -KMD -MEMR (HQ)	08-12	10	25	25	25	35
4.3	Lobbying Sectoral support for enhanced budgetary allocation	Strengthen inter-ministerial committees and enhance lobbying skills	-Human - Finance	MEMR	08-12	10	25	25	25	35
4.4	Engagement of MEMR in inter-governmental processes and management of trans-boundary environmental resources Strengthened	Develop, harmonise and implement Transboundary environmental resource strategies	-Human -Finance	MEMR	08-12	10	10	15	15	20
4.5	Ratified MEAs domesticated	Develop and implement Domestication strategy for multilateral environment agreements	-Human -Financial	MEMR NEMA	08-12	10	20	20	25	30
					Total	50	100	110	115	155
	Expected Output/	Activities	Type of resource	Actors	Time frame	Budget				
			-Human Financial			08/09	09/10	10/11	11/12	12/13
5.1	Lessons learnt in environment and natural resource management up scaled and promoted	Upscale and replicate best practices and lessons learnt in environment and natural resource management	-Human - Financial	-MEMR -MoF -DPM	08-12	10	20	25	25	25
5.2	Partnerships developed and promoted in knowledge management	Develop Knowledge sharing and dissemination systems	-Human - Financial	-MEMR	08 – 12	10	25	50	60	60
5.3	Invest in scaling up and replication of successes, via networks	Invest in scaling up and replication of successes, via networks	-Human - Finance	-MEMR NEMA -KMD -DRSRS -MGD	08 - 12	10	20	20	20	20

5.4	ICT systems and capacities strengthened	Develop and implement an ICT strategy	-Human -Finance	-MEMR and Depts	08-12	10	20	20	20	20
5.5	Environmental and natural resources data collection and management strengthened	Develop and implement a Framework for data collection and management	-Human -Financial	MEMR and Depts	08-09	10	50	30	30	30
5.6	Adoption of innovations and technologies promoted	Develop and promote adoption of decision support systems for innovations and technologies. Periodically organise show case events	Human -Financial	MEMR and Partners		5	10	20	25	30
					Total	55	145	165	180	185
					GRAND TOTAL	289	517	598	655	737

The Implementation matrix outlined above is a Ministerial level matrix, and much of the emphasis is on the broad Ministerial functions. There is less detail relevant to the technical functions of the Parastatal and three main Departments of the Ministry (NEMA, KMD, DRSRS and DMG).

The implications of the Strategic Plan for these Departments and Parastatal are set out using four main principles:

1. All Ministry Departments to develop their own specific departmental Strategic Plans, each with its own Log-frame and Annual Work-Plans. The preparation of these Departmental Plans will be done according to guidelines developed by MEMR in collaboration with central Government.(Output 1.6)
2. Two of the five Ministry Outcomes are of immediate relevance to all Departments, Outcome 3 on Capacity Building (all 6 outputs), and Outcome 5 on Knowledge Generation (all 6 outputs)
3. Some Outputs from the three other Outcomes are of immediate relevance; Output 1.6 on Departmental Strategic Plans has been mentioned. Others are: Outputs 4.1 and 5.6 on linking to Vision 2030 and Output 4.3 to MEAs.
4. The Ministry and Ministerial Departments emphasise the flagship project approach as set out in Vision 2030.

Ministry Flagship Projects include projects implemented by the MEMR directly, and those implemented by other Ministries, but over which MEMR maintains close oversight as per EMCA. A not complete list of projects is provided in the Table 6-2 below.

Table 6-2 List of Recognized and Potential Flagship Projects

No	Name	Lead Agency	Ministry Role
1	Wildlife Migratory Routes Dispersal Areas	KWS	Coordination as per EMCA
2	Plastic Bag Programme	NEMA MEMR	Manage
3	Lake Victoria Environmental Programme.	MEMR	Manage
4	Restoration Watershed Services for Mau Forest	PMO, KFS, MEMR	Coordination as per EMCA
5	Restoring Nairobi River	MEMR, NEMA, etc	Joint management
6	Reducing Urban Pollution	MEMR, NEMA, etc	Manage
7	Developing Sustainable Charcoal Programmes	MEMR, KFS	Joint Management
8	Integrating Sustainable Land Management	MEMR, MoA. MoL	Coordination as per EMCA
9	Rainfall enhancement/Hail suppression pilot project	MEMR, KMD	Coordination

6.5 Specific and Priority Departmental Issues

Tables 6.3 – 6.6 show specific and priority activities that have devolve from this strategy to the departments.

Table 6.3 Activities that devolve down from the Ministerial Strategy for Mines and Geological Department

No	Detail	Responsibility
1	Finalise Policy / Legislative Policy	MGD, MEMR
2	Finalise Seismology Monitoring and link to Disaster Prevention	MGD, MEMR
3	Strengthen Decentralised Offices	MGD, MEMR, Districts
4	Increased Partnerships with Private Sector	MGD, Private Sector

Table 6-3 Activities that devolve down from the Ministerial Strategy for Kenya Meteorological Department

No	Detail	Responsibility
1	Inputs into Kenya Climate Change Policies	KMD, MEMR
2	Strengthening Agro-Met services for farmers	KMD, MEMR
3	Inputs to PES programmes based on water flow / rainfall data	KMD, MEMR
4	Flagship projects in Vision 2030 linked to disaster preparedness	KMD, MEMR
5	Strengthen capacity at Provincial and District Meteorological Bureaus	KMD, MEMR
6	Weather modification/Modernization programme for climatological monitoring	KMD, MEMR

Table 6-4 Activities that devolve down from the Ministerial Strategy for Department of Resource Surveys and Remote Sensing

No	Detail	Responsibility
1	Finalise Policy / Legislative Policy	DRSRS, MEMR
2	Finalise a Policy on Sharing of Information	DRSRS, MEMR
3	Strengthen Capacity at the Headquarters	DRSRS, MEMR
4	Partnerships with Private Sector	DMG, Private Sector

Table 6-5 Activities that devolve down from the Ministerial Strategy for National Environment Management Authority

No	Detail	Responsibility
1	Finalise Revision of Strategic Plan for NEMA	NEMA, MEMR
2	Finalise Harmonisation of Standards / Regulations with lead Agencies	NEMA, MEMR
3	Strengthen Capacity at the Headquarters, Provinces, Districts	NEMA, MEMR
4	Enhance Partnerships with Private Sector	NEMA, Private Sector

7 THE COORDINATION FRAMEWORK

7.1 Introduction

The emerging strategic environmental management issues at both national and global arenas dictates the re-orientation, refocusing and re-engineering of the Ministry of Environment Mineral Resources. The Ministry will therefore, endeavour during the plan period to put in place a comprehensive coordination framework to deliver its mandate.

7.1.1 Institutional Re-organization

During this Plan Period, the Ministry will undergo institutional reorganization in order to effectively deliver on its mandate. The reorganization is being driven by the need to focus on the core service delivery of specialised departments such as, KMD and DRSSRS, which will need to be transformed into Semi-Autonomous Government Authority-SAGA. The directorate and the departments will also be restructured and their capacity including that of NEMA will be strengthened to deliver services to the public effectively and efficiently.

1. The new structure will focus on the core functions and support services of the Ministry, which are briefly described below; The General Administration and Planning Division will be reorganized into a fully-fledged department. There will be two divisions– administration, and technical support (planning and Information Technology (IT)). The proposed structural changes are reflected in the proposed organization structure of the Ministry given in Figure 7-1 the Ministry is headed by the Minister and two Assistant Ministers.
2. The Permanent Secretary is the accounting officer of the Ministry and is assisted by the Director Administration who is in-charge of day to day running on the Ministry on administrative matters.
3. Environment Secretary on the other hand is in-charge of technical environmental issues of the Ministry. Environment Secretary also supervises three directorates namely; Policy formulation, interpretation and implementation; Programmes, Projects and Strategic Initiatives and Multi-lateral Environment Agreements.
4. The Central Planning and Project Monitoring Unit, which deals with planning issues, data collection and analysis, monitoring and evaluation of programmes and projects. There are three departments namely; Mines and Geological Department, Kenya Meteorological Department and Department of Resource Surveys and Remote Sensing, and NEMA, which is currently the only Parastatal in the Ministry. The Ministry operates with the support services from; Finance, Procurement, Accounts, Human Resource Development and Human Resource Management Divisions.

7.2 Proposed Structure

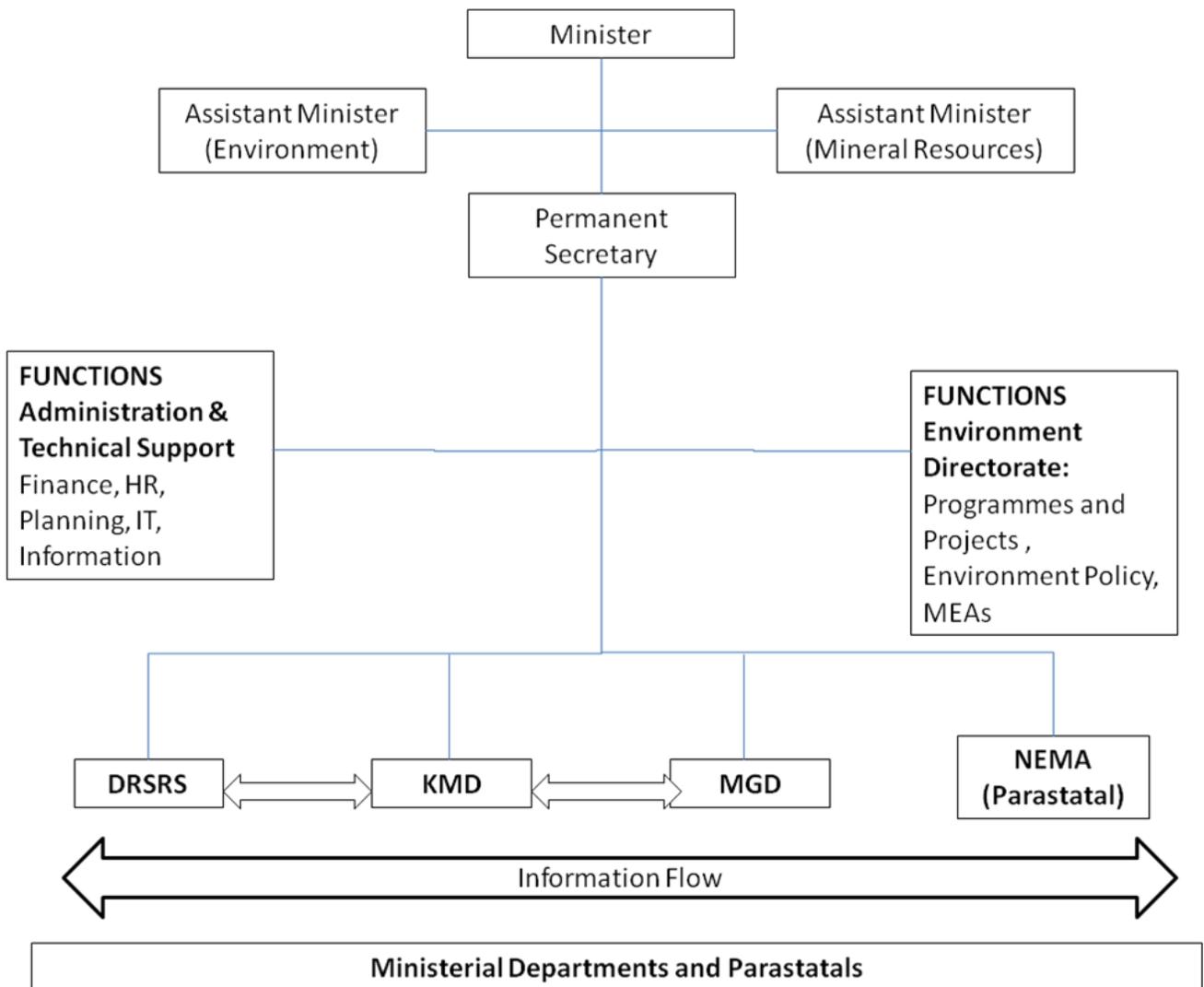
The proposed structure arises from the recommendations on functional analysis funded by DANIDA through Environment Support Programme. The recommendations covered restructuring within the Ministry as well as National Environment Management Authority. These recommendations include;

- i. Increasing staffing level of the Ministry including NEMA;
- ii. Forming the Directorate of Environment at the Ministry level to deal with technical and policy issues;

- iii. Formulating clear ToRs for re-structured Directorate and Ministry departments including NEMA; and
- iv. Transforming general administration and planning divisions into a department at the Ministry Headquarters.

Besides the functional analysis recommendation other proposals include transformation of Kenya Meteorological Department, Department of Resource Surveys and Remote Sensing, Mines and Geological Department in transformation stage into Semi-Autonomous Government Agencies be expedited during the plan period.

Figure 7-1 Proposed Organization Structure of the Ministry



7.3 Staff Establishment

Among the main objectives of the Ministry’s reform programmes, there is the need to achieve optimal staffing levels. However, the Ministry is currently faced with inadequate staffing levels (see Appendix I). To effectively implement the strategic plan, the Ministry will require optimal staffing levels as indicated in Appendix I. Key new positions are:

1. Within the Directorate of Environment (see below)
2. Within the new Technical Support Department, with a Planning Director, M and E specialists (1 senior and 1 junior officers), and more Information ICT staff, including two data analysts in the Ministry, that form the link from technical Departments such as DRSRS and KMD to address issues of Climate Change, which is coordinated at the Ministry Headquarters.

7.3.1 The Directorate of Environment (DoE)

The new Directorate DE will be responsible for the overall coordination of environment and natural resource management and policy analysis. This Directorate will be headed by a Senior Environmental Specialist, an equivalent of Senior Deputy Secretary level. There will also be other staff as proposed in the Functional Analysis Report, which was undertaken in 2007/2008.

The Directorate is expected to grow to 16 technical positions within the coming 18 months. These personnel will be responsible for coordinating functions with other departments and ministries and also with the Departments within the Ministry.

A key issue will be the relationship with NEMA. Directorate is seen to be policy related (policy harmonization, policy integration, policy implementation review and feedback mechanisms) and advisory in nature (advising the Minister and Cabinet through the Minister); rather than implementation – the main function of NEMA.

A stronger Technical Administrative Unit – comprising Planning and a strengthened information division linked to ICT unit; where the ICT unit provides the technical liaison to the detailed GIS and databases maintained in e.g. DRSRS and NEMA. This allows the Planning section and DoE to use up-to date planning data and information.

7.3.2 Proposed Human Resource Strategy and Succession Plans

Although most of the human resource strategies in the civil service are centralized, the Ministry has found it prudent to formulate strategies that address its specific concerns. Generally, the following key areas will be addressed:

- a) Performance recognition;
- b) Human resources (recruitment, retention, succession management and exit);
- c) Training and development; and
- d) Timely implementation of schemes of service.

7.3.3 Succession Plan

The human resource analysis in the Ministry clearly indicates an aging workforce. This raises concern on succession planning. The Ministry will embark on succession planning to ensure availability of the right quality and quantity of professional and technical staff to drive the business of the Ministry at all levels. Well-planned recruitment and development of technical staff therefore will be integral part of the succession plan.

7.3.4 Scheme of Service

A clear scheme of service is necessary for ease of administration of human resources. The ongoing revision of schemes of service by respective departments will be continued and enhanced during the planning period.

The following is recommended for implementation during the Strategic Plan period:

- (a) Scheme of service be fully implemented; and

- (b) Professional, technical and non-technical staff should advance in the scheme of service depending on their job performance, besides qualifications and years of service.

7.3.5 Development and Training

Currently, all technical staffs have the requisite minimum qualification for adequate performance. However, due to institutional, legal and policy dynamism and the international nature of environmental issues, there is need for both short term and long term courses in order for the human resource to cope in the dynamic environment sector. Specialised training in Geographical Information Systems (GIS), participatory forest management, ICT, among others will also be pursued. Paramilitary training that has already been initiated for the forest staff will be strengthened. Although the support staff will also need both short and long term courses, emphasis will be laid on the short-term training. Institutional development will also be targeted at enhancing the capacity of training centres/institutions.

As part of this Strategic Plan, the Ministry will develop a functional training programme to be supported by GoK and donor funds, linking training needs to gaps in capacity and requisite skills. This will cover longer-term courses e.g. at Masters level for younger staff and short in-service training for senior staff. Opportunities will be taken to develop training with the partner agencies.

7.4 Putting the new Outcomes into Practice

Several underlying or crosscutting principles underlie the effective and cost-efficient implementation of these outcomes. They are considered here – as they run across all five Outcomes. They are:

1. Reducing “silos” in the work place, where individual sections (and individuals) hoard information without sharing or disseminating (as information equals power). There must be more openness and transparency and a collective spirit of sharing and partnership, within and outside the Ministry.
2. Reducing duplication. The Ministry has a functional GIS (spatial database) and other databases – within DRSRS. However environmental planners, economists and specialists need this level of data. There is no need to duplicate facilities if the information is shared through server computers allowing data to be accessed by ALL Ministry units.
3. Increasing a Result Oriented work pattern, with continuous self-assessment and monitoring (section and individual) against output and process targets, with these targets linked to ToR and job mandates.
4. Increasing the use of partnerships and cross-sectoral task forces. This applies to partnership at central and at district level and within / without government⁷.
5. The use of task forces to undertake periodic evaluations of key environmental strategies (such as effectiveness of water hyacinth control in Lake Victoria).
6. Increasing the use of short “in-service” training, and rewarding trainees.
7. Make the Ministry more “visible” through more information dissemination and use of newsletters, reports and media days. Focus on Greening of Government in carbon footprint.
8. The Ministry introduces the concept of “Risk”, and strategies to reduce risk, in programme management.

⁷ An example here is the cross-sectoral task force looking at the representation of Protected Areas across main habitats. This involves Environment, Forests, Wildlife, Civil Society and Donors, hosted by NEMA

9. Ensuring that the developing Environmental Policy Process gives strength to the Policy and the institutions concerned with Policy implementation. The provisions / recommendations of the draft policy process are important.
10. Preparation of an overarching environment policy that comprehensively provides clarity and direction for the safeguard of the environment and all its components while leading to the achievement of sustainable development within the context of national and local level development priorities.
11. The environment policy should insure a common approach, through harmonisation and effective guidance, for the various environment-related sectors by promoting ecosystem-based assessment and planning using integrated ecological, social and economic approaches and tools.
12. The policy should encourage Public Participation in environmental management and enhance sense of ownership and benefit sharing.

8 RESOURCE MOBILIZATION

8.1 Introduction

The successful implementation of this plan will involve mobilization of both financial and human resources. This Chapter sets out how human and financial resources shall be mobilized to meet the implementation of strategic targets as outlined in Chapter 7.

8.2 Human Resources

Among the main objectives of the Ministry's reform programmes, there is need to achieve optimal staffing levels. To effectively implement the strategic plan, the Ministry will require optimal staffing levels as indicated in Appendix I. Changes are proposed in the Directorate of Environment (DoE) and technical and support departments. There will be a position for Senior Environmental Specialist at Senior Deputy Secretary level. The Directorate is expected to grow up to 16 technical positions within the coming 18 months. These personnel will be responsible for coordinating functions with other departments and ministries and also with the Departments within the Ministry.

In the proposed Technical Support Department (Planning and Information Technology, be transformed and posted with a Planning Director) there will be Monitoring and Evaluation specialists (1 senior and 1 junior officers), and additional Information Communication and Technology staff, including two data analysts in the Ministry, that will form the link from technical Departments such as DRSRS and MGD.

Although most of the human resource strategies in the civil service are centralized, the Ministry has found it prudent to formulate strategies that address its specific concerns. Generally, the following key areas will be addressed:

- a) Performance recognition;
- b) Human resources (recruitment, retention, succession management and exit);
- c) Training and development; and
- d) Timely implementation of schemes of service.

The human resource analysis in the Ministry clearly indicates an aging workforce. This raises concern on succession planning. The Ministry will embark on succession planning to ensure availability of the right quality and quantity of professional and technical staff to drive the business of the Ministry at all levels. Well-planned recruitment and development of technical staff therefore will be integral part of the succession plan.

Clear schemes of service are necessary for ease of administration of human resources. The ongoing revision of schemes of service by respective departments will be continued and enhanced during the planning period.

To ensure motivation and retention of employees in the Ministry the Schemes of service will be fully implemented.

The Ministry will also develop a functional training programme to be supported by GoK and donor funds, linking training to gaps in capacity and requisite skills. Opportunities will be explored to develop training and exchange programmes with development partners.

8.3 Financial Resources

The Ministry has continued to receive low budgetary allocation despite the role the sector plays in the economic development of the country. There are significant variations between the printed, revised and actual expenditures of the Ministry. This has been attributed to budget cuts, freezing of development expenditures and delays in disbursement of funds by the Treasury.

In the allocations of the financial year 2004/05, the gross estimate (recurrent and development expenditure) stood at Ksh 5.273 billion. In the 2005/06 fiscal year allocations, the gross estimate reduced to Ksh 3.130 billion and in 2007/08, there was a slight increase to the tune of Kshs. 4.559 billion. This reflects the relatively low concern and priority, which past governments have given to the environmental sector. However recent experience has shown that the looming problems of climate change, with reduced water flows, reduced agricultural yields, are going to need much greater levels of investment.

It is clear that the magnitude of the costs inherent in achieving the environmental and natural resources sector targets as outlined in this strategic plan requires devising ways of financing aspects of the Strategic Plan beyond those currently covered by the MTEF budgetary process.

8.4 Cost of Implementing the Strategic Plan

The cost of the implementation of the Strategic Plan is-Kshs 3.214 Billion, which is expected to be shared between the Government, Development partners, Local Authorities and the private sector. The following ways are proposed.

(a) Prioritisation of ministry programs

The Ministry will channel resources to justified priorities/ core-functions as reflected in the strategic plan in order to avoid wastage and mismanagement. The non-core activities that will be identified by the ongoing Ministry's rationalisation process will be offloaded.

(b) Increasing Funding for Programmes and Projects

The partnership between the Ministry and the Development Partners will be strengthened to develop strategic alliances based on the needs of the ministry. The existing inter-agency collaboration will be continued so that there is a shared view on what the priorities are and how they will be financed. In this regard, the Ministry will embark on deliberate efforts of preparing fundable proposals.

Further, in order to continue with the activities within the framework of community approach to sustainable development, facilities such as Community Development Trust Fund (CDTF) will be strengthened through continued and enhanced partnerships with Development partners such as the World Bank, EU, DANIDA, SIDA, UNDP, UNEP, FAO, NORAD, JICA, ADB and FINIDA among others.

Towards increased efficiency and effectiveness in programme/project funding, the Ministry will among other things undertake the following measures:

- Increase the general absorption capacity especially in utilizing and accounting for funds through strengthening implementation and accounting capacity.
- Introduce transparency and accountability to all stakeholders in the planning and implementation, with the Ministry providing adequate information to all stakeholders.

(c) Exploitation of Untapped Resources

While environmental conservation has been viewed primarily as a Government affair, it has been realised that inputs from the stakeholders are vital to the successful management of the environment and natural resources. It is important that capacity building and training of these stakeholders be done in order to enable them take up the roles previously performed by the Government.

Further, the private sector will be engaged through collaborations and partnerships to invest and develop value addition industries for natural resources in the rural areas. This would greatly improve their marketability and returns.

As the Ministry implements the strategic plan, it recognises the critical role that the communities and the CBOs play in joint natural resource management. The Ministry will intensify public awareness and sensitisation on the projects and services it is providing in the country. Develop stronger environmental indicators with real assessment, to show contribution of environmental resource base to overall GDP. Payment for Ecosystem Services (PES) proposals will be developed to identify investment opportunities for environmental goods and services.

(d) Targeting areas to minimise cost

Areas that are likely to reduce operational costs currently facing the Ministry include the need to;

- instill values and positive attitude towards utilization of public resources;
- install a local area network(LAN) and centralized equipment to reduce on consumables;
- automate offices especially in the registries and procurement.; and
- enforce financial regulations.

In view of the above, the Ministry should explore and implement innovative and creative strategies of resource mobilization to supplement government budgetary allocations.

9 ACCOUNTABILITY AND RISK

These two items are specifically contained in Government's directive on Strategic Plans, released with the new guidelines in March 2008. These issues have been discussed in this Chapter, taking into consideration the operations of the Ministry as a whole, including the Departments and NEMA.

9.1 Accountability

The issue of accountability is of growing importance, as reflected by Government's insistence on Performance Contracts for individuals. The same principle holds within institutions – sections are accountable to Departments and Departments are accountable to the Ministry. Of difficulty here is the accountability of decentralised officers – with dual reporting to technical Ministry PS and to District Heads.

Overly the Permanent Secretary has ultimate accountability for all matters in the Ministry. The PS in MEMR is assisted in this regard by two senior deputies– The Environment Secretary, and Director Administration.

Specific Departments and their Departmental Heads have responsibilities for their Departments and for the targets and Outputs specified in this Strategic Plan.

However, an agreed Annual Work Plan, that is firmly embedded within a coherent Logical Framework, that is funded and approved, is needed to allow for proper accountability. It is not realistic to hold someone responsible for activities that were planned but under funded.

A functional M and E system – linked to the targets and indicators in the Log Frame is a further necessity to track accountability.

Accountability needs recognition for tasks completed successfully as well as for shortfalls. This links to Adaptive Management while recognizing under-performing areas (and individuals) and prescribing measures for strengthening such areas.

Accountability needs to be linked to training and to lessons learned – What works? What does not? All these are provided for within this Strategic Plan.

9.2 Risk and Risk Management

Risk occurs at several levels, natural risk from the environment itself (e.g. floods, earthquakes), risks external to the Government (e.g. civil unrest), risks within broader Government (e.g. increased pollution from industry) and risks from within the Ministry itself (reduced budget, under-performance). To deal with these risks, an analysis has been made, and issues identified in terms of Probability (P) and Severity (S). Each of these parameters, are then further categorised as those with High (H), Medium (M) and Low (L). The other column shows mitigation measures which can be adopted to effectively manage the risks, as shown in Table 9-1 below.

Table 9.1 Show the Risk Management Strategy

No	Risk Description	Probability & Severity		Mitigation Measures
Institutional, Political and Financial Risk				
1	Changes in government structure continue to affect workings and coherence of the Ministry	P Med	S High	Lobbying on need for consistency. The present arrangement has much merit, especially bringing in KMD, and close links to DRSRS and climate change
2	Political instability and violence reduce ability to implement environmental programmes	Med	High	This is outside the immediate ambit of this Ministry, but resource conflicts (water, land. Forest) fuel much of larger instability.
3	Political intransigence continues to delay and reduce impact of necessary environmental measures such as Mau	High	High	This strategy emphasises the importance of political will and the use of economic and social arguments to gain such political will.
4	Government funding priorities fail to realise fundamental importance of environmental sector	Med	High	It is hoped that “political will” will prevail. However past trends show “environment” is often the first to be slashed. Real budgets have declined all decade.
5	In-adequate inter-sectoral collaboration marginalizes the environmental sector, and environmental programmes and EMCA oversight fail.	Low	High	The Strategy emphasises collaboration at all levels – based on real benefit sharing.
6	Donor support to environmental programmes in Kenya greatly reduces due to global economy or to Kenya being less favoured on development indices.	L/M	High	Both scenarios are possible. The first seems inevitable.
Natural Issues: Disasters				
7	Climate change severity overcomes national capacity to adapt, leading TO INCREASED DISASTERS, including drought and famine.	L/M	High	Kenya has yet to really develop a strong Adaptation Capacity, or pit CC-A on an emergency footing Yet the signs of CC are increasingly obvious.
Technical Issues				
8	The environment sector loses political will and support, meaning that EIAs and legislation have no teeth. Government continues to make decisions based on Financial reward and short term gains with less recognition of long term importance of sustainability	L/M	High	This strategy emphasises the importance of political will and the use of economic and social arguments to gain such political will. However other sectors, and much of the private sector are driven by short-term gain.
9	Water shortages lead to conflict and reduced growth	M	High	This is probable, and remains a priority cross-sectoral issue
10	Funding shortfalls reduces availability of necessary manpower	L	High	Increased advocacy on the importance of environmental sustainability and magnitude of threats / needs
11	Cross-sectoral task forces fail to work due to sectoral rivalry	L	High	High level leadership is essential
12	The M and E system suggested in this Strategic Plan is under funded or	L	High	High level leadership – with resources is essential

10 MONITORING AND EVALUATION

10.1 Introduction

Monitoring will be undertaken on continuous basis while Evaluation will be periodic on an annual basis as is conventionally acceptable. The Ministry, through the evaluation process of the Strategic Plan, will critically re-examine the strategic objectives, outcomes, outputs and activities to ensure delivery of expected services. The process will help compare the actual attainment of targets set and identify the reasons for shortfall or achievements made for the documentation of “Best Practices”.

Towards effective, results-based Monitoring and Evaluation of the implementation of the Strategic Plan, the Ministry will focus on utilization of projects resources; adherence to implementation plans; achievement of planned targets and problems encountered. Such a results-based M&E will help track progress and demonstrate impact of a given project, program or policy and thus assist the MEMR to focus on outcomes and impacts. These will be addressed in line with the Performance Contracts, Annual Work Plans and their relevance to the overall national objective of Vision 2030 as captured by the five-year Medium Term Plans – 2008-2012.

10.2 Monitoring and Evaluation Methodology

Monitoring and Evaluation (M&E) will provide stakeholders and implementation partners with data and information to measure progress, determine whether expected impacts have been achieved, and to provide timely feedback in order to ensure that problems are identified early in implementation and that appropriate actions are taken. Monitoring will be an integral activity of all objectives and aims to assess the Ministry capacity and partnership effectiveness in protecting the environment.. The Ministry Plans will be implemented through an adaptive framework that’s feeds the findings of M & E into operational planning, thus enabling management strategies and activities to be adjusted as necessary. A number of indicators to measure impact and processes have been selected at the goal, purpose and output levels. A detailed M and E Analysis with emphasis on demonstrating impact on environmental issues and reducing threats is given in Chapter 4.

Monitoring and Evaluation will involve: -

- a) Definition of the main objectives and targets so that all participants have a common understanding of them;
- b) Selection of indicators for measuring the efficiency and effectiveness of activities, the quality and effectiveness of outputs, results, outcomes and impacts;
- c) Emphasis on self-monitoring at all levels and all stages;
- d) Identification of ways and means for feedback, lessons learnt and replication of best practices; and
- e) Identification of stakeholders involved in Monitoring, Learning and Evaluation at all levels of programme/project implementation.
- f) Development of the 5 year and annual (detailed) M&E Framework / Matrix (see Table 10-1).

10.3 Institutionalization of Monitoring and Evaluation

10.3.1 Ministry headquarters

The Ministry will build and set up an effective, results-based M&E System at the Headquarters. It will also aim to have similar systems established in all its institutions. Committees comprising

of relevant Departments and Units will be formed. The Permanent Secretary will chair the committee meetings while the Planning Department will provide the secretariat. Meetings will be held once every quarter while progress towards achievement of the various strategic objectives will be evaluated. The committee will provide information on whether existing or new approaches that have been developed and adopted are working effectively and report on the progress, problems encountered and offer solutions.

10.3.2 Creating a Monitoring and Evaluation Committee at Department / Parastatal Level

All Departments and Parastatals will be encouraged to form their Monitoring and Evaluation Systems Units. The M&E will be set up to consider policy and projects/program implemented, decision making and the provision of information regarding regional development activities. The committee will be made up of a Managing Director, Planning Units, Administration and other technical staff as the Managing Director/Head of Department may deem necessary. The Managing Director/Head of Department will chair committee meetings once every month to analyse progress and evaluate outputs of various activities. The committee shall report the observations/findings, intervention actions and recommendations to the Ministry's M&E Committee for decision-making.

The Ministry M&E will include:

- Two independent, external evaluations (at the mid point and at the end);
- An internal evaluation in alternate years (ie three internal evaluations)
- Self-assessment of staff and units in the Ministry; and
- Site-level monitoring of key programmes associated with each environment management / conservation target and the threats to them

As part of the Annual Work Plan process an M&E framework will be completed (as per below) showing what will be monitored, when and by who. The monitoring and evaluation matrix is presented in Table 9.1

Table 10-1 Monitoring and evaluation matrix

M&E activity	Responsible Parties	Budget KShs (Million)	Time frame
Inception Workshop	Senior officials	0.8	Two months
Inception Report	PS and senior officials	0.10	Three months
Develop a detailed plan of action for monitoring (establishing what info to collect at what frequency, identifying responsible stakeholder to collect info, determining type of info management system to be used)	Planning and DE	0.10	Within the first three months of SP
Assess if Ministry team has the skills required to conduct and oversee monitoring	Ministry Team	0.50	Within first three months
Conduct M&E training for the Ministry team and relevant stakeholders	Ministry Team	1.50	Within the first six months
Establish/determine baselines available for monitoring	Ministry Team	0.05	Start, mid and end of plan period
Collect monitoring data	Ministry team to coordinate and oversee assessments and other data collection	0.20	Throughout the plan period

Measure Means of Verification for Ministry Progress and Performance (measured on an annual basis)	Oversight by PS and OP Monitoring Units	0.15	Annually prior to APR/ and to the definition of the MTER & annual work plans
Annual Progress Report for each Unit.	Ministry Heads	0.01	Annually
Minutes of Programme Steering Committee Meetings and Technical Task Forces		-	Annually
Periodic status reports		-	TBD by PS
Thematic/Technical reports	Ministry Task Force Teams Consultants researchers	0.25	TBD by PS
Mid-term External Evaluation	Ministry	0.01	At the mid-point of the project
Final External Evaluation	Ministry	0.01	At end of project implementation
Lessons learned	Ministry	-	Yearly
Audit		-	Yearly
Visits to field sites	Ministry, Partners, Local Government representatives	0.75	Yearly
TOTAL indicative COST of M and E per annum		4.43	

ANNEX I: SUMMARY OF AUTHORISED ESTABLISHMENT AS AT JUNE 2009

SUMMARY OF AUTHORISED ESTABLISHMENT AS AT JUNE 2009				
MINISTRY HEADQUARTERS				
DESIGNATION	J/G	A/E	IN-POST	VAR
Minister	4	1	1	-
Assistant Minister	6	2	2	-
Permanent Secretary	U	1	1	-
A. ADMINISTRATION				
Director of Administration	S	1	1	-
Senior Deputy Secretary	R	1	-	-1
Deputy Secretary	Q	2	1	-1
Under Secretary	P	3	-	-3
Senior Assistant Secretary	N	3	2	-1
Assistant Secretary 1	M	2	2	-
Assistant Secretary 11	L	2	-	-2
Assistant Secretary Cadet/Assistant Secretary 111	J/K	2	2	-
	TOTAL	20	12	-7
B. HUMAN RESOURCE MANAGEMENT				
Deputy Director Human Resource Mgt	R	1	-	-1
Snr.Asst. Director of Human Resource Mgt.	Q	1	-	-1
Assistant Director Of Human Resource Management	P	1	-	-1
Principal Human Resource Mgt Officer	N	1	1	-
Chief Human Resource Management Of Officer	M	2	1	1
Senior Human Resource Management Officer	L	2	1	1
Human Resource Management Officer II/I	J/K	12	2	10
Chief Human Resource Management Assistant	M	1	-	-1
Senior Human Resource Management Assistant	L	1	-	-1
Human Resource Management Assistant 1	K	4	2	-2
Human Resource Management Assistant III/II	H/J	12	6	-6
	TOTAL	38	13	-25
C. HUMAN RESOURCE DEVELOPMENT				
Senior Assistant Director Human Resource Development	Q	1	1	-
Assistant Director Human Resource Development	P	1	-	-1
	TOTAL	2	1	-1
D. ACCOUNTS				
Principal Accountant I/Snr. Principal Accountant	P/Q	1	-	-1
Principal Accountant II	N	1	1	-
Chief Accountant	M	2	1	-1
Senior Accountant	L	3	4	1
Accountant II/I	J/K	24	13	-11
ASSISTANT ACCOUNTANT I	L	5	-	-5
ASSISTANT ACCOUNTANT II	K	5	-	-5
SENIOR ACCOUNTS ASSISTANTS	J	8	-	-8
Accountants Assistant II/I	G/H	45	23	-22
	TOTAL	94	42	-52

E. PLANNING				
Chief Economist	R	1	-	-1
Deputy Chief Economist	Q	1	1	-
Principal Economist	P	2	-	-2
Senior Economist II/I	M/N	7	3	-4
Economist/Statistician II/I	K/L	12	2	-10
Planning Assistant	J	1	-	-1
Statistical Officer II	J	2	-	-2
	TOTAL	26	6	-20
F. PROCUREMENT				
Assistant Director of Procurement	P	1	-	-1
Principal Procurement Officer	N	1	-	-1
Chief Procurement Officer	M	1	1	-
Senior Procurement Officer	L	4	1	-3
Procurement Officer I	K	5	3	-2
Procurement Officer II	J	8	1	-7
Procurement Assistant	H	9	3	-6
Storekeeper II/I/Senior	E/F/G	9	3	-6
	TOTAL	38	12	-26
G. FINANCE				
Chief Finance Officer	R	1	-	-1
Snr. Principal Finance Office/DCFO	P/Q	1	-	-1
Principal Finance Officer	N	1	1	-
Snr. Finance Officer	M	3	-	-3
Finance Officer III/II/I	J/K/L	6	2	-4
	TOTAL	12	3	-9
H. ADMINISTRATION SUPPORT SERVICES	J/G	A/E		
Executive Secretary	N	2	1	-1
Senior Personnel Secretary	M	2	1	-1
Senior Records Management Officer	L	1	1	-
Personal Secretary I	L	8	-	-8
Personal Secretary II	K	17	4	-13
Personal Secretary III	J	10	15	-5
Records Management Officer I	K	5	-	-5
Records Management Officer 11	J	6	-	-6
Records Management Officer III	H	11	6	-5
Principal Driver	J	10	1	-9
Chief Clerical Officer	J	4	-	-4
Snr Telephone Supervisor	J	1	-	-1
Snr Library Assistant	K	1	-	-1
Library Assistant II/I	H/J	1	-	-1
SENIOR SECRETARIAL ASSISTANT	J	10	4	-6
SECRETARIAL ASSISTANT II/I	G/H	36	17	-19
Library Assistant 111	G	2	-	-2
SECURITY OFFICER II	J	1	-	-1

ASSISTANT SECURITY OFFICER	H	4	-	-4
Security Warden I	F/G/H	1	2	-1
Clerical Officer li/l/Sco	F/G/H	80	26	-54
Telephone Supervisor 111	H	2	2	-
Telephone Operator li/l/Senior	E/F/G	9	4	-5
Driver lii/li/l/senior/Chief	D/E/F/G/H	20	12	-8
Support Staff lii/li/l/Snr/Supervisor lib/lia/l	A/B/C/D/E/F/G	50	17	-33
		294	113	-193
I. PUBLIC COMMUNICATION UNIT				
Deputy Director of Public Communications	R	1	1	-
Snr Assistant Director of Public Communications	Q	1	-	-1
Assistant Director of Public Communications	P	1	-	-1
Principal Public Communications Officer	N	1	1	-
Chief Public Communications Officer	M	1	-	-1
Senior Public Communications Officer	L	1	-	-1
Public Communications Officer II/I	J/K	1	-	-1
Technical Officer (Camera /Photographer)	H/J/K	1	1	-
Technical Officer (Electrical/Electronic)	H/J/K	1	-	-1
	TOTAL	8	3	-4
J. INFORMATION COMMUNICATION TECHNOLOGY				
Snr Assistant Director ,Information Communication Technology Officer	Q	1	-	-1
Assistant Director ,Information Communication Technology Officer	P	1	-	-1
Principal Information Communication Technology Officer	N	1	-	-1
Chief Information Comm. Technology Officer	M	1	1	-
Snr Information Comm. Technology Officer I	L	1	-	-1
Information Comm. Technology Officer I	K	1	-	-1
Information Comm. Technology Officer II	J	1	1	-
Information Comm. Technology Officer III	H	3	1	-2
	TOTAL	9	3	-6
		495	207	288
MINES AND GEOLOGICAL DEPARTMENT - NO.057				
DESIGNATION	J/G	A/E	IN-POST	VAR
Commissioner of Mines & Geology (to be upgraded to T)	S	1	1	-
Chief Geologist (Geological Survey)	S	1	-	-1
Deputy Commissioner of Mines (to be upgraded to S)	R	1	-	-1
Senior Principal Superintending Geologist (Geological Survey)	R	3	-	-3
Chief Inspector of Mines	R	1	-	-1
Principal Superintending Geologist (Geological Survey)	Q	7	4	1
Principal Superintending Inspector of Mines	Q	1	-	-1
Senior Principal Chemist I	Q	1	-	-1
Senior Principal Chemist II	P	1	-	-1
Chief Superintending Geologist (Geological Survey)	P	10	7	-3
Chief Inspector (Explosives)	P	1	-	-1
Chief Superintending Inspector of Mines	P	1	-	-1

Senior Superintending Inspector of Mines	N	4	1	-1
Principal Chemist/Analst	N	1	1	-
Senior Superintending Geologist (Geological Survey)	N	24	13	-11
Principal Superintendent (Explosives)	N	1	1	-
Chief Chemist/Analyst	M	1	-	-1
Superintending Inspector of Mines	M	5	2	-3
Chief Superintendent (Explosives)	M	3	-	-3
Superintending Geologist (Geological Survey)	M	27	4	-23
Senior Chemist/Analyst	L	1	-	-1
Snr. Inspector (Explosives)	L	1	-	-1
Snr. Cartographic Assistant	L	1	1	-
CHIEF LABORATORY TECHNOLOGISTS	M	3	-	-3
Snr. Laboratory Technologist	L	1	1	-
Senior Analyst	L	1	1	-
Geologist II/Geologist I(Geological Survey)	K/L	35	14	-11
Inspector of Mines II/ Inspector of Mines I	K/L	15	12	-3
Librarian I	K	1	-	-1
Inspector I (Explosives)	K	2	1	-1
Cartographic Assistant I	K	3	3	-
Laboratory Technologist I	K	1	1	-
Chemist II/I	J/K	3	-	-3
Personal Secretary I	K	3	-	-2
Personal Secretary III/II	H/J	5	2	-3
Accountant 11/1	J/K	1	-	-1
Records Management Officer II/I	J/K	1	1	-
Senior Drilling Inspector	J	1	-	-1
Cartographic Assistant III/II	J	9	9	-
Inspector Mechanical/Senior	H/J	1	-	-1
Laboratory Technologist III/II	H/J	5	5	-
Records Management Officer III/11	H/J	2	-	-2
Librarian 1	K	1	-	-1
Snr. Library Assistant	K	1	-	-1
Inspector II (Explosives)	J	12	11	-1
Procurement Officer II	J	2	1	-1
Principal Driver	J	2	-	-2
Chief Clerical Officer	J	4	4	-
Telephone Supervisor 111	H	1	-	-1
Procurement Assistant	H	1	-	-1
Senior Drilling Assistant	H	8	-	-8
Drilling Inspector	H	4	4	-
Laboaratory Technician I	H	1	1	-
Library Assistant II/I	H/J	6	-	-6
Snr. Security Warden	G	1	1	-
Library Assistant III	G	2	-	-2
Accounts Assistant 11/1	G/H	3	2	-1
SECRETARIAL ASSISTANT II/I	G/H	6	6	-
Claims Inspector/Warden of Mines	F	4	-	-4

Clerical Officer/II/I/Sco	E/F/G/H	21	12	-9
Storekeeper II/ISNR	E/F/G	4	2	-2
Telephone Operator II/I	E/F/G	4	3	-1
Drilling Assistant III/II/I	E/F/G	19	11	-8
Laboaratory Technician Trainee/IV/III/II	D/E/F/G	9	9	-
Driver III/II/Snr/Chief	D/E/F/G/H	33	10	-23
Mechanic III/II/I/Chargehand	D/E/F/G	2	2	-
Junior Cartographer 11B/11A/1	D/E/F	2	-	-2
Security Warden 111/11/1	D/E/F	9	7	-2
Support Staff III/II/I/Snr./Supervisor IIB/IIA/I	A/B/C/D/E/F/G	22	10	-12
	TOTAL	375	181	-177
DEPARTMENT OF RESOURCE, SURVEYS AND REMOTE SENSING				
DESIGNATION	J/G	A/E	IN-POST	VAR
Director Natural Resoucre Surveys & Remote Sensing	S	1	1	-
Deputy Director Natural Resource Surveys & Remote Sensing	R	2	-	-2
Senior Assistant Director Natural Resource Surveys	Q	4	2	-2
Senior Assistant Director Of Geo-Information Service	Q	1	-	-1
Assistant Director Natural Resource Surveys And Remote Sensing	P	3	1	-2
Assistant Director Geo-Information System	P	1	-	-1
Principal Natural Resource Scientist	N	6	4	-2
Principal Geo-Information Officer	N	2	1	-1
Principal Geo-Information Assistant	N	1	1	-
Senior Pilot	N	1	-	-1
Principal Technical Assistant (Remote Sensing)	N	1	-	-1
Principal Documentation Officer	M	1	1	-
Chief Natural Resource Scientist	M	5	3	-2
Chief Geo-Information Assistant	M	1	-	-1
Chief Geo-Information Officer	M	1	-	-1
Chief Technical Assistant (Remote Sensing)	M	1	-	-1
Senior Personal Secretary	M	1	-	-1
Personal Secretary I	L	1	-	-1
Pilot I	M	1	-	-1
Senior Librarian	L	1	-	-1
Senior Documentation Officer	L	1	1	-
Senior Geo-Information Officer	L	3	3	-
Senior Technical Assistant (Remote Sensing)	L	1	1	-
Pilot 11	L	1	-	-1
Natural Resource Scientist/Senior Natural Resource Scientist	K/L	21	9	-12
Snr Geo-Information Assistant	L	3	2	-1
Documentation Officer 1	K	1	-	-1
Forester I	K	1	-	-1
Technical Assistant 1 (Remote Sensing)	K	9	8	-1
Geo-Information Officer 11/1	J/K	8	3	-5
Personal Secretary II	K	3	-	-3
Accountant 11/1	J/K	1	1	-
Geo-Information Assistant 1	K	2	1	-1

Pilot 111	K	3	-	-3
Records Management Officer 11/1	J/K	1	1	-
Procurement Officer li	J	1	-	-1
Documentation Officer li	J	1	-	-1
Snr. Library Assistant	K	1	-	-1
Graphic Designer lii	J	1	-	-1
Technician 2	J	1	-	-1
Laboratory Technologist lii/li	H/J	1	-	-1
Geo-Information Assistant 111/11	H/J	8	8	-
Technical Assistant 111/11 (Remote Sensing)	H/J	26	22	-4
Chief Clerical Officer	J	5	-	-5
Principal Driver	J	10	-	-10
Accounts Assistant li/l	G/H	2	-	-2
Records Management Officer lii/li	H/J	2	1	-1
Procurement Assistant	H	1	1	-
Assistant Security Officer	H	1	-	-1
Senior Sergeant Ranger	H	3	3	-
Senior Graphic Designer	H	1	1	-
Personal Secretary III/II	H/J	6	2	-4
Library Assistant li/l	G/H/J	2	1	-1
Senior Security Warden	H	1	1	-
SENIOR SECRETARIAL ASSISTANT	J	3	-	-3
SECRETARIAL ASSISTANT II/I	G/H	2	2	-
Library Assistant 111	G	1	1	-
Ranger/Corporal/Sergent	F/G/H	7	2	-5
Clerical Officer/li/l/Sco	F/G/H	3	3	-
Telephone Operator li/l/Snr.	E/F/G	4	4	-
Storekeeper li/l/Snr.	E/F/G	3	-	-3
Driver lii/li/l/Snr/Chief	D/E/F/G/H	18	7	-11
Artisan lii/li/l/Chargehand	D/E/F/G	3	3	-
Electrician lii/li/l/Chargehand	D/E/F/G	1	1	-
Mechanic lii/li/l/Chargehand	D/E/F/G	3	3	-
Aircraft Attendant lii/li/l	D/E/F	2	2	-
Security Warden lii/li/l	D/E/F	10	-	-10
Radio Operator li/l	D/E	1	-	-1
Support Staff lii/li/l/Snr./Supervisor lib/lia/l	A/B/C/D/E/F/G	13	4	-9
	TOTAL	243	116	-127
	J/G	A/E	IN-POST	VAR
DIRECTORATE OF ENVIRONMENT				
Environment Secretary	T	1	1	-
Director Multi- Lateral Environmental Agreements and Domestication (National, Regional & International)	S	1	1	-
Director Of Programmes, Projects And Strategic Initiatives	S	1	1	-
Director- Environmental Policy Formulation, Monitoring & Interpretation	S	1	1	-
Deputy Director, Multi- Lateral Environmental Agreements and Domestication (National, Regional & International)	R	1	-	-1
Deputy Director, Programmes, Projects and Strategic Initiatives	R	1	-	-1

Deputy Director Policy Formulation And Interpretation	R	1	-	-1
Senior Assistant Director, Multi- Lateral Environmental Agreements and Domestication (National, Regional & International)	Q	1	-	-1
Senior Assistant Director Policy Formulation Monitoring & Interpretation	Q	1	-	-1
Senior Assistant Director, Programmes, Projects and Strategic Initiatives	Q	1	-	-1
Assistant Director, Multi- Lateral Environmental Agreements and Domestication (National, Regional & International)	P	1	-	-1
Assistant Director Policy Formulation, Monitoring & Interpretation	P	1	-	-1
Assistant Director, Programmes, Projects and Strategic Initiatives	P	1	-	-1
Principal Environment Officer, Multi- Lateral Environmental Agreements and Domestication (National, Regional & International)	N	1	-	-1
Principal Environment Officer, Policy Formulation, Interpretation and Interpretation	N	1	-	-1
Principal Environment Officer, Programmes, Projects and Strategic Initiatives	N	1	-	-1
Principal State Counsel	N	1	-	-1
TOTAL		17	4	-13