Republic of Mozambique

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Ministry for the Coordination of Environment Action

Directorate of Planning and Studies

FINAL REPORT

Public Environmental Expenditure Review

Mozambique

2005-2010

August 2012

Maputo

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ABBREVIATIONS

Note that many abbreviations relate to Portuguese phrases; this is why the abbreviations may not appear to correspond to the definition.

AfDB	African Development Bank
AT	Tax Authority
CDS	Sustainable Development Centre
CEPA	Classification of Environmental Protection Activities and Expenditures
CFC	Chlorofluorocarbons
CFMP	Cenário Fiscal de Médio Prazo (Medium Term Financial Framework)
CNPML	National Cleaner Production Centre
GDP	Gross Domestic Product
COFOG	Classification of the Functions of Government
CONDES	National Council for Sustainable Development
CSO	Civil Society Organization
CUT	Single Treasury Account
DAF	Directorate of Administration and Finance
DANIDA	Danish International Development Agency
DC	Directorate of International Cooperation
DFID	UK Department for International Development
DNAC	National Directorate of Conservation Areas
DNAIA	National Directorate for Environmental Evaluation
DNAPOT	National Directorate for Territorial Planning and Regulation
DNGA	National Directorate for Environmental Management
DNO	Direcção Nacional de Orçamento/National Budget Directorate
DNP	Direcção Nacional de Planificação/ National Planning Directorate
DNPA	National Directorate for Environmental Promotion and Awareness
DNSP	National Directorate for Public Health
DNT	National Directorate of Treasure
DNTF	National Directorate of Land and Forestry
DPAG	Provincial Directorate of Agriculture

DPCAA	Provincial Directorate for the Coordination of Environmental Action
DPE	Department of Planning and Studies
DPOPH	Provincial Directorate of Public Works
DPPF	Provincial Directorate of Planning and Finance
DPTUR	Provincial Directorate of Tourism
DRH	Departamento de Recursos Humanos/Human Resources Department
EADS	Environment Strategy for Sustainable Development
EC	European Community
EDP	Environment Development Partners Working Group
EIA	Environmental Impact Analysis
EWG	Environmental Working Group
FAO	Food and Agriculture Organization
FCA	Municipal Compensation Fund
FEMA	Forum Empresarial para o Meio Ambiente
FIIL	Local Initiative Investment Fund
FUNAB	Environment Fund
GERENA	Natural Resource Management / GEstão de REcursos NAturais
GIZ	Deutsche Gesellschaft fuer International Zusammenarbeit
GJ	Legal Department / Gabinete Jurírico
GoM	Government of Mozambique
IA	Environmental Inspection / Inspecção Ambiental
IDPPE	National Institute for the Development of Small Scale Fisheries / Instituto de Desenvolvimento de Pesca de Pequena Escala
IIA	Institute for Agronomic Reseach / Instituto Nacional de Investigação Agronómica
IIP	Institute for Fisheries Research / Instituto Nacional de Investigação Pesqueira
IMPFA	Institute for Physical Planning and Environmental Management
INGC	National Institute of Disaster Management
JICA	Japanese International Cooperation Agency
MAE	Ministry of State Administration / Ministério da Administração Estatal
MDG	Millennium Development Goals
MF	Ministry of Finance
MFP	Ministry of Civil Service / Ministério da Função Pública

MICOA	Ministry for the Coordination of Environment Action
MINAG	Ministry of Agriculture
MINED	Ministry of Education and Culture
MINEN	Ministry of Energy
MIREM	Ministry of Mineral Resources
MITUR	Ministry of Tourism
MOPH	Ministry of Public Works
MPD	Ministry of Planning and Development
MTC	Ministry of Transport and Communication
NPEM	National Programme for Environmental Management
ODI	Overseas Development Institute
OE	State Budget
PAC	Pollution Abatement and Control
PAP	Programme Aid Partners
PARP	Plano de Acção para a Reducção da Pobreza
PARPA	Plano de Acção para a Reducção da Pobreza Absoluta / Poverty Reduction Strategy Paper
PEDFFB	Policy and strategy for Development of Forest and Wildlife
PEER	Poverty Environment Expenditure Review
PEI	Poverty-Environment Initiative
PES	Plano Económico e Social / Economic and Social Plan
PQG	Plano Quinquenal do Governo / Five Year Government Plan
R & D	Research and Development
REO	Budget Execution Report / Relatório de Execução Orçamental
SEEA	System of Integrated Environmental and Economic Accounting
SISTAFE	The State Financial Administration System
SPA	Provincial Services of Agriculture / Serviços Provinciais de Agricultura
SPFFB	Serviços Províncias de Florestas e Fauna Bravia
SPGC	Provincial Services of Geography and Registry / Serviços Provinciais de Geografia e Cadastro
SPP	Provincial Services of Livestock / Serviços Provinciais de Pecuária
UGB	Budget Beneficiary Institution
UGE	Budget Execution Institution
UNEP	United Nationals Environment Programme
UNIDO	United Nations Industrial Development Organization

USAID	United States Agency for International Development
USD	United States Dollars

1.1 Macroeconomic performance

Politically, Mozambique is one of the most stable countries in the region and is known as a post-war economic recovery success story. Growth of GDP each year between 2005 and 2009 was above 6.4%, averaging 7.52% for the period.[1] GDP per capita increased from 334.5 USD per capita to 453.8 USD.[2] Debt, interest rates and inflation have largely remained stable over this period, with inflation reaching its lowest level of the decade 3.3% in 2009.[3]

Table 1 - Macroeconomic Indicators (2005-2009)

Indicator	2005	2006	2007	2008	2009	2010
Real GDP Growth %	8.4	8.7	7.3	6.8	6.4	6.8
Inflation %	6.4	13.2	8.2	10.3	3.3	12.4
GDP per capita (USD)	334.5	352.8	398.7	476.9	453.8	414

Source: INE

Mozambique has previously been reliant on external economic aid and in 2005 received over US$1.2 billion (or, 59% of the State Budget), making the country one of the top 25 highest aid recipients in the world in that year. Since then, the country has been working hard to achieve financial autonomy and in 2009, approximately half the state budget was financed by the country itself.

However, in spite of the political stability and the impressive increase of GDP in recent years, the country remains one of the poorest in the world, ranking just 165d out of 169 in the United Nations' 2010 Human Development Index.[4] Poverty remains high with more than half the population living below the poverty line. Like many developing countries, rural areas suffer from more widespread poverty than urban areas. The Gini coefficient[5] remained virtually unchanged between 2002-3 (0.42) and 2008-9 (0.41) at the national level, but inequality increased slightly in urban areas vis-à-vis rural zones.[6]

[1] *Report on the Millennium Goals, Mozambique (2010)*
[2] *Ibid.*
[3] *Ibid*
[4] *http://hdr.undp.org/en/statistics/hdi/*
[5] *The Gini coefficient measures the degree of inequality in the distribution of income. The closer to zero, the greater is the equality in the distribution of income; the closer to unity, the greater is income inequality.*
[6] *PARP 2011 – 2014, Republic of Mozambique Poverty Reduction Plan, May 3, 2011*

The country remains a largely rural economy with over 64% of Mozambicans living in rural areas. Many people in rural areas rely on subsistence farming to live and 93% of the rural workforce is employed within the agricultural sector.[7] Agriculture contributes to 30% of GDP.

1.2 Progress towards the Millennium Development Goals (MDG)

Steady progress has been made towards meeting the MDGs between 2005 and 2009, and in most areas it is potential or probable that Mozambique will meet its targets for 2015. Table 2 sets out the progress towards each MDG and the analysis that follows details progress towards key targets and identifies the main challenges faced by GoM in meeting these targets as laid out in the 2010 *Report on the Millennium Goals, Mozambique*.

Table 2 - Progress Towards the MDGs

Objectives / Targets	Will it be met?
MDG 1: EXTREME HUNGER AND POVERTY	
Reduce to half by 2015, the proportion of people living under extreme poverty	Potentially
Ensure by 2015, decent work for all, including women and young people	Without data
Reduce to half by 2015, the proportion of people who suffer from hunger	Potentially
MDG 2: UNIVERSAL PRIMARY EDUCATION	
Ensure that, by 2015, all boys and girls will be able to complete a full course of primary schooling	Potentially
MDG 3: GENDER EQUALITY	
Eliminate, preferably by 2005, gender disparity in primary and secondary education, and by 2015 in all levels of education	Probably
MDG 4: REDUCE CHILD MORTALITY	
Reduce by two thirds, by 2015, the under-five mortality rate	Probably
MDG5: MATERNAL HEALTH	
Reduce by three quarters, by 2015, the maternal mortality ratio	Without data
Achieve, by 2015, universal access to reproductive health	Potentially
MDG 6: COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES	
Have halted, by 2015, and begun to reverse the spread of HIV/AIDS	Potentially
Achieve, by 2010, universal access to HIV/AIDS treatment for all those who need it	Improbably
Have halted, by 2016, and begun to reverse the incidence of malaria and other major disease	Probably
MDG 7: ENSURE ENVIRONMENTAL SUSTAINABILITY	
Integrate the principles of sustainable development into national policies and programmes and reverse the loss of environmental resources	Potentially
Reduce the loss of biodiversity, achieving, by 2010, a significant level	Without data
Reduce to half, by 2015, the number of people without access to safe drinking water and sanitation	Potentially
By 2020, to have achieved a significant improvement in the standard of living of the slum dwellers	Potentially
MDG 8: DEVELOP A GLOBAL PARTNERSHIP FOR DEVELOPMENT	
Develop further an open, rule-based, predictable, non-discriminatory	Potentially

[7] *ODI Study - Environmental Institutions, Public Expenditure And The Role For Development Partners - Mozambique Case Study 2008*

trading and financial system. This includes a commitment to good governance, development and poverty reduction – both nationally and internationally	
Address the special needs of the least developed countries	Without data
Address the special needs of landlocked developing countries and small island developing States and the outcome of the twenty-second special session of the General Assembly of the UN	Without data
Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term	Without data
In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries	Without data
In cooperation with the private sector, make available the benefits of new technologies, especially information and communications	Probably

Source: Report on the Millennium Goals Mozambique (2010)

UPDATE ON MDG 7: ENSURE ENVIRONMENTAL SUSTAINABILITY

A large part of Mozambique is covered in forest and the 2008 forest survey indicated the country's forest coverage to be 51%, with a rate of deforestation of 0.58% (21% increase in the coverage as compared with 2001). Protected areas have been given increasing priority in recent years and new national parks and reserves have been created (including coastal and marine) resulting in an increase in volume of protected areas from 11% to 16% of total land mass. Mozambique's ecosystems are vulnerable to severe droughts, flooding and cyclone damage. Furthermore, migration from rural to urban and coastal areas following the civil war has put additional pressure on the environment causing desertification and water pollution. With increased industrialization, ozone depletion substances have increased substantially (2003: 503,148 tons to 2009: 898,835 tons) which is a considerable problem to be addressed. On the more positive side, access to improved water source has increased from 35.7% in 2003 to 57% in 2009 and access to improved sanitation has increased from 40% in 2003 to 45% in 2009.

1.3 Structure of the Report

This report is divided into eight sections. One of the key objectives of this report is to define the scope of the environmental sector and provide a detailed methodology based on which data has been collected, analysed and reported on. *But as evident from the sections listed below, this report goes much beyond it to include a comprehensive analysis of the preliminary findings of both quantitative and qualitative data*.

Section 1 – Outlines the macroeconomic performance of Mozambique between 2005 and 2009 and considers the progress of the country towards meeting the MDGs in particular MDG 7: Environmental Sustainability.
Section 2 – Defines what is meant by 'environment', 'environmental expenditure' and 'environmental income' both internationally and previously in Mozambique, finally proposing how these terms will be defined in the PEER.

It also considers who the principal stakeholders are and their existing roles and the dialogues between them.
Section 3 – Firstly outlines the mission and vision of the environmental sector and then considers the key environmental issues that are currently impacting Mozambique.
Section 4 – Considers what a PEER is, how it is used and specifically how it will be used in Mozambique and the questions that it will address.
Section 5– Provides, as a background to the PEER, a summary of the planning and budgeting process in Mozambique and the responsibilities of the key ministries.
Section 6 – Summarizes the policy and legal framework relating to the environmental sector in Mozambique.
Section 7 – Outlines the methodology for the PEER and how this will be applied when examining MICOA, other ministries, total expenditure, external financing and revenues.
Section 8 – Performs a preliminary assessment of public environmental expenditure following the methodology set out in section 7.

2 DEFINING THE SCOPE OF THE ENVIRONMENTAL SECTOR

2.1 "Environment"

Mozambique's 1997 Environment Law defines the term "environment" as: "the medium in which humans and other beings live and interact among themselves and with the medium itself, including:

a) Air, light, land and water;
b) Eco-systems, bio-diversity and ecological relationships;
c) All organic and inorganic matter;
d) All socio-cultural and economic conditions which affect the lives of communities."[8]

2.2 "Environmental Expenditure"

Defining what is specifically meant by environmental expenditure is no easy task, for it does not simply mean that which is spent by the environmental sector's dedicated agencies. As set out in PARPA II, environment is a cross-cutting issue which spans many different areas of government. The aim therefore of this section is to lay out some common global definitions of environmental expenditure and to propose the extent of the scope of environment expenditure within Mozambique.

OECD
The OECD definition of environmental expenditure is an important one first postulated in the 1970s and since adapted. The current definition is "pollution abatement and control (PAC) expenditure plus protection of biodiversity and landscape, research and development (R&D) in environment)." The limitation

[8] *Environment Law 1997 Article 1*

of this definition is that it does not include water supply, which is not seen to have an 'unambiguous effect' on the environment.

System of Integrated Environmental and Economic Accounting (SEEA)
The SEEA, used by the UN as a framework bringing together economic and environmental information within country's national accounts to measure the contribution of the environment to the economy and the impact of the economy on the environment. It defines environmental expenditures as "those which reduce or eliminate pressure on the environment and which aim at making more efficient use of natural resources." This definition is interesting because it includes activities that are not carried out for specific environmental reasons but which do have a clear impact on the environment.

Classification of Environmental Protection Activities and Expenditures (CEPA)
CEPA 2000 classifies activities, products, outlays and other transactions whose principal purpose is environmental protection into the following categories:

- Protection of ambient air and climate
- Wastewater management
- Waste management
- Protection and remediation of soil, groundwater and surface water
- Noise and vibration abatement (excluding workplace protection) Protection of biodiversity and landscapes
- Protection against radiation (excluding external safety)
- Research and development
- Other environmental protection activities

World Bank
The World Bank in its 2003 study, "Public Environmental Expenditure Reviews (PEERs), Experience and Emerging Practice" by Auphil Swanson and Leiv Lundethors proposed to use the following as a general definition: "*Expenditure by public institutions for purposeful activities aimed directly at the prevention, reduction and elimination of pollution or any other degradation of the environment resulting from human activity, as well as natural resource management activities not aimed at resource exploitation or production*".

This definition doesn't include resource exploitation or production, but in its report adds that they need to be monitored and corrective measures taken afterwards if necessary, using the example of correct mine closure and rehabilitation after exploitation.

Classification of the Functions of Government (COFOG)
COFOG, part of the UN family of international classifications, is used to define the broad functions of government of which one is 'environmental protection'. This is divided into the following sub-categories:

- Waste management
- Waste water management
- Pollution abatement
- Protection of biodiversity and landscape

- R&D environmental protection
- Other environmental protection services

In their report for ODI on Mozambique, "Environmental Institutions, Public Expenditure and The Role For Development Partners" (2008), Lídia Cabral and Dulcídio Francisco proposed adding the category "environmental promotion activities" to the COFOG definition. This has since been used in Rwanda's PEER report.

Table 3 below summarizes the links between the functions performed by GoM agencies and the COFOG categories of environment protection and the additional category of environmental promotion.

Table 3 - Environmental Management Functions of Government and Corresponding GoM Agency

	Environment protection (COFOG) and environment promotion	Description of function	GoM agencies mandated with the respective function
1	Waste management (COFOG 05.1)	Collection, treatment and disposal of waste.	- MICOA - Municipalities
2	Waste water management (COFOG 05.2)	Sewage system operation and waste water treatment.	- MOPH, National Directorate of Water - Sanitation - Municipalities
3	Pollution abatement (COFOG 05.3)	Activities relating to ambient air and climate protection, soil and groundwater protection, noise and vibration abatement and protection against radiation.	- MICOA - Municipalities
4	Protection of biodiversity and landscape (COFOG 05.4)	Activities relating to the protection of fauna and flora species, the protection of habitats (including the management of natural parks and reserves) and the protection of landscapes for their aesthetic values.	- MITUR, National Directorate of Conservation Areas - MINAG, National Directorate of Land and Forest - MICOA, Environmental Management Directorate
5	Research and development (COFOG 05.5)	Administration of applied research and experimental development on subjects related to environment protection; operation of	- MICOA, Directorate of Planning and Studies - MINAG, National Directorate of Land

		government agencies engaged in applied research and experimental development on subjects related to environment protection; support in the form of grants and loans for applied research and experimental development on subjects related to environment protection undertaken by non-government bodies such as research institutes and universities.	and Forest - MITUR, National Directorate of Conservation Areas - Ministry of Science and Technology and Public Universities
6	Environment protection affairs and services n.e.c. (COFOG 05.6)	Administration, management, regulation, supervision, operation and support of activities such as formulation, administration, coordination and monitoring of overall policies, plans, programmes and budgets for the promotion of environmental protection; preparation and enforcement of legislation and standards for the provision of environmental protection services; production and dissemination of general information, technical documentation and statistics on environmental protection.	- MICOA, various - Municipalities - Monitoring departments/divisions of various sector ministries, including MINAG (Regulation and Control Department within DNAC) and the Ministry of Mineral Resources (Environmental Department)
7	Environment promotion activities	Activities which promote sustainable use of natural resources and which prevent or mitigate the negative environmental externalities of non-environmental development projects that potentially deplete natural resources or generate pollution: Examples would include investments in renewable sources of energy, or in sustainable agricultural technologies.	- MICOA, various - MINAG, National Directorate of Land and Forest - Ministry of Energy - Ministry of Mineral Resources - Ministry of Fisheries - Other?

Source: ODI report on "Environmental Institutions, Public Expenditure And The Role For Development Partners" (2008), Lídia Cabral And Dulcídio Francisco

There is a risk of using too narrow a definition of environmental expenditure such as COFOG,that is the risk that the total expenditure on environment across all ministries may be much higher than is reported.

It is therefore proposed to use a wider definition of environmental expenditure so as to get as full a picture of environmental expenditure in Mozambique as possible. This could include expenditure items that have both a **direct** and **indirect** impact on the **natural** or **built up** environment. This encompasses expenditure towards **environmental management** but also expenditure towards **protection and control of human activities** that may affect the environment.

Environmental expenditure within Mozambique will include at the very least expenditure within the following categories and any other environmental expenditure which falls into the above description.

- Land and similar resources
- Hydrological and associated resources
- Ocean, coast and islands
- Biodiversity (species and protected areas)
- Urban environment
- Urbanization and planning
- Healthy environment
- Air pollution
- Population dynamic and structure
- Endemic diseases and medical care
- Water and sanitation

Clearly, using this definition, environmental expenditure is found within a large number of budget lines. The environmental sector will be the focus of this review, but there are significant areas within other sectors such as agriculture, fisheries, tourism, public works, industry, commerce, health, education, transport and communications, energy and mining that need to be taken into account in order to truly reflect the public expenditure on environment in Mozambique.

2.3 Environmental revenue

There are three sources of funding to public sector activity in the environment in Mozambique. These are:

1. Un-earmarked funding allocated through the budget negotiation process originating from ordinary government revenue (i.e. tax revenues) and general budget support provided by development partners;
2. Earmarked revenue generated by environmental management activities; and
3. Earmarked funding provided by development partners.

The earmarked revenue generated by environmental management activities refer to concession fees and fines collected for the use and management of natural resources such forestry, conservation areas, and land use. The single main beneficiary of the environmental revenues is the Environmental Fund

(FUNAB) that draws fines and fees related to EIA processes as well as fees from the landfill in Matola. Created by Decree 39/2000, of 17 October, part of FUNAB's expenditures are covered by earmarked revenues comprising 60 percent of the total amount collected from fines and fees established under Decree 45/2004, of 29 of September. Other sources of environmental revenues directly collected from related activities include:[9]

- Compensations resulting from environmental accidents occurring in the country;
- Sale of "produced with clean technology" stamp or certificate;
- Fees and tax collected under the national legislation concerning environmental preservation and conservation; and
- Any other revenues (to be) designated by Law for the benefit of the Fund.

A closer look at the list of revenues from the State Budget, however, shows that the potential sources of revenues for the wider environmental sector is far more reaching than what can be suggested by just looking at the "fees and fines from the National Environmental Fund".

Potential sources of revenues include:

- Rent (fee) on Land[10]
- Surface tax - Mining Activity
- Production Tax - Mining Activities
- Fees and Fines from the National Environment Fund
- Fisheries License Fees
- Fee for Land Use
- Fee for Fisheries Development Fund
- Fee of exploration of charcoal and Firewood - SPFFB
- Hunting Fee - SPFFB
- Hunting Fee - DNTF
- Abatement Fees - SPP
- Annual Fee for Land Use
- Fee for Timber Extraction - SPFFB
- Registration fee request Mining Concession
- Fee for Issuance of Mining Concession Title
- Fee for Late Submission of Application for the Extension of Mining Concession
- Fee for the Extension of a Mining Concession
- Wood Certified - SPA
- Fines of the Use and Utilization of Land - SPGC
- Fees and Fines from the Institute of National Petroleum

[9] Although detailed and disaggregated information on receipts is prepared by the Tax Authority (AT), it is not published in the Budget Execution Report (REO).

[10] *According to the Mozambican Law (LEI DE TERRAS, Lei n° 19/97, de 1 de Outubro), the use of land is subject to the payment of rates whose value is determined taking into account the location of the land, its size and purpose of their use and enjoyment, set as follows: (a) authorization fee, and (b) annual fee which can be progressive or regressive, according to the investments made. The law also predicts setting preferential rates for nationals.*

- Fines of Mining Activities - 60%
- Revenues on Conservation Areas for Tourism purposes

Also, the following four tax revenues (rather than non-tax revenues as above) can be considered as environmental revenues:

- Fishing License
- Tax on Production of Petroleum
- Tax on the Mineral Production
- Surface Tax

2.4 Sectoral Scope and related public institutions

This section provides an overview of the key players in the environmental sector:

Ministry for the Coordination of Environmental Action (MICOA)
MICOA is the government agency with overall responsibility for coordination of environmental activities. It is not an implementation agency. The most important areas of intervention are organized by thematic national directorates, namely:[11]

- Territorial Planning (DNPOT) – responsible for territorial planning;
- Environmental Management (DNGA) – responsible for environmental management of coastal zones, natural resources and urban areas;
- Environmental Impact Assessment (DNAIA) - responsible for the Environmental Impact Assessment of development activities and investments;
- Environmental Promotion (DNPA) – responsible for environmental awareness raising and promotion.

The basic structure is complemented by the following support units:

- Planning and Studies (DPE) – responsible for strategic planning of MICOA's activities and development;
- Legal (GJ) – responsible for legal issues relevant to MICOA and development of environmental legislation;
- International Cooperation (DC) – mainly responsible for the management of relations between MICOA and external entities particularly in regard to international and regional environmental conventions;
- Financial Administration (DAF) – responsible for financial management and procurement;
- Human Resources (DRH) – responsible for the management of human resources;

[11] The provincial level follows basically the same structure, with the national directorates becoming provincial departments.

- Environmental Inspection (IA) – responsible for ensuring compliance with the public sector regulations within MICOA and environmental supervision.

One problem is that MICOA has poor human[12] and financial resources meaning that in reality it has lower political and decision making leverage and little scope for influencing sector policies, particularly those sectors which possess relatively more resources and means. Of a total staff of 321, only approximately a quarter of which are educated to bachelors degree level or higher. Only four members of staff have an academic background in environmental engineering, environmental management and audit. Many have no relevant training in environmental management, others require updates. It is hoped that the establishment of the Institute for Physical and Environmental Planning (IMPFA) which will see its first graduates in 2013, will in part address the availability of qualified personnel.

Within its remit MICOA has the following five agencies:

- ***The Environment Fund (FUNAB)*** - FUNAB is a public sector agency under MICOA to provide financial resources within the environmental domain. It mainly funds small-scale community or district activities such as: spatial planning, awareness campaigns and promotion of sustainable technologies.
- Ten ***Provincial Directorates for Environmental Coordination (DPCA).***
- Three ***Centres for Sustainable Development (CDS's)*** in Gaza, Manica and Nampula provinces**.** The CDSs are subordinate to MICOA playing a range of different roles such as: research activities, project implementation and technical support on environmental issues.
- ***The Research Centre for the Marine and Costal Environment (CEPAM).***
- ***The Institute for Physical and Environmental Planning (IMPFA)*** - created in 2010**.**

Governance and facilitators in planning and budgeting processes

National Council for Sustainable Development (CONDES)

CONDES is Cabinet's consultative body on environmental issues, subordinated to the Prime Minister's Office. It consists of Ministers and Vice-Ministers from relevant sectors and is chaired by the Prime Minister and the Minister of Environment is the vice-chair. Its mandate is to promote dialogue on environmental issue and monitor policy implementation. The general perception is that its political leverage and technical capacity are limited due taking into account that is presence in environmental policy debate could be stronger; in the meantime, there is a noticeable progress in this direction. However, according to the ESPS II report[13], the GOM is said to be generally satisfied with its performance and hence the relatively low priority to its revitalisation. According to the same report, the major challenges faced by the government in environmental management should be dealt with by MICOA and line ministries, who directly face the day-to-day issues, meaning

[12] See Annex 1 for statistical evidence

[13] GoM (2010): *Environmental Sector Programme Support II (2011 – 2015).*

that it is the dynamic of the environmental sector as a whole that should inform CONDES and not the other way around.

MPD/MF: As described in Section 5, related to the planning cycle being followed by the GOM, MPD is the ultimate entity responsible for the formulation, monitoring and evaluation of the main planning instruments in Mozambique, i.e. PARPA, PQG, MTEF and PES. MPD provides guidance to the state organs, including the government, in the practical use of these instruments including their continuous updating. In addition to its general role in the planning cycles and processes MPD has a unit that deals with cross cutting issues which also include environment. Other areas of work in that unit are HIV/AIDS and gender. With regards to these three specific areas MPD is particularly concerned with the development of indicators that could objectively measure the country's progress. Environmental indicators are in the process of being developed and tested[14]. On the other hand, MF is responsible for resource allocation, budget elaboration, financial management and reporting across the planning cycle. The main financial management instruments in use are the State Budget (OE) and SISTAFE, including e-SISTAFE.

Local administration and finance and human resources management

MAE/MFP: The Ministries of State Administration (MAE) and the Ministry of Civil Service (MFP) set the general framework for public administration in terms of local administration and finance and human resources management. MAE is entrusted with the responsibility of ensuring that local administration, mainly municipalities and districts have the financial resources to which they are entitled from the state and that they operate in a way that is in line with the principles of the Mozambican state such as decentralisation and local participation. MFP defines the basic framework for human resource management in the public sector.

Technical areas

National Directorate for Conservation Areas of Ministry of Tourism (DNAC)
DNAC falls under the Ministry of Tourism and is responsible for overseeing management of conservation areas including national parks and reserves. There is some tension between the twin interests of the Ministry of Tourism: tourism development and nature conservation and its natural resource management objectives.

National Directorate of Land and Forestry (DNTF)
DTNF is responsible for forest management, wildlife conservation and the land registry; it is under the remit of the Ministry of Agriculture. Principal activities include managing licenses and concessions for forest exploitation and forest and wildlife conservation.

Environmental Line Ministries

[14] PEI will assist the development and testing of poverty environment indicators for the national territorial statistics

Environmental Line Ministries comprise the government departments that deal directly with the main environmental components, i.e. soil and subsoil, water, air and the biotic components (plant and animal). In general these are also subdivided into two categories:

Those depending directly on natural resources as their main source of raw materials (inputs) comprise:

- Agriculture (land and forests)
- Fisheries (fishery resources)
- Mines (mineral resources)
- Public works and housing (water and land); and

Those whose outputs depend largely on the supply of environmental services comprise:

- Energy (water, mineral resources, biotic elements for bio fuels, etc.)
- Tourism (landscape and wildlife)
- Health (water and infrastructures)

Other Ministries that are increasingly becoming relevant in the debate as potential line Ministries are:

- Ministry of Education and Culture (inclusion of environmental issues in the education curricula)
- Ministry of Defence
- Ministry of Transport and Communication (which, by hosting the National Meteorological Institute (INAM), and given the strong links between Climate Change and INAM, repositions MTC within the environmental subsectors)
- Ministry of Trade and Industry (National Clean Production Center (CNPML)[15]

The environmental line ministries cover the following sectors and respective main technical areas:

- **Energy**: Energy production and distribution (electricity, fuels and renewable energy)[16];
- **Agriculture**: Plant and animal production, forests and wildlife, land and cadastre, agricultural irrigation and agricultural research and extension[17];
- **Health**: health including environmental health as part of public health[18];
- **Mining/Mineral Resources**: Geology, mines and fossil fuels[19];

[15] The main mission of the Center is to contribute with increased entrepreneurial efficiency assuring industrial sustainable development together with environmental protection, with the main objective of promoting a sustainable industrial development, among other objectives.
[16] Ministerial Diploma n.º 195/2005.
[17] Ministerial Diploma n.º 22/2005 of January 2005
[18] Ministerial Diploma n.º 94/97 of October 22.

- **Public Works and Housing**: Water, buildings, roads and bridges, housing and urbanisation[20];
- **Tourism**: Tourism and respective hotel industry as well as conservation areas related with tourism[21];
- **Fisheries**: Fisheries' management and inspection, fisheries research and technologies[22].

Environmental Units/Focal Points

Environmental units or departments are found under the following ministries:

- Ministry of Agriculture (environment unit)
- Ministry of Energy (environment unit)
- Ministry of Mineral Resources (environmental department in the Mines Directorate)
- Ministry of Public Works (environment unit in the Roads Section, environment unit in FIPAG, and Environment Department in the National Directorate of Water[23])
- Ministry of Health (Environmental Health Department in the National Directorate for Public Health)

The aim of the environmental units is to incorporate an environmental perspective into sectoral planning. Some units have full time staff; others form just one part of an employee's job description. There is no direct link between these units and MICOA, and often results in duplication of work by MICOA. However, it was suggested by the MICOA technical committee that the ToRs for this group were needed to be drafted by the end of the year.

The establishment of these environmental units/focal points in line ministries is emerging as one of the most preferred ways of strengthening the integration of environmental considerations in the sectors represented by those ministries, but so far this is happening without any formal guidelines or clear definition of the roles and responsibilities of these entities. Moreover, except for the Ministry of Mineral Resources[24] that has a department dealing with environmental issues in its organizational structure, other ministries carry out environmental mainstreaming "informally", through appointed units/individuals. The level of allocation of other resources (material and financial) also varies from ministry to ministry, and only a few ministries (e.g. Energy) have full time staff while in most of them the tasks are assigned to people who have other formal responsibilities within the ministries. Nonetheless, most environmental units are filled with reasonably qualified and experienced people (GoM/ESPS 2011 – 2015).

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[19] Ministerial Diploma n.º 201/2005 of August 23.
[20] Ministerial Diploma n.º 217/98 of December 23.
[21] Ministerial Diploma n.º 126/2000 of September 13.
[22] Ministerial Diploma n.º 55/2000 of June 07.
[23] The Departments of Sanitation at MOPH is responsible for promoting the appropriate and sustainable provision of sanitation services, in particular the draining and cleaning of wastewater and storm drainage in urban areas, and disposal of excreta, and to safeguard public health, protect the environment and welfare of the people
[24] The Ministry of Tourism has a National Directorate for Conservation Areas in its organizational structure.

Research and Investigation Institutions

There are a number of research and investigation institutions subordinated to various ministries. These include:

- The National Institute for Agronomic Research (IIA), which falls under the Ministry of Agriculture
- The National Institute for Fisheries Research (IIP), under the Ministry of Fisheries
- The Institute for the Development of Small Scale Fisheries (IDPPE), under the Ministry of Fisheries

Civil Society and NGOs

There are numerous NGOs operating in the environmental sector in Mozambique including:

- Centro Terra Viva (CTV)
- Livaningo
- Forum Natureza em Perigo (FNP)
- Viga

NGOs are expected to play an active role in the implementation of PARPA, although it is not fully clear what this entails.

Therefore within this PEER the consultants have attempted to account for the expenditures from all these institutions. A full list of the public sector institutions is given in Annex 3.

2.5 Development Partners and funding

Mozambique has a number of development partners who support environmental management; some focus on policy development and capacity building, others on direct intervention in the field. The principal development partners are summarized in Table 4.

Table 4 – Principal activities of development partners working with environment

Institution	Activities
AECID	Institutional strengthening
AfDB	Projects include: 1) Institutional support to African climate institutions project 2) Shared Watercourses Support Project for Buzi, Save and Rovuma River Basins
DFID	Providing technical support to Ministry of Energy on biofuels
DFID and Irish Aid	Funding of MASC the CSO umbrella organisation. RCCP - Regional climate change programme for southern Africa
EC	Global Climate Change Alliance (GCCA)
FAO	Supports implementation of Forestry and Wildlife Component of National Agriculture Development Programme (PROAGRI)
FFEM (French GEF)	Funds various climate change projects
GIZ	1) Integrating vulnerability & adaptation to CC into sustain. development policy planning & implementation in East & Southern Africa 2) Technical Assistance on Sustainable Use and Production of Biofuels (SADC wide) 3) SADC Sustainable forest Management
Government of	Funds various climate change projects including: Expansion of Renewable

Belgium	Energy Systems for the promotion of rural development. Expansion of Renewable Energy Systems for the promotion of rural development
Government of Denmark (DANIDA)	Five-year environmental support programme 2006-2010 up to US$ 29.0 million, plus US$ 25.2 million and US$ 28.0 million for Natural Resources Management (NRM) and Coastal Zone Management (CZM), respectively, making it the main environmental donor.
Government of Finland	1) Adaptation Learning Programme for Africa (ALP) 2) Regional SADC Meteorology project 3) Energy and environment partnership programme in Southern and East Africa 4) Climate change & development: recognizing the role of forest & water resources in cc adaptation
Government of Italy	Funded projects include: 1) Sustainable livelihoods & natural resource management 2) Community management & conservation of natural reserves
Government of Norway	Funds various climate change projects
Government of Sweden	Funds various climate change projects and an energy program: Rural electrification, environmental and financial sustainable energy sector in Mozambique. Rehydration of power stations project.
Government of the Netherlands	Previous donors to MICOA until 2006[25]. Now, active champion for environmental policy amongst donors (focusing mainly on environmental policies) and making its contribution mainly through General Budget Support;
JICA	Funds various projects including 1) Programme for emergency water supply for addressing climate change. 2) Research on coastal integrated management system. 3) Reducing impact of climate change (coastal erosion) in Beira City. 4) Programme for Emergency Water Supply for Addressing Climate Change
The World Bank	Funding 2 large projects up to US$ 15m: 1) Trans-frontier Conservation Areas and Tourism Development 2) Coastal and Marine Biodiversity Management as well as some climate change projects and supporting policy dialogue on natural resources, environment and climate change.
UN-HABITAT	Active role in sanitation, waste management and erosion at municipal level as well as various climate change projects
UNDP	Several large projects including: 1) Africa Adaptation Programme – supporting integrated and comprehensive approaches to climate change adaptation. 2) Strengthening disaster risk reduction and emergency preparedness. 3) Coping with drought and climate change. 4) INGC Climate Change Project Phase II 5) Environmental Mainstreaming and adaptation to climate change. 6) INGC Climate Change Project Phase II - Responding to CC in Moz.
UNEP	In addition to above partnerships, UNEP funds projects such as: 1) Africa Environment Information Network 2) Integrating vulnerability & adaptation to CC into sustainable development policy planning & implement. in East & Southern Africa
UNEP - UNDP	Poverty and Environment Initiative (PEI) – capacity building, awareness raising
UNEP + 6 other UN agencies	MDG F joint project in Chicualacuala, Gaza
UNIDO	Projects include: 1) Pilot project to address negative impact of coastal tourism and promote sustainable tourism. 2) Prevention and disposal of obsolete pesticides in Mozambique phase 2009-2010
USAID	Funds various environmental projects

[25] Which used to be the biggest bilateral donor before DANIDA engagement.

DANIDA contribute a significant amount to the MICOA budget. In addition to their own finances they channel funds from other agencies such as the EU. Other donors provide indirect support to environmental programmes[26].

The above table of donors and projects is by no means exhaustive. For more detailed lists of donors and projects see annexes for mapping of donor activities in relation to environment and climate change.

2.6 Policy dialogue

Attempts have been made in recent years to strengthen policy dialogue and coordination; however, this remains weak.

Within Government

MICOA and CONDES continue improving their institutional performance, but a lot still needs to be done in order to day that these two institutions have influence over high level government policy decisions. One of the explanations to the slow progress in this area could be fact that other Ministries still have a tendency to see environmental protection and promotion as a barrier to economic development. Inter-sectoral exchanges and debates are rare and often do not lead to coordinated decision-making. The implementation of the Environmental Units / Departments in selected ministries has not yielded the expected benefits in terms of coordinating intra-government policies and facilitating dialogue. Indeed the consultants were not able to gain any information on environmental expenditures from these units and relied on other staff in the ministries.

Government and Other Stakeholders

A temporary multi-stakeholder policy dialogue group, the *Grupo de Reflecção* was created during the preparation of PARPA II, which included representatives of various ministries, development partners and NGOs, headed by MICOA. The group played a proactive and strong role in the PARPA preparation, however, is now dormant.

A sector Environmental Working Group (EWG) was formally established in 2008 as "development partners, civil society and private sector organizations" as part of the PAP (Programme Aid Partnership) process. This is led by MICOA and in 2008 it defined its mission as follows: "*The EWG promotes an inter-sector approach to create synergies between policies, strategies and programme, ensuring that environmental considerations are taken into account in the development planning instruments*". The group members include: MICOA representatives, focal points/members of the Environment Units in government sectors; civil society and private sector representatives of relevance to topic being discussed in a specific working session and the interested participants of the Donor Environment Working Group. The EWG has been and is expected to be one of the main arenas for an invigorated dialogue between the Government and Partners. The EWG is a formalised but open forum where environmental issues as well as studies and projects are

[26] Other donors not included in this table include Norway and Sweden.

discussed. Formal and regular meetings are supposed to be conveyed every second month, but this has not always been the case, although MICOA is putting effort into making the meetings more regular.

Parallel to EWG there exists the Development Partners Environment Working Group to ensure a harmonised policy dialogue among donors. In 2009 the EWG was relatively active, with a number of meetings between donors and the MICOA, but the civil society participation and that of other sectors remains weak and does not seem to be a platform for multi-stakeholder policy dialogue. In 2010 the EWG became less active, while the Development Partners Environment Working Group was definitely more active and visible.

There is strong will to reactivate either the *Grupo da Reflecção* as a platform for multi-stakeholder policy dialogue or to have EWG perform this function. Another proposal is to somehow ensure CONDES plays a stronger role by utilizing its Technical Council.

Between Development Partners

There has not until recently been much dialogue or coordination between development partners. In line with the development of the EWG, an Environment Development Partners Working Group (EDP) is working to harmonize policy dialogue between development partners and GoM. DANIDA play a key role as the sector lead in environment. Although they may not have formal dialogue their project staff is well connected to MICOA on other important informal levels. There is a reference to the environment included in the budget support Performance Assessment Framework (PAF). This was developed to focus dialogue on key factors facing the environmental sector.

Civil Society and Private Sector

In 2005, a network of civil society organizations was established to focus on environment and development, although this has not recently played an active role. More recently, a mechanism to support the Civil Society (MASC – Mechanism for Civil Society in Mozambique) was established. MASC has mainly been funded by DFID and Irish Aid but Danida is keen to join the financing this independent support mechanism. There is also a movement to create a Civil Society Environment Forum, however this is facing financial constraints. The *Forum Empresarial para o Meio Ambiente (FEMA)* includes members from 90 largest private sector operators in Mozambique with the aim to promote environmental awareness, provide technical assistance on environmentally sound investment and facilitate dialogue between public and private sectors on environmental awareness.

The private sector is represented by the Environmental Corporate Forum/*Forum Empresarial para o Meio Ambiente (FEMA)*. FEMA was established in 1996 and among its membership representatives of the private productive sector, consultancy companies and other private sector operators interested in environmental issues can be found. After a few years of playing an active role in environmental education/awareness, dialogue with the government on legal issues related with the environment and the

private sector this organisation has retreated considerably from the institutional landscape in the last 4-5 years.

3 KEY ISSUES RELATED TO ENVIRONMENT SECTOR

In order to conduct a PEER, it is important to understand the environmental sector and the key challenges that face it. This section sets out the mission and vision of the environmental sector and outlines the key environmental priority issues for Mozambique.

3.1 Mission of the Environmental Sector

The MICOA Strategic plan 2005-2015 sets out the mission and vision of the environmental sector as follows:

The environmental sector mission is to "Coordinate the implementation of the Environmental Strategy for Sustainable Development of Mozambique, in order to reduce absolute poverty, to promote sustainable use of natural resources, improvement of the quality of environment, economic growth and social equity."

The environmental sector vision is to "Lead the country in promoting a healthy environment, achieve high quality of living and balanced social, environmental and economic development:"
This will be achieved through the following:

- Sustainable use of renewable and non-renewable natural resources
- Designing and implementing sustainable development policies and corresponding legislation
- Sustainability in the decision-making process regarding management and use of natural resources
- Application of environmental principles in activities, projects and sector working programmes
- Improvement of the environmental quality by adopting eco-efficiency, reduction of pollution, urban re-qualification and industrial upgrading, and an adequate territorial planning and zoning
- Reduction of asymmetries in integrating gender issues in policies of development
- Establishment, maintenance and development of cooperation with counterpart institutions at regional and international level.

3.2 Key Environmental Issues

Some of the environmental issues currently facing Mozambique are as follows.

Natural resource management
Natural resources for Mozambique are a key asset for the country. There have been sustained decreases in the government budget dedicated to forestry and wildlife protection since the 1990's; this has led to serious shortages of staff, skills and equipment to manage the sector. Protection of natural

resources is now being recognized as an important issue and recently the percentage of protected land areas has been increased from 11% to 16%. Uncontrollable forest fires have become commonplace leading to significant damage to forests, property and loss of human life. Fish stocks are at risk and are currently below the optimum level.

Land degradation

Land degradation including soil erosion and salinization of agricultural lands, housing zones and coastal areas is cited frequently as a key environmental issue in Mozambique. Inappropriate mining techniques, agricultural practices and deforestation are direct causes. Similarly, the unordered land settlement of recent years following periods of war and natural disasters has caused disruption and damage to the land. Natural phenomena are the cause of some degradation; also the effects of climate change are apparent with an increase in average sea water levels causing salt intrusion and salinization of agricultural lands. With 80% of the population reliant on subsistence agriculture as their main source of income, it is important to safeguard the land and find a balance between exploitation and sustainable development.

Natural disasters and climate change

Mozambique is the third African country most exposed to risk from multiple weather-related hazards according to the 2009 Global Assessment Report on Disaster Risk Reduction.[27] The country is highly vulnerable to floods, droughts and cyclones. In 2008 for example, 58% of households are said to have suffered the effect of floods, excessive rainfall or lack of rain.[28] There is also evidence that climate change has increased temperatures and that rainfall patterns have changed considerably.[29] A law on Disaster Risk Reduction is in the process of being finalized.

Pollution from industries and urban areas

As the country industrializes, increased levels of pollution are seen in the air and water. Between 2003 and 2008, consumption of ozone depleting substances in Mozambique increased by 0.01 million tonnes (from 0.51 million tons of ODS to 0.52 million tons of ODS, or 2%). From 2008 to 2009, the relative increase went from 0.52 million tons of ODS to 0.9 million tons of ODS (or, 73%)[30]. Despite the 2009 ban on import of chlorofluorocarbons (CFCs) there remains high stock levels throughout the country. There is a general lack of training of technicians and importers about banned chemicals and substances. Unregulated and excessive use of pesticides and fertilizers results in water contamination, loss of biodiversity and reduced oxygen in lakes, rivers and sea. Respiratory diseases have been reported in relation to environmental pollution and/or exposure, in particular, indoor air pollution from cooking fuels and to a lesser extent use of agro-chemicals without observing proper health and safety measures.

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[27] *2009 Global Assessment Report on Disaster Risk Reduction*, UNISDR, 2009.

[28] Cited in *Environmental Priorities in Mozambique: Current Status and Future Challenges* Edited by Stefaan Dondeyne (2010) p146

[29] *Study on the Impact of Climate Change on Disaster Risk in Mozambique: Synthesis Report,* INGC. June 2009

[30] *Report on the Millennium Development Goals - Mozambique 2010, UNDP, 2011*

Unplanned occupation of land / territorial zoning
Underdeveloped spatial planning and unplanned occupation of land is a key environmental issue that affects both rural and urban areas. Legislation in this regard has historically been weak and there is low technical capacity in country at municipal, district and provincial level to address this. Unplanned land occupation can lead to land erosion and also contributes to sanitation problems, pollution and non-sustainable exploitation of natural resources in general. A law in territorial planning has recently been approved by MICOA.

Water supply
In 2003, access to clean water was only 36.2% nationwide; progress is being made and this increased to 56% by 2009. However, supplying the population with adequate freshwater for irrigation, domestic and industrial use, especially in rural areas remains a significant challenge. Droughts and floods cause considerable disruption.

Waste management and sanitation
Poor sanitation and waste management are key issues in overcrowded areas of habitation especially as there is not yet an economically feasible mechanism for waste collection and recycling. There is also a general lack of sewage and drainage systems as well as lack of public toilets. Access to improved sanitation increased from 40% in 2003 to 45% in 2009. However much of the population are unaware of basic hygiene techniques. Poor sanitation and lax waste management directly leads to the spreading of water-borne diseases such as malaria, diarrhoea and cholera. There are several initiatives in place to address sanitation issues such as the Mozambican Association of Recycling (AMOR) and the Paga Lata.

4 WHAT IS A PEER?

4.1 Public Environmental Expenditure Review (PEER)

A Public Environmental Expenditure Review is a review of government resource allocation in respect of the environment. This can be on a national or sub-national level and may include all sectors or a selection of sectors. The review assesses the efficiency and effectiveness of actual environmental resource allocation in comparison with the provisions within the environmental management framework and priorities. The conclusion of the review should suggest reforms to current practice in order to improve performance of the implementation of sustainable environmental management. Given the importance of the outcome of the PEER in policy making, it should be conducted in regular intervals and should be institutionalised as part of the overall monitoring process of the planning and budgeting formulation and execution.

The principal goals of a PEER are:

- Ensuring cost-effectiveness of environmental initiatives
- Promoting sustainable environmental management
- Fiscal prudence in environmental spending and revenue raising
- Efficient management of investment in programmes

The actual purpose of the PEER will depend on the current requirements of the country and may change for subsequent PEERs.

The data and insights gained from the PEER can be used for a number of purposes including: policy development (aligning public financial strategy with environmental policies), planning (guaranteeing adequate budget is allocated to ensure implementation), assessment (assessing effectiveness of implementation) and monitoring (reviewing expenditure against policy priorities).

Specifically, the results of the PEER can be used to:

- Examine whether government expenditure matches environmental priorities
- Identify inconsistencies between policies and budget allocation
- Design policy reforms
- Set government budgets
- Redistribute of spending to environmental institutions
- Increase environmental budgets
- Prioritise funding longer-term over short-term goals

PEERs have seen considerable success in countries around the world. Table 5 shows some examples of the outcomes.

Table 5 – Country outcomes of PEER

Country	Key Outcomes
Madagascar	Highlighted how protected area system could become a net source of government revenue through ecotourism
Ukraine	Rationalised the hundreds of separate environmental funds, thereby reducing overall administration costs
Tanzania	Increased the environmental agency's budget fivefold
Colombia	Proved justification for World Bank's Sustainable Development Policy Loan

Source: *Markandya A, Hamilton K, and E Sanchez-Triana. 2006. Getting the Most for the Money – How Public Environmental Expenditure Reviews Can Help*. World Bank Environment Strategy Notes No 16. World Bank, Washington DC

4.2 Objectives and Areas of Focus of PEER in Mozambique

The purpose of the PEER in Mozambique is to provide answers to a number of questions, including where the funds for environment are being allocated, how the decisions on the funding of the sector are currently made, how effectively and efficiently the funds are being spent and who the principal beneficiaries of the expenditure are.

As detailed in the terms of reference and based on the suitability and feasibility, the objective of the study is to assess the allocation and management of public resources committed to the environmental sector between 2005-2009 building on the ODI study on Environmental Institutions, Public Spending and the Role of Development Partners, by:

- analysing the allocation, disbursement of funds, and revenue (both geographic and thematic, internal and external sources) to the environmental sector and any noticeable trends compared to other sectors;
- establishing the efficacy of the budget process as well as assessing the institutions involved with its management (MICOA, its affiliated agencies and other concerned strategic Government agencies/ bodies/sectors for environmental mainstreaming);
- distributing environmental expenditures by type of activity;
- commenting on the component parts of the expenditure (recurrent and development budgets) and on its efficiency and effectiveness and reasons for any variation between planned expenditure and its execution;
- providing an assessment of the adequacy and appropriateness of expenditure to date and planned for the near future, establishing its consistency with sector priorities and that of the priorities of the National Strategy for Sustainable Development (EADS) and PARPA II, Environmental Sector Strategic Plan;

- analysing the capacity of the environmental sector to execute requested budget;
- comparing the strategies and planned programmes for the sector in the future with the resources likely to be made available;
- assessing the contribution from the environmental sector central, sectoral and provincial revenue generation;
- building capacity for relevant national institutions to carry out PEER on a regular basis.

It is intended that the study will provide answers to a number of questions including:

- In which programmes and sub-sectors is public investment in support of environment being made and what is their coverage?
- How are decisions on public expenditures in support of the environment made and by whom?
- How the decentralised planning and budgeting process is likely to have an impact on environmental spending and revenue generation?
- How effectively and efficiently are public resources being spent in support of the environment?
- Who benefits? Are public resources reaching the poor (the equity issue)?
- How to improve data collection and M&E system for environmental budgeting and execution?
- What recommendations can be made to support a more effective and efficient use of public funds for the environment in specific and environmental management in general (in light with the recommendation provided by the 2007 ODI study)?

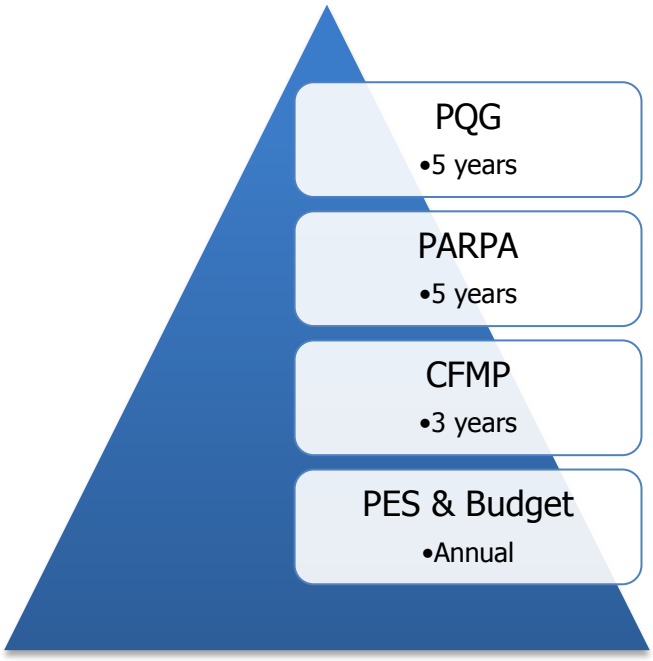
5 PLANNING AND BUDGETING PROCESS IN MOZAMBIQUE

In order to conduct a PEER, it is important to understand the planning and budgeting process of Mozambique.

Two ministries coordinate the budgeting and planning process: the Ministry of Finance (MF) responsible for the budget and the Ministry of Planning and Development (MPD) charged with coordinating the planning process. Historically, these functions were combined in one ministry but in 2006 they commenced operations as separate ministries working in close coordination.

There are three planning instruments for the government to use: the Poverty Reduction Strategy Paper (known as PARPA but renamed as PARP due to the assumption that the focus should be on poverty not absolute poverty), the Medium-Term Expenditure Framework (CFMP) and the Economic and Social Plan (PES). These fall under the general umbrella of each government's five-year programme known as the PQG. Prepared at the same time as the PES, is the annual budget for the financial year starting in January.

Figure 1 - Diagram of Hierarchy of Planning Instruments in Mozambique



Five Year Government Programme / Programa Quinquenal do Governo (PQG)

Upon inauguration of each new government, the PQG is presented to the National Assembly within 60 days of taking office. This is a five-year strategy largely based on the winning party's election manifesto. It set outs the government's general policy objectives and areas of priority action. The PQG guides the planning and budgeting process.

Poverty Reduction Strategy Paper / Plano de Acção para a Reducção da Pobreza Absoluta (PARPA) – 5 yearly

The PARPA is the country's poverty reduction strategy paper prepared every five years by the MPD. PARPA II was initially written to cover the periods 2006 and 2009, but was formally extended to 2010. It is expected that the new poverty reduction strategy paper (PARP) that was adopted in May, 2011 will focus on poverty reduction, rather than absolute poverty reduction. For the avoidance of doubt, where this document refers to the PARPA, this includes the PARP.

The PARPA elaborates the five-year government Programme and is the main policy and reference document guiding the CFMP, PES and annual budget. The PARPA is seen to be a major political driving force and donors generally try to align their support to the PARPA framework. It focuses on poverty reduction objectives.

Preparation is an interactive process between the MPD and all the ministries.

Medium Term Expenditure Framework (CFMP) – 3 yearly

Coordinated by the MPD, preparation of the CFMP is a collaborative process between the MF and MPD. Ministries and other spending units submit proposals for the CFMP and there is then extensive consultation between MF, MPD and spending units. Each year, between the months of November and February, ministries are required to submit their proposals for the CFMP to MPD, these are prepared with a three year perspective. After a process of discussion and consolidation, the CFMP is submitted to Cabinet mid-May.

The CFMP allocates all sources of revenue be it aid (as general sector support), sector programme support or traditional project support and provides budget ceilings for three year period. It is approved by the Economic Council and is the starting point for the annual budget preparation. In practice, year 1 figures become the budget ceilings for the annual budget, whilst years 2 and 3 figures become tentative budget ceilings, and are often obsolete by the time that year's budget comes to be prepared.

Recently, expenditure has started being classified into programmes in order to enhance budget transparency and allow linkage between budgets and plans.

The CFMP is widely discussed within ministries and provincial directorates, however, more interaction between MICOA and other ministries in this process is desirable. Although planners are slowly but surely paying attention to it, the CFMP is not yet used as a principal planning document. The information from the CFMP is not published or standardized and there is some question as to the quality of forecasts within the CFMP, which have a tendency to be broad.

Economic and Social Plan / *Plano Económico e Social* (PES) - Annual

The PES is prepared annually by sectors and consolidated by the MPD. By the

end of July each year, ministries and other spending units submit proposals to MPD for the year ahead. The proposals are then consolidated by MPD and submitted to the National Assembly each year by the end of September. The PES is finally approved by the National Assembly by mid December ready for the new financial year starting in January.

The PES compliments the budget, by providing basic assumptions underlying revenue projection and explaining how expenditure plans within the budget proposal will be implemented. The PES communicates the planned activities of public institutions and also forecasts economic activities that are the basis for revenue projection. Targets are given to the social and economic sectors.

The State Budget - Annual

The budget is prepared by sectors and consolidated by the MF in collaboration with the MPD and follows a similar timetable to that of the PES. The sectors have all the methodologies and instruments to prepare their own budgets. Ministries and spending units submit their proposals by the end of July each year, which are then consolidated by MF and submitted to the National Assembly by the end of September. Approval is expected by mid December.

The state budget is the annual budget management instrument. An accompanying budget statement provides the rational behind the budget and sets out its relevance to the PARPA priority areas and an analysis of the structure of public expenditure by functions of government.

Note, that although MF and MPD work collaboratively, it remains difficult to this day to fully link the budget and PES. Often the budget proposals are adjusted at the last minute to fit available funds without adjusting PES targets. This means the budget may be insufficient for achieving the project aims.

Table 6 shows the planning and budgeting process in Mozambique by month.

Table 6 – Timetable for planning and budgeting process

	CFMP (3 yearly process)	PES (Annual)	State Budget (Annual)
Jan	Sectors submit proposals to MPD		Implementation
Feb	Sectors submit proposals to MPD		
Mar			
Apr			
May	CFMP submitted to cabinet. Budget ceilings announced	PES proposals prepared by sectors	Budget proposals prepared by sectors
Jun		PES proposals prepared by sectors	Budget proposals prepared by sectors
Jul		Sectors submit proposals to	Sectors submit proposals to

		MF/MPD	MF/MPD. Negotiation between sectors & MF/MPD
Aug			Finalization of budget proposal
Sep	Start preparation of budget ceilings	Submission to parliament	Submission to parliament
Oct	Sectors submit proposals to MPD		
Nov	Sectors submit proposals to MPD		
Dec	Sectors submit proposals to MPD	Parliamentary discussion & approval	Parliamentary discussion & approval

The Budget Execution

After the approval of the budget appropriations, the resources are released to the spending agencies, via the CUT (Single Treasury Account), to implement expenditure programmes. This takes place from January to December of the following year. Funds are normally released on a monthly basis and transferred directly from the Treasury to budget execution institutions (UGE), such as ministries, provincial directorates, districts, etc. Until 2009 the 3 CDSs were considered budget beneficiary institutions (UGB) and received their funds from the Provincial Directorate of Planning and Finance (DPPF), which received funds via CUT on their behalf. Starting from 2010, CDSs are supposed to receive their funds via CUT as they have become UGEs. The same applies to "UGB districts" (78 in 2009). In 2010 it was planned that another 50 district would become "UGE districts" and would receive their funds directly from CUT, leaving only 28 districts under the UGB category.

The Environmental Fund (FUNAB) plays an important role in funding the area of environment with the role of mobilizing internal and external resources to finance environmental activities. The National Council for Sustainable Development (CONDES) and Centre for Coastal and Marine Studies (CEPAM) based in Cabo-Delgado also receive state funds for their operations.

Municipalities receive two categories of funds from the MF, i.e. the Municipal Compensation Fund (Fundo de Compensação Autárquica - FCA) and the Local Initiatives Investment Fund (Fundo de Investimento de Iniciativas Locais – FIIL). However, municipalities do not account for the funds to the GoM. Further, the external funds that municipalities receive (from donors) are not registered in the State Budget. Hence, like in many other sectors where donors support programmes outside the government's financial system, the reporting mechanism is also done off-budget and not through e-SISTAFE (e.g. ODAMoz system).

6 POLICY AND LEGAL FRAMEWORK

The policy and legal framework for the environment in Mozambique consists of a range of laws, policies and strategies, some of which focus specifically on the environment such as the Environment Strategy for Sustainable Development and others such as the agricultural policy which has elements within it that impact the environment.

It is worth mentioning that the environmental policy objectives and priorities are framed by the overarching government policy as set out in the PQG, PARPA and PES which is explained in more detail in the section on planning and budgeting.

6.1 Legal Framework

The Constitution
Mozambique's constitution lays out the significance of the environment to its citizens and is an important instrument for environmental protection. Article 90 and Article 117 of the constitution set out the State's duty to protect the environment and for citizens to have the right to environment. In addition to this, Article 45 puts responsibility of "promoting and defending the environment" into the hands of the citizens.

Environment law
Law No. 20/97 of 1 October
The environment law passed in 1997 sets the foundations for policy and institutional framework for environmental management. The law defines scope, agents and management tools for environment management in order to achieve sustainable development.

Forest and wildlife law
Law No 10/99 of 7 July
The forest and wildlife law was passed in 1999 with the aims of protecting, preserving, developing sustainable use of forest and wildlife resources for the economic, social and ecological benefit. (Article 4) The law does not take into consideration ecological balance, biodiversity, preservation and conservation of environmental components or climate change.

Water law
Law No. 16/91 of August 3
The water law highlights the importance of water for different people's needs and the importance of creating mechanisms for its distribution so as to be available to all without harming the needs of others.

Land Use Law
Law No. 19/2007 of 18 July

The land use law sets out land rights and a legal framework of land use. It also forms the basis of territorial planning.

Law and Regulation on Environmental Impact Assessment (EIA)
Decree nº 45/2004
The Law on Environmental Impact Assessment lays out requirements for undertaking EIA for projects with environmental impact and states MICOA's responsibilities in respect of this.

Spatial Planning Law
Law nº 17/2007 - law
Resolution nº 18/2007 - policy
The draft law on Territorial Planning is intended to strengthen the legal basis for spatial planning, addressing all areas of the country including informal settlement areas.

6.2 Policies

PARP 2011 – 2014
The PARP 2011 – 2014, approved in 2011, sets as its third priority "improving the sustainable management of natural resources (land, water, fisheries and forests)." As strategic goals it advocates the improvement of spatial planning and land management mechanisms, namely:
• Implement the law on spatial planning with emphasis on agricultural zoning and mapping and on land register;
• Perform the mapping of areas prone to natural disasters.

The second strategic objective of PARP is to adopt measures for disaster risk reduction and adaptation to climate change, including:
• Promote implementation of the strategy for reducing emissions from deforestation and degradation of forests and reforestation and fighting wildfires;
• Promote conservation agriculture and income diversification in areas prone to disaster risk;
• In the zones prone to disaster risk and in the zones more vulnerable to climate changes, create, train and equip local committees to manage disaster risks;
• Operationalize the Committees of management of natural resources; and
• Promote reforestation program and reducing emissions from deforestation and degradation of forests and establishment of carbon stocks (REDD +)

PARPA II
2005-2009
The poverty reduction strategy paper, PARPA II recognizes the country's dependence on its natural resources for subsistence and income and the direct link between the environment and poverty. It designates the environment as a cross-cutting sector. Its objective is to:
- Create a regulatory framework and build capacity for environmental management

- Enforce sustainable use of resources and good governance
- Monitor exploitation concessions for environmental sustainability
- Financial and administrative deconcentration to provinces and districts including participatory district planning

National policy on environment
Resolution No 5/95, 3 August
The national policy on environment was approved in 1995 with the aim "to ensure sustainable development of the country, considering their specific conditions, through a realistic and acceptable commitment between socio-economic progress and environmental protection."

Agricultural policy and implementation strategies
Resolution No 11/95, of 31 October
The aim of the 1995 agricultural policy is stated as: to "develop the agricultural activity in order to achieve food security through diversified production of goods for consumption, supply to the domestic industry and for export, based on the sustainable use of natural resources and guarantee of social equity". The implementation strategies highlight the need for sustainable use of resources.

Policy and strategy for development of forest and wildlife (PEDFFB)
Resolution No. 8/97, 1 April
The policy and strategy for development of forest and wildlife was introduced in 1997 with the objective "to protect, preserve, develop and use in a rational and sustainable manner the forest and wildlife resources for the economic, social and ecological benefit of the current and future generation of Mozambicans." The PEDFFB is under the responsibility of two ministries: Ministry of Agriculture and Ministry of Tourism.

National water policy
Resolution No 46/2007 of 21 August
In 2007, the new national water policy set out to make available water "in quantity and quality suitable for the present and future generations, for sustainable development, poverty reduction and promoting the welfare and peace and mitigating the negative effects of floods and droughts".

Energy policy and strategy
Resolution No 5/98, 3 March - Policy
Resolution No. 24/2000 of 3 October - Strategy
Objectives of the 1998 energy policy include: ensuring reliable energy supply at lowest cost possible; increasing availability of energy from non-renewable sources; and, promoting renewable energy technologies

Policy on disaster management
Resolution No 18/99 of 10 June
This policy on disaster management concentrates on preventing disasters, and specifies contribution to the conservation and preservation of the environment as one of its objectives. Implementation of the disaster management policy falls to the National Institute of Disaster Management

(INGC)

Policy and strategy for development of meteorology
Resolution No 7/96, April 2 - Policy
Resolution No 43/2006, of 26 December – Strategy
The development of meteorology policy expanded the meteorological network to provide the country with advance warnings of extreme adverse weather. The aim of the strategy is to minimize the impact of natural disasters and other weather on Mozambique's development. It is the Ministry of Transport and Communications through the Institute of Meteorology responsible for implementation.

National policy on land use planning
Resolution No. 18/2007 of 30 May
The national policy on land use planning aims to enhance the "integration of land use tools in the development and economic planning of the political-administrative territorial units at all levels, to enable a better economic and social use of the resources, depending on its location, its relationship with existing infrastructure or to be creates, current occupation of the land and factors of spatial and environmental nature".

National Programme for Environmental Management (NPEM) 1996-2006
The NPEM is the policy framework that guides MICOA's work. The programme sets out to ensure long-term sustainability of social and economic development and identifies areas of priority for sustainable management of development including: forestry, agriculture, mining, fishery and tourism. It identifies three focus areas for intervention: natural resources, coastal areas and urban areas.

Strategic Plan for Environmental sector 2005-2015
The Strategic Plan for Environmental Sector is the successor to NPEM and identifies the key priority areas to be:

- Water and sanitation in urban areas
- Upgrading of peri-urban areas
- Erosion and soil degradation in coastal areas
- Management of natural resources
- Legal and institutional development
- Pollution of water and soils
- Natural disasters

Environment Strategy for Sustainable Development 2007-2017 (EADS)
The EADS is a medium strategy providing a common vision for all the different environmental stakeholders in their common aim of sustainable development and the eradication of poverty. It sets out its objectives within four major groups: natural resources protection and management, urban planning, air pollution, and population.

6.3 Treaties and Protocols

Mozambique is a signatory of a number of environmental protocols and treaties:

- African Convention on the Conservation of Nature and Natural Resources
- UN Framework Convention on Climate Change (The Kyoto Protocol)
- UN Convention for the Combat of Desertification
- Convention on International Trade in Endangered Species of Wild Flora and Fauna
- UN Convention on Biological Diversity
- UN Declaration on Human Settlements
- Millennium Declaration
- Action Plan for Sustainable Development
- Treaty of Cross-border Conservation Areas
- The Vienna Convention for Protection of the Ozone
- Montreal Protocol on Ozone Destroying Substances
- UN Convention on the Law of the Sea
- Convention for the East Africa Coastal and Marine Development Management and Protection
- Basel Convention (cross-border trade of dangerous waste)
- Bamako Convention on the prohibition of importing dangerous waste into Africa.
- RAMSAR Convention on wetlands
- The Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region

7 METHODOLOGY FOR THE PEER

As we have seen the scope of the environmental sector is wide in Mozambique including the core Ministry, MICOA, Ministries with strategic overlapping priorities, donors and Civil Society Organisations (CSOs). This section will describe what information was available to review and what this means for limitations of the analysis. Due to the difference sources of information used the methodology will be described for each source separately.

Before we discuss data limitations it is necessary to set out how we assess whether the expenditure distributions are in line with national plans. According to PARPA II, the major environmental priorities in Mozambique for the period under analysis focused on the following areas:

- Sanitation;
- Territorial planning;
- Prevention of land degradation;
- Management of natural resources, including control of fires;
- Legal and institutional aspects, i.e. environmental education, compliance of the law and capacity building;
- Reduction of air pollution, waters and soils pollutions; and
- Prevention and reduction of natural disasters.

However, as the ODI (2008) report indicates, planning and budgeting practices in Mozambique does not allow an easy establishment of a clear link between policies and budgets. Even when policy documents indicate priorities, they fail to specify concrete activities and targets associated with a particular policy objective. Moreover, the budget does not provide sufficiently detailed information to indicate how resources are distributed across areas of intervention below the level of the ministry, provincial directorate or district administration (i.e. within the categories specified by the organic classification of expenditure). This is a key limitation to the PEER analysis.

Therefore, a method was developed with this lack of planning and budgeting link and the data limitations (listed below) in mind. Where possible the consultants have compared policy documents and other relevant country-specific information (e.g. poverty levels), with planned budgets and with the realised / actual expenditures. As there is more comprehensive data available at the project level this can be carried out by comparing the priorities against the data on projects by environmental code.

This has allowed an assessment of the extent of alignment of environmental expenditures with needs in Mozambique. However, as will be noted below there are data limitations over various sectors. This will limit comparative

budget versus executed analysis to those years and disaggregation levels where data is available.

7.1 MICOA

MICOA have supplied the consultants with a breakdown of their budgets from 2005 to 2010. This includes a recurrent and investment expenditure split and a further clarification of those external expenditures that are domestically and externally financed. MICOA supplied both the original budget allocations and the final executed expenditures. This has allowed a review of budget execution rates.

Budget data was supplied broken down by the internal institutions; i.e. MICOA; FUNAB; the ten DCPAs; the three CDSs; CEPAM and IMPFA. This allowed a review of the internal agency trends in spending.

A geographical analysis was possible as a result of the internal institutional breakdown. Trends in spending by province were reviewed using the changes in the DPCA's expenditures. Whilst this is not a full view of the provincial expenditures (some can be allocated to MICOA centrally instead of directly to the budget of the DPCAs) it does provide an indication of the decentralisation policy and the extent of capacities of the provincial agencies.

Expenditure by economic classification has been made available to the consultants from 2007 to 2010. This means that a full breakdown of expenditures by salaries, goods and services is possible in this review.

7.2 Other Ministries

As discussed above in the section on 'scope of the environmental sector' environmental expenditures in Mozambique stretch beyond MICOA. Key Ministries were highlighted where significant environmental activities are undertaken. This section will explain how the consultants were able to identify and analyse the environmental expenditures across this array of institutions.

Chapter 6 lists these ministries and their sub-agencies who are responsible for the environmental expenditures. It also gives an account of the internationally recognised coding for budgets 'COFOG'. The full coding system does not just include one decimal place as seen in table 5 but a larger system for diversification as shown in Table 7. This allows for a more precise budgeting system. So that when there are expenditures in a project (in any ministry) where only some of the activities are environmentally related this system allows that proportion to have a code associated with it to be accounted for as environmental expenditure.

Table 7 – International environmental budget codes

Code	Designation

05	ENVIRONMENTAL PROTECTION
05.1	WASTE MANAGEMENT
05.11 **05.111**	
05.2	WASTE WATER MANAGEMENT
05.21 **05.211**	
05.3	POLLUTION ABATEMENT
05.31 **05.311**	
05.4	PROTECTION OF BIO DIVERSITY AND THE LANDSCAPE
05.41 **05.411**	
05.5	RESEARCH AND DEVELOPMENT ON ENVIRONMENTAL PROTECTION
05.51 **05.511**	
05.6	ENVIRONMENTAL PROTECTION
05.61 **05.611**	

Source: http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=4

However, the budget in Mozambique has not begun to implement this rigorous system until 2010. Therefore it has been difficult for the consultants to find the precise expenditures across Ministries. For example in the Ministry of Agriculture the key institution that deals with environmental expenditures is the National Directorate of Land and Forestry. The information available gives only their overall budget, not a breakdown of environmental expenditures on organic fertiliser purchases or terracing costs. In other words the budgeting system in Mozambique does not offer disaggregated information on sub-programmes and activities.

Therefore the review is limited to the code of the ministry as there are no sub-codes that allow us to pinpoint the environmental expenditure. Yet, the option of simply accepting the budget of a Ministry or the National Directorate would greatly overestimate the amount of environmental expenditures.

There is a consistent budget coding system applied to projects. These are available from the Ministry of Finance using SISTAFE: the State Financial Administration System (a new integrated budget, treasury management, accounting and internal control system). The projects can be filtered along environmental codes regardless of which ministry the expenditures were made from. As a quality assurance measure the consultants were able to read the project titles to make sure they were correctly assigned.

This method allows a breakdown of recurrent and investment expenditures. The project information is coded by the COGOF sectors and the titles have information on geographical location (provincial agencies). Also the investment expenditure is broken down into those which are funded internally and externally. However, as in many investment expenditure classification systems there will inevitably be some inclusion of recurrent expenditures, e.g. staff salaries for the project.

The time frame for evaluation is limited to 3 years; from 2008 to 2010. This is because of the introduction of the new system - SISTAFE. Prior to 2008 the Government did not have a centralized tool to make direct payments and hence have an account of the expenditures in real time. Ministries had their own bank accounts and their accounts were organized in a variety of ways, mostly using excel, and would report on a monthly basis and consolidated reports would only be generated at the end of the fiscal year. It was rather a manual process and until all reconciliations were done it would take months. Since 2008, both the budget and the execution are done online for the UGBs using the SISTAFE.

However, the environmental coding only goes so far. For example once again referring to agriculture, we would not see any expenditure from the Ministry of Agriculture on deforestation in the 05 COFOG code. Also the installation of wind generators by the Ministry of Energy is not included. Therefore, in addition to the coded projects the consultants have used SISTAFE to look at all projects that are in some way related to environment.

In lieu of time to discuss each project with each institution this is somewhat of a subjective exercise. To reduce over-estimation, projects that are solely related to operational costs were not included and again titles of projects were used to ensure that the projects were directly relevant. This has resulted in the inclusion of the following four government sectors:

- National Institute of Disaster Management
- Ministry of Agriculture and its Provincial Directorates
- Ministry of Mineral Resources and its Provincial Directorates
- Ministry of Energy

This results in a list of projects from 2008 to 2010 (in line with that available in the COFOG coding). The COFOG coding which allows the identification of the projects was introduced with e-SISTAFE from 2008.[31] Hence, the analysis for 2005 – 2007 has not been possible to materialize. Projects are analysed by institution and by main environmental budget codes whether responsibility is central or provincial.

7.3 External Financing

External financing for environmental expenditures are widely disbursed through government agencies. Not all financing is channeled through the official government systems which makes data collection very difficult.

The budget information for MICOA is broken down by domestic and external expenditures. Moreover, DANIDA - the key donor agency – have supplied their own data on their expenditures which will also be used to analyse the extent of external environmental expenditure in MICOA.

[31] See Annex 2 for more detail on how the e-SISTAFE is structured in accordance with COFOG coding.

To gain information on the wider government expenditures which are financed externally ODAMoz is used. This is an online data base that provides information on Official Development Assistance (ODA) to Mozambique. It includes both on-budget and off-budget financing:

- On-budget refers to the donors' use of the single treasury account to disburse funds.
- Off-budget means that the funds to the project implementers are not channelled through the government accounting system and therefore the government does not include this in the national state budget. Any institution, with its workers and in many cases with the assistance of foreign consultants can implement the project. However, the donor keeps a parallel accounting system.

The analysis will focus on on-budget external financing as this constitutes public expenditure on environment. Whilst off-budget funding is important, and will be discussed, there are serious limitations to information. For example there is increasingly more activity from non-traditional donors such as China (in MICOA and other Ministries) whose contributions are practically impossible to track. Therefore readers must be aware that any external financing information will not capture all forms of financing.

In terms of using the ODAMoz database; the projects were filtered to show any funding described as environmental. Whilst the majority are solely environmental-based there are some projects that are described as a mixture of goals such as environment and poverty, or gender and environment. This may lead to a slight over estimate of the external expenditures for environment using this source.

Finally, the data extracted covers the years 2007 to 2010. However, there is data missing for the year 2010. This is normal for donor financing databases; the OECD's international donor database for example currently is only updated in full to 2009[32]. The World Bank's contribution is clearly missing and as a major environmental sector donor the absence of their contribution does skew the trend. However, the consultants have chosen to include the 2010 data to be in line with the MICOA data availabilities. Readers should bear this missing data in mind.

7.4 Total Expenditures

The method of summing the expenditures has been carried out as follows:

- MICOA total expenditures are accepted as the most accurate and complete.
- The SISTAFE project data is then added –
  - Environmentally coded projects will be added MINUS all MICOA project expenditures as these have already been included in the MICOA budget;

[32] http://stats.oecd.org/Index.aspx?DatasetCode=CRSNEW

    - The non-environmentally coded project expenditures are added.
- Finally any remaining externally funded projects from ODAMoz are added making sure not to duplicate any external investment expenditure from the MICOA budget.

As the collection of all relevant data comes from a variety of sources it is important to note the complementarity of data sources. The official data from MICOA and the Ministry of Finance project data (SISTAFE) should be aligned as they are both compiled through the same budgeting system. However the data from SISTAFE and ODAMoz will vary; fundamentally as ODAMoz includes off-budget expenditures, but even for the on-budget values there will be deviation.

This is due to a variety of factors surrounding imperfect and asymmetric information. In particular timeliness and reporting techniques to the different sources will vary. Also recording of disbursements may not be dealt with similarly. The reporting systems of donors and governments are also not always aligned.

There are also issues concerning classification of expenditures. For example the treatment of staff salaries or office furniture in an investment project may or may not be correctly treated as recurrent.

7.4 Revenues

In addition to the external funding to the environmental sector, as described above there are domestic revenue sources. On the revenue side the consultants have incurred constraints relating to a lack of in-depth details from individual institutions. However, a full list of revenues associated with the environment sector is given above in section 4.3. This was obtained from the Ministry of Finance, National Directorate of Budget for 2008, 2009, and 2010.

This list gives a wide definition of domestic revenues. Revenues from sources such as the fees and fines of FUNAB, conservation areas and abatement fees are clearly linked with the environment. However the list also includes revenues from the production of petroleum and mineral production which could be viewed as simply general taxation. Therefore the definition of environmental revenues has been limited to monies from fees and fines in the environmental sector. This leaves the following sources of revenues from domestic sources:

- **Direct Environmental Revenues**[33]: Fees and Fines from the National Environment Fund; Revenues on Conservation Areas for Tourism purposes; Abatement Fees - SPP [34]

[33] Titled as such due to their specifically designed purpose to gain revenues for environmental rather than an association to an industry.
[34] Serviços Provinciais de Pecuária (*Provincial Livestock Services)*

- **Revenues sources associated with Land**: Rent (fee) on Land; Fee for Land Use; Annual Fee for Land Use; Fines of the Use and Utilization of Land - SPGC [35]

- **Revenues from Fishing and Hunting**: Fisheries License Fees; Fee for Fisheries Development Fund; Hunting Fee – SPFFB[36]; Hunting Fee – DNTF[37]; Fishing License

- **Revenues from Coal and Firewood**: Fee of exploration of charcoal and Firewood – SPFFB; Fee for Timber Extraction – SPFFB; Wood Certified - SPA[38]

- **Revenues from Mining**: Registration fee request Mining Concession; Fee for Issuance of Mining Concession Title; Fee for Late Submission of Application for the Extension of Mining Concession; Fee for the Extension of a Mining Concession; Fines of Mining Activities - 60%[39]

- **Revenues associated with Petroleum**: Fees and Fines from the Institute of National Petroleum

The available complete data set from the government e-SISTAFE reports gives revenues from 2008 to 2010 only. Prior to 2008, available data shows only aggregate revenues (comprising of various fees, not all necessarily environmental linked) at the level of main sectors (e.g. MINAG, MICOA, etc. see Annex 3.1).

[35] Servicos Provinciais de Geografia e Cadastro (*Provincial Services of Geography and Land Registry*)
[36] Serviços Provinciais de Florestas e Fauna Bravia (*Provincial Services for Forestry and Wildlife*)
[37] Direcção Nacional de Terras e Florestas (*National Directorate of Land and Forestry*).
[38] Serviços Provinciais de Agricultura (SPA); Serviços Provinciais de Florestas e Fauna Bravia (SPFFB).
[39] The 60% rate was established by law (Decreto no. 28/2003, de 17 de Junho (alínea *b* do artigo 96) for illegal mining activities. Another law (Diploma Ministerial no. 160/2004, de 18 de Agosto) the amount collected is to be channelled to the Mining Development Fund (Fundo de Fomento Minieiro).

The analysis of the PEER is carried out in line with the data availabilities and limitations as described above. As such format of the PEER is as follows: firstly the expenditures of MICOA will be examined; secondly, a wider view of other ministries expenditures on the environment will be assessed, thirdly, a review of external financing and fourth a breakdown of these estimates of environmental expenditure as a proportion of total expenditures and GDP will be shown. Throughout there will be a disaggregation of internal and external funding.

8.1 Core Environmental Agencies of MICOA

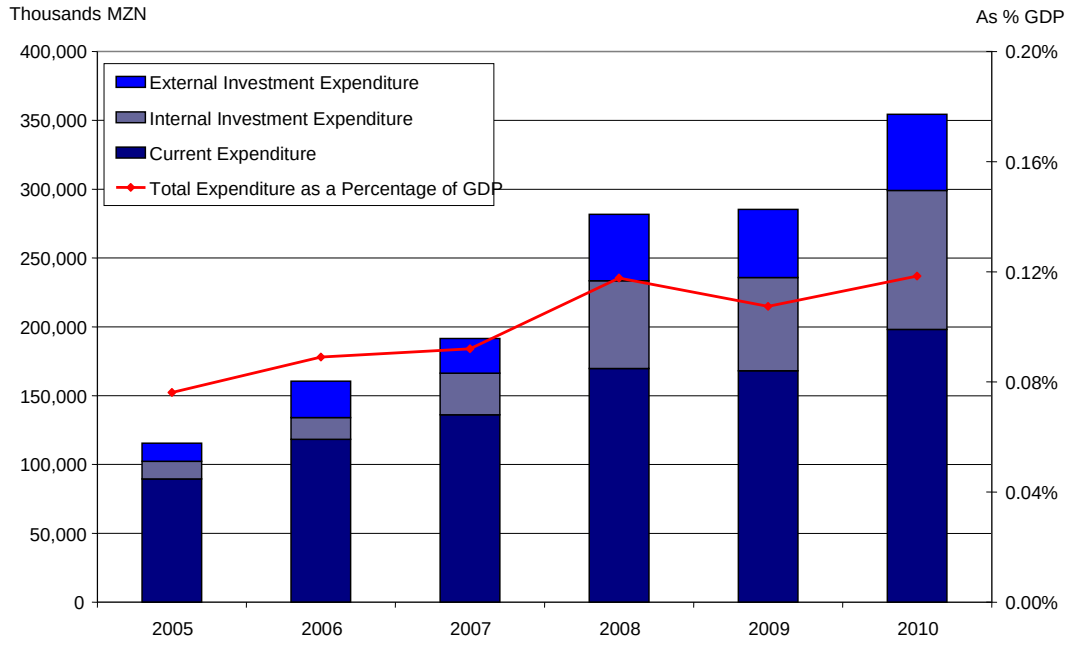
The core environmental agency is The Ministry for the Coordination of Environmental Action (MICOA). In addition to its own direct expenditures the Ministry has six sub-agencies within its budget as follows:

i) Environmental Fund (FUNAB);
ii) Ten Provincial Directorates for Environmental Coordination (DPCA's);
iii) Three Centres for Sustainable Development (CDS's) in Gaza, Manica and Nampula provinces (classified as central expenditures not provincial);
iv) The Research Centre for the Marine and Costal Environment (CEPAM); and
v) The Institute for Physical and Environmental Planning (IMPFA) - created in 2010.

These agencies and their functions are described in chapter 2 above. As mentioned above, the Ministry and its agencies are considered as the 'environmental sector' in the narrowest sense in Mozambique. As such they will be reviewed together as the core environmental agencies in this section. Data availability allows for a full Ministry budget analysis from 2005 to 2010.

Total expenditure of the core environmental agencies is shown in Figure 2. Expenditures have risen from 115.6 million MZN in 2005 to 354.3 million in 2010. This is equal to an annual average growth rate of 26 percent. Despite this sharp rise the total environmental expenditure (using this narrow definition) remains at around 0.3 percent of the total state budget and 0.1 percent of GDP. Whilst expenditures have remained relatively stable as a proportion of the total state budget there has been slight growth in these environmental expenditures as a share of the economy (rising from 0.08 to 0.12 percent of GDP).

Figure 2 - Core Environmental Agencies Executed Expenditures (2005-2010)



Source: MICOA

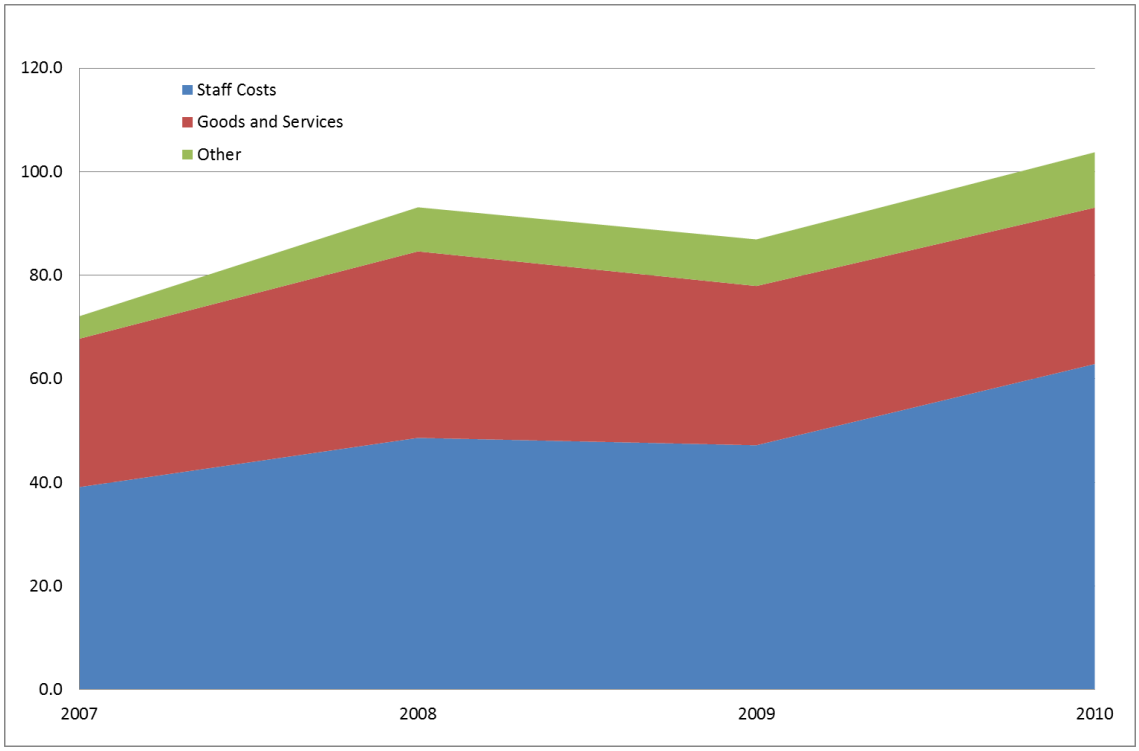
Recurrent expenditure accounts for the majority of spending at 66% but this has been declining consistently from 77% in 2005. Data available for 2007 and 2008 show that of this salary payments account for just less than half of all recurrent expenditures and this equates to around one third of total expenditures[40].

Investment expenditures have been growing faster than recurrent over the time period and now account for 44% of total expenditures (up from 23% in 2005). Within investment expenditure internal funding has been growing faster than external funding. As a result, since 2007 domestic financing has contributed the greater proportion of funding to investment expenditure.

Expenditures by economic classification have been made available from 2007 – 2010) as shown in Figure 3 and Figure 4. Staff costs represent 56% of the current expenditure, on average, with a tendency to increase, while expenditures on goods and services tend to be stabilized at 35%, with a slow tendency to decrease. On the capital expenditures side, constructions (48%) and goods and services (32%) account for 80% of the costs, on average. Overall, while current expenditures tend to increase over time, investment costs show a steady decline after a pick in 2008, mainly justified by construction.

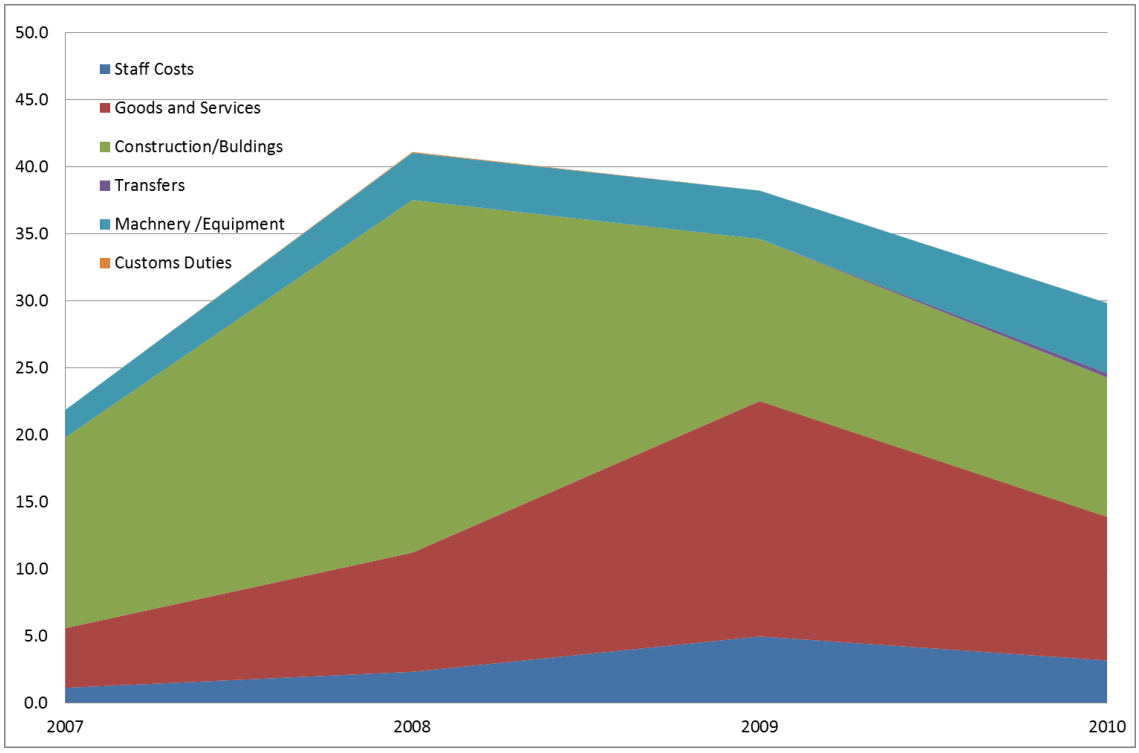
[40] The consultants are awaiting details of expenditures for the entire time period from MICOA DAF. 2007 and 2008 information was supplied by DANIDA.

Figure 3 – Current expenditures 2007-1010 (Millions of MZN)



Source: MICOA

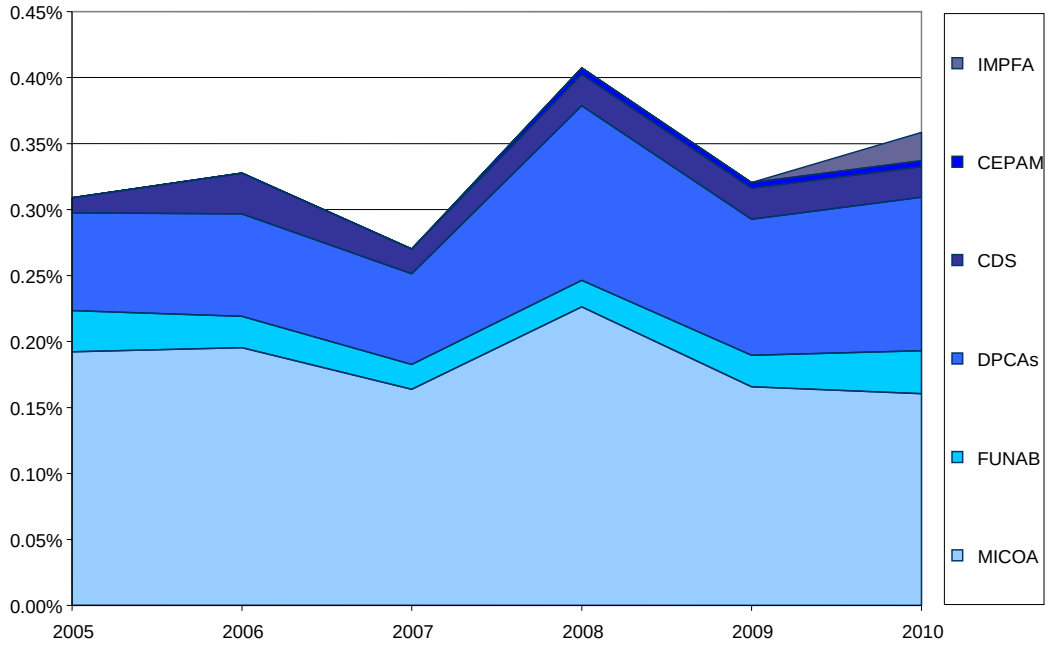
Figure 4 – Capital expenditures 2007-2010 (Millions of MZN)



Source: MICOA

Expenditures have been broken down by each agency in Figure 5. This provides information on the size of each of the core environmental agencies. Expenditures carried out directly by MICOA has traditionally accounted for the largest proportion averaging 56% over the time period. However in line with the GoM's decentralisation policy the growth of funding to MICOA - the central agency - has fallen from 62 to 45% of the total MICOA budget. Correspondingly more responsibility and funding has been allocated to the DPCA's which now account for one third of all spending by the core environmental agencies. Indeed this provincial expenditure has doubled as a percentage of GDP since 2005 (0.02 to 0.04 in 2010)[41]. As research institutes the CDS's, CEPAM and IMPFA have smaller expenditure. Reasons for the peak in 2008 are discussed by province below.

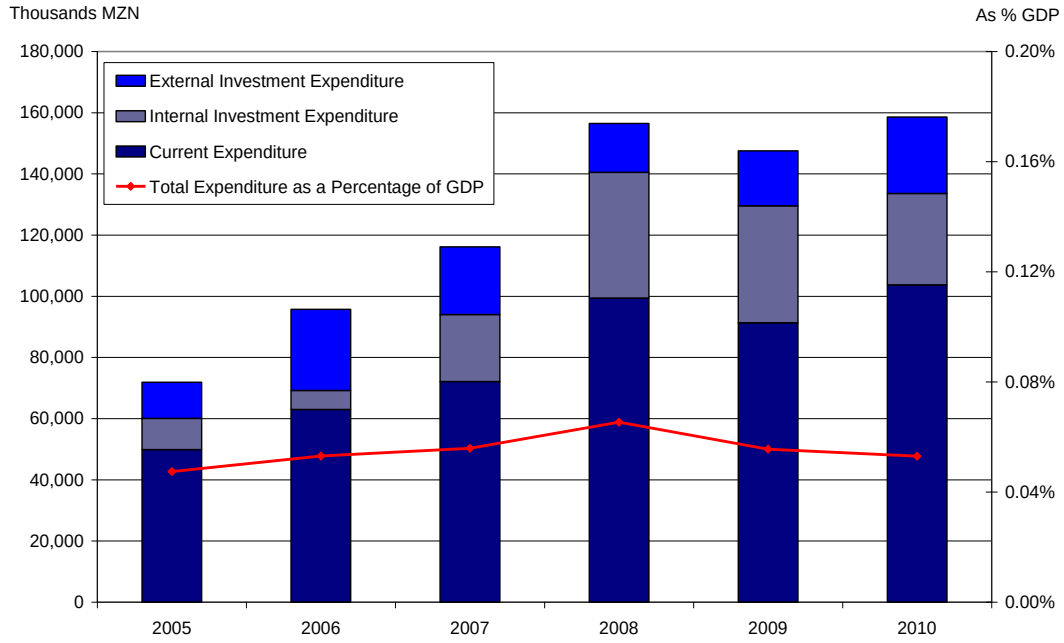
Figure 5 - Expenditure by Core Environmental Agency as a Percentage of Total State Budget (2005-2010)



Source: MICOA

[41] Provincial here refers to the DPCAs and central expenditure is the sum of MICOA, FUNAB, CDSs, CEPAM and IMPFA.

Figure 6 - MICOA Expenditures (2005-2010)



Source: MICOA

MICOA's expenditures are shown in Figure 6. As the agency with the greatest spending power in the Ministry it is useful to look at the breakdown over the time period. Recurrent expenditures make up two thirds of expenditures which is expected in a coordinating agency. Since 2005 the growth in investment (both internally and externally funded) expenditure has been greater than recurrent.

Expenditures by province are shown in Figure 7. Across all provinces funding has been rising since 2005. Significant growth areas for MICOA have included:

- A doubling of expenditures in Cabo Delgado province in 2009 which was sustained in 2010. Sustained increase in expenditures is linked with the execution of projects associated with P13 programmes being managed at in three municipalities, namely in Pemba, Montepuez and Mocimboa da Praia. Specifically, in 2009, while recurrent expenditure fall slightly from 3.6m to 3.3m, from the previous year, investment cost rose from 1.0 m (for the rehabilitation of provincial DPCAA), in 2008 to 6.14m (1.44m for the purchase of cartographic equipment and 4.7m for institutional support to the provincial government), in 2009. In 2010, while recurrent expenditure increased 35% to 4.5m, investment cost fell 25% to 4.6m, mainly due to a decline in institutional support and despite the establishment of the CEPAM laboratory.

- Rise in expenditures in Zambezia, Tete and Manica provinces in 2010. In the case of Manica, the rise is associated with the implementation of capacity building programme; in Zambézia, the sustained increase is explained by the management of P13 programmes in Quelimane and

Mocuba; while in Tete expenditures are mainly justified by a waste management programme (which appear under the designation of M&E of provincial environmental programmes). Specifically recurrent expenditure remained at an average of 4.4m in Tete, but increased 22% and 18%, respectively for Zambézia and Manica, on average. Investment cost increased significantly for Zambézia and Tete provinces. The main projects in Zambézia comprised of the rehabilitation of the provincial DPCAA, in 2008, erosion control and reduction in four districts (Chinde, Alto Molocue, Mocuba and Nicuadala), in 2009, and strengthening of community leaders and associations, in 2010. In turn, investment increased from about 1.8m in 2008 and 2009, in Tete, to almost 4.0m (or, 130%) in 2010, mainly for waste management programmes. In Manica, after an increase of 40% in capital expenditure (for institutional capacity building) from 2008 (3.0m) to 2009 (4.1m), it declined 65% in 2010 (1.5m).

- The peak in Sofala province in 2008 is a joint domestic and externally financed investment projects, namely natural resource management (Gerena) and a solid waste management programme (both funded by Danida), as well as projects associated with the ongoing programme on Decentralized Planning and Finance. In terms of recurrent costs, they picked in 2009 5.0m (34% from the previous year), while investments costs remain at higher levels than anywhere else (13.2m, 5.3m and 0.3m, respectively for 2008, 2009 and 2010). Investments in 2008 were directed mainly to Gerena, in Gorongosa and for a Coastal Protection project in Nova Sofala. In 2009, Gerena continued to enjoy support, albeit at a lower level of investment, together with institutional support, while in 2010 Gerena's support increased from the previous year, while funds were also channelled into the production of slabs for improved latrines.

Table 8 summarizes the provincial breakdown of aggregate investment expenditure per province and per major areas of environmental intervention.

Table 8: Investment[42] expenditure per province and per area of intervention (aggregate amounts, 10^6 MZM, for the period 2008-2010).

Beneficiary	Capacity Building (Training, M&E, Plans)		Sanitation & Waste/Water Management		Erosion Control & Protection		Infrastrutur e (Rehab & Constructio n)		Natural Resource Manageme nt		TOTAL	
	MZM	%	MZM	%	MZM	%	MZM	%	MZ M	%	MZM	%
Cabo Delgado	10.02	60%	4.95	30%			1.72	10%			16.69	2.3%
Niassa	4.69	100 %									4.69	0.7%
Nampula	11.25	79%	1.24	9%			1.67	12%			14.16	2.0%

[42] SISTAFE only reports areas of intervention for investment expenditures, whereas for recurrent expenditure there is no distinction made whether the expenditure is for capacity building, sanitation or any other specific area of intervention, Hence, Table X was constructed solely on investment expenditure to draw a picture of geographic as well as thematic distribution of the budget.

Zambezia	8.07	58%			3.50	25 %	2.27	16%			13.84	1.9%
Tete	7.56	100 %									7.56	1.1%
Manica	8.56	100 %									8.56	1.2%
Sofala	1.46	5%			13.16	41 %	2.86	9%	14.94	46%	32.42	4.6%
Inhambane	1.60	9%	12.16	65%					4.89	26%	18.64	2.6%
Gaza	0.20	1%			18.92	87 %	2.54	12%			21.67	3.0%
Maputo C	32.55	30%	0.63	1%	57.61	54 %	16.34	15%			107.12	15.1%
Maputo P	6.87	68%					1.23	12%	1.98	20%	10.08	1.4%
SUBTOTAL	***92.83***	36%	***18.98***	7%	***93.19***	36 %	***28.62***	11%	***21.81***	9%	***255.44***	***36%***
MICOA	60.64	100 %									60.64	8.5%
FUNAB (a)					22.48	62 %			14.02	38%	36.50	5.1%
MITUR									11.18	100 %	11.18	1.6%
MOPH			347.11	100 %							347.11	48.8%
SUBTOTAL	***60.64***	13%	***347.11***	76%	***22.48***	5%	***0.00***	0%	***25.20***	6%	***455.43***	***64%***
TOTAL	153.47	22%	366.09	51%	115.68	16 %	28.62	4%	47.00	7%	710.86	100.0 %

Source: SISTAFE Reports (2008, 2009 and 2010).

(a) The amount of 22.5 million MT reported under FUNAB was spent in 2010 on both sanitation and erosion control projects, but it was recorded in SISTAFE in aggregate terms.

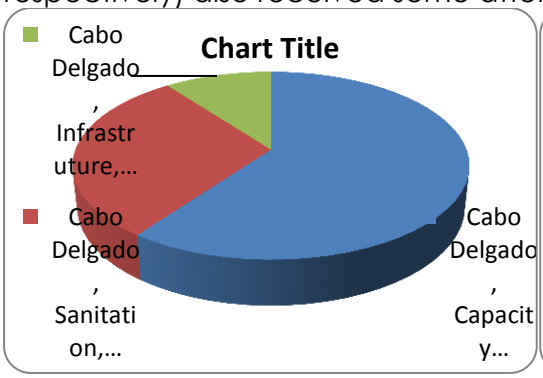
Overall, provinces, mainly through their respective provincial directorates, were responsible for 36% of all the investment expenditure for the period 2008-2010. Among the provinces, the Municipality of Maputo (42%) and Sofala (13%) were the major beneficiaries. The share of all other provinces remained at 8% (Gaza) or below.

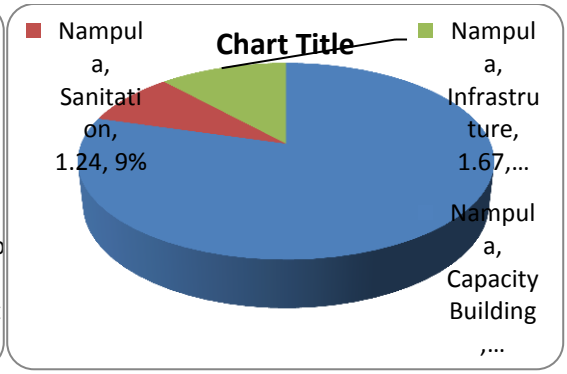
In terms of areas of expenditure, capacity building projects and erosion control and protection absorbed the biggest share (72%), divided equally, followed by infrastructure (mainly rehabilitation of facilities), with 11%. Natural resource management (mainly on national parks) and sanitation and water received the least, 9% and 7%, respectively.

Whereas Niassa, Tete and Manica recorded no material investment (i.e. 100% of the resources went into capacity building), other provinces diversified their investments according to physical environmental area of concern, as the illustrations below (constructed on the basis of the above table) show.

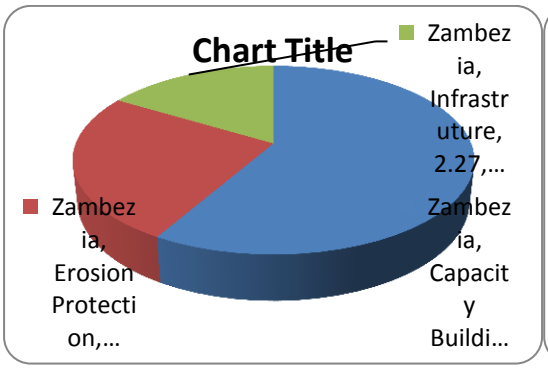
In the Northern provinces of Cabo Delgado and Nampula, major expenditures went to capacity building (60% and 79%, respectively), while

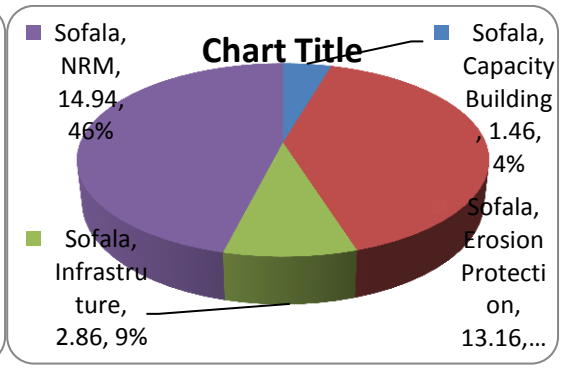
sanitation (30% and 9%, respectively) and infrastructure (10% and 12%, respectively) also received some attention.



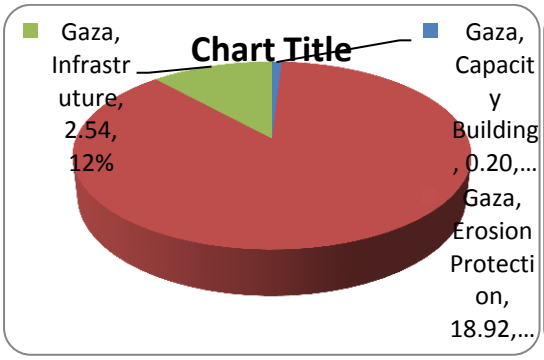


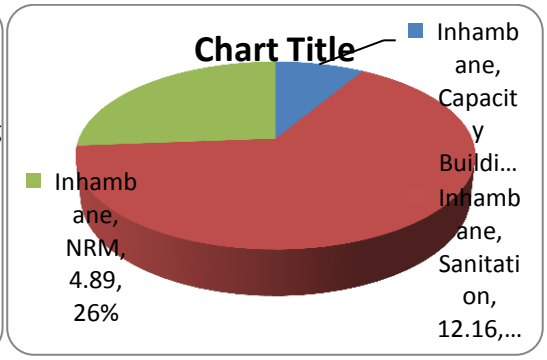
In the central part of the country, priorities vary considerably. Whereas Zambézia puts some emphasis on erosion control (25%), in Sofala, that seems to be a major concern (41%), together with natural resource management, in Gorongoza (46%). In contrast, 58% of the resources in Zambézia wento into capacity building (only 5% in Sofala).



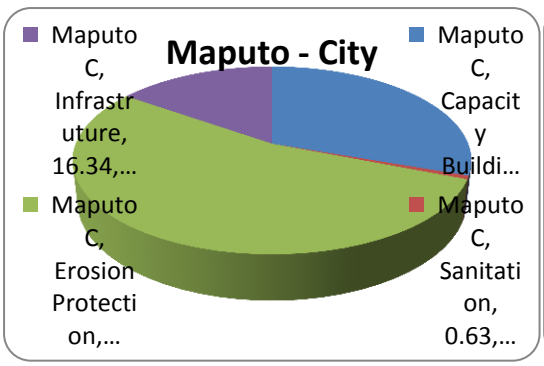


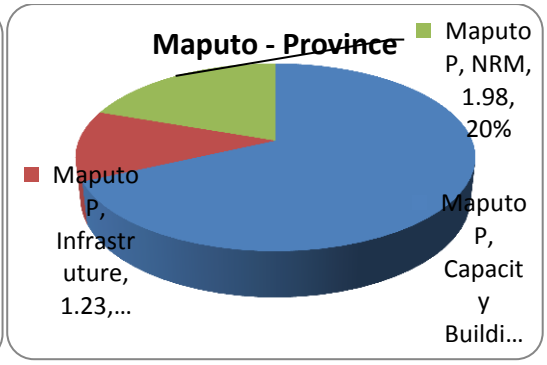
The southern provinces tend to allocate major share of their resources into erosion control and protection: Gaza (87%), Inhambane (65%), and Maputo (54%). Maputo Province, on the contrary, spent most of its investment resources into capacity building, followed by Maputo City (30%).





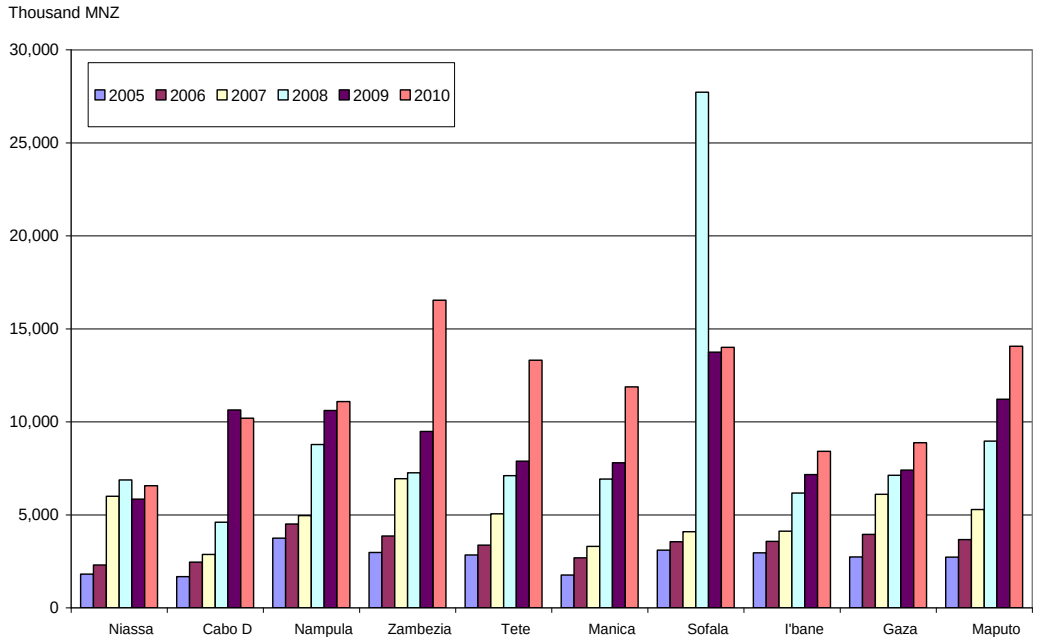
Both Maputo City and Maputo Province also tend to give some importance to infrastructure.





The remaining and larger portion of the total national investment expenditure (64%) was executed through central agencies in Maputo. Although a significant amount of this share may have been spent in activities in some provinces, SISTAFE does not give clues of its geographic distribution. In terms of areas of investment, the Ministry of tourism (MITUR) invests 100% of its resources in natural resource management (i.e. national parks and reserves), while the Ministry of Civil Services and Housing (MOPH) spends 100% in sanitation and water projects. Apart from investments throughout the country carried out by its provincial directorates, MICOA also made huge investments in capacity building at the central level. Finally, FUNAB also manages a fund which it makes available to other entities managing environmental programs and/or projects. For the 2008-2011 period, FUNAB allocated its resources to erosion control (62%) and natural resource management (38%).

Figure 7 – Total Provincial Expenditures - Recurrent and Investment (2005-2010)

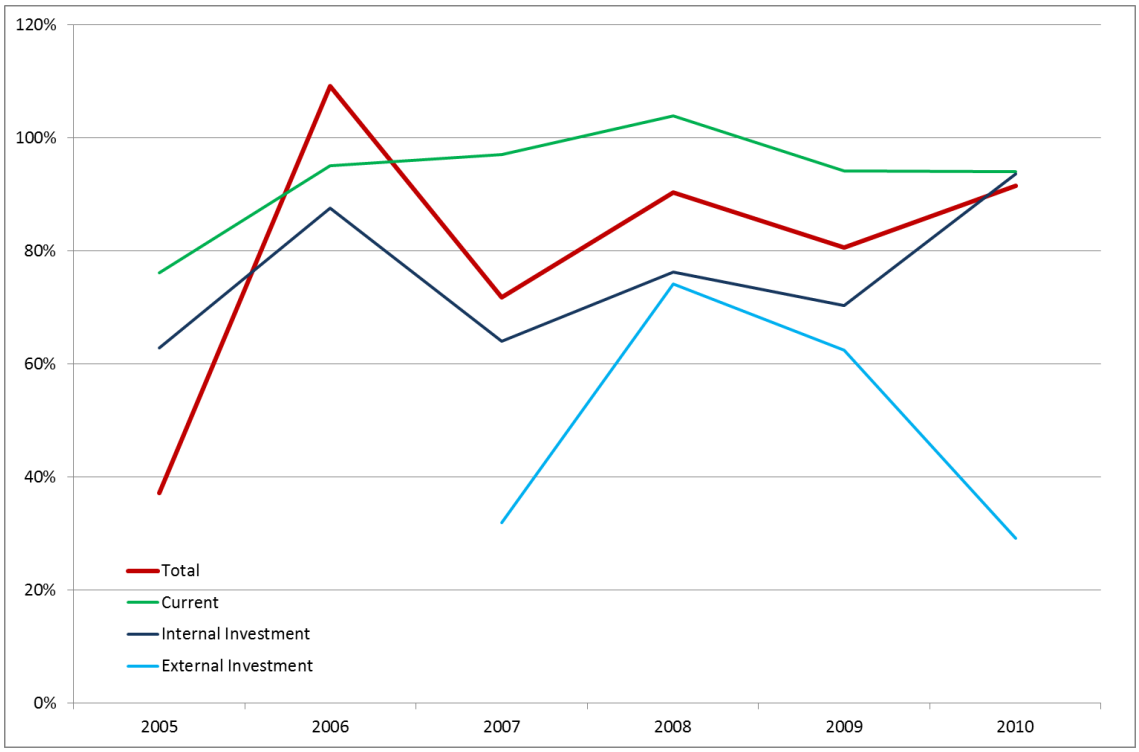


Source: MICOA

Execution rates of core agencies averaged 80% over the time period. Figure 8 shows the total and sub divisions for the core agencies. As expected current

expenditure has a higher execution rate than the capital or investment expenditure averaging 93% over the past six years. The internal investment execution rate averages 76% performing better than the volatile external investment – four years of data available result in an execution rate of 49%.

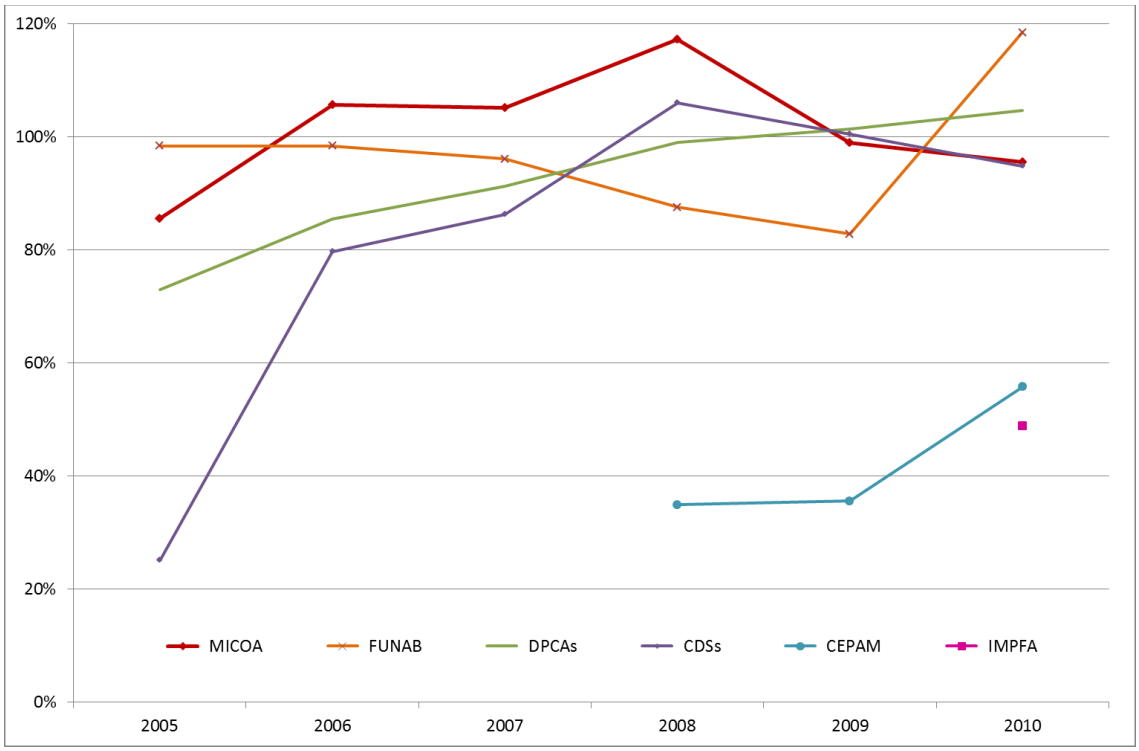
Figure 8- Execution Rates of MICOA Core Agencies (2005-2010)



Source: MICOA
Source: MICOA

Figure 9 provides the execution rates for the current expenditures disaggregated by each agency. As one would expect the newer agencies, namely CEPAM and IMPFA) have lower execution rates in their initial years. One would expect that they would follow the path of the CDSs which also began with low rates of budget execution in 2005 to rise over time to reach the current 95% rate of more experienced agencies, i.e. MICOA, FUNAB and the DPCAs.

Figure 9 – Current Expenditure Execution Rates of MICOA Core Agencies by Agency (2005-2010)



Source: MICOA

Table 8 looks at the execution rates of each province using each DCPA and CDS budgeting information. The provincial execution rates have on average been lower than that of the national agencies over the six years. However, all provinces have been showing a general rise in execution rates. Of the DPCAs Gaza, Tete and Cabo Delgado have registered the lowest execution rates for current expenditures in recent years. However, they have managed to improve in 2010. Execution of planned internal investment expenditure has been volatile for the CDPCAs.

For the CDSs the average execution rate for current expenditures is also below that of the national agencies and their rates for internal investment average only 54%. The Nampula CDS has performed consistently well in executing its budget for internal investment. The Gaza CDS and Maniza CDS have both improved markedly in 2010.

Table 8 - Execution Rates of DPCAs and CDSs by Province (2005-2010)

	2005	2006	2007	2008	2009	2010	Average
Total Expenditure	**37%**	**109%**	**72%**	**90%**	**81%**	**92%**	**80%**
Current Expenditure	**76%**	**95%**	**97%**	**104%**	**94%**	**94%**	**93%**
DPCAs	**73%**	**85%**	**91%**	**99%**	**101%**	**105%**	**92%**
Niassa	77%	73%	99%	97%	91%	122%	93%
Cabo D	47%	68%	67%	100%	115%	91%	81%
Nampula	83%	95%	91%	116%	111%	112%	102%
Zambezia	67%	79%	91%	109%	102%	103%	92%
Tete	74%	72%	65%	83%	81%	113%	81%
Manica	75%	109%	129%	90%	97%	101%	100%

Sofala	93%	98%	100%	97%	107%	95%	99%
I'bane	76%	84%	90%	116%	127%	105%	100%
Gaza	56%	67%	69%	77%	78%	96%	74%
Maputo	82%	110%	110%	105%	106%	107%	103%
CDSs	**25%**	**80%**	**86%**	**106%**	**100%**	**95%**	**82%**
Gaza	11%	59%	71%	121%	121%	93%	79%
Manica	7%	84%	93%	98%	97%	95%	79%
Nampula	56%	96%	95%	100%	83%	97%	88%
Internal Investment Expenditure	**63%**	**88%**	**64%**	**76%**	**70%**	**94%**	**76%**
DPCAs	**-**	**-**	**126%**	**74%**	**82%**	**71%**	**88%**
Niassa	-	-	-	-	-	51%	51%
Cabo D	-	-	-	67%	90%	40%	66%
Nampula	-	-	90%	90%	145%	88%	103%
Zambezia	-	-	59%	66%	102%	88%	79%
Tete	-	-	119%	90%	98%	90%	99%
Manica	-	-	15%	90%	0%	89%	48%
Sofala	-	-	2%	90%	24%	62%	44%
I'bane	-	-	-	45%	71%	82%	66%
Gaza	-	-	471%	91%	114%	34%	177%
Maputo	-	-	-	40%	90%	90%	73%
CDSs	**36%**	**80%**	**33%**	**30%**	**72%**	**76%**	**54%**
Gaza	1%	65%	0%	0%	87%	57%	35%
Manica	16%	74%	0%	0%	0%	90%	30%
Nampula	90%	100%	100%	90%	129%	82%	98%

Source: MICOA

The Expenditure Allocation compared with National Priorities can be assessed using the PARPA II. Recognising that most of the Mozambican population depends on exploitation of resources natural resources for their subsistence and income generation, PARPA II indicates that the achievement of poverty reduction objectives depends deeply on how natural resources are managed and maintained. It also recognizes:

- A failure of the environmental policy being given due consideration in the resource allocation process;
- The mechanisms for inter-sectoral coordination at the planning/budgeting level calls for improvement; and
- The allocation of budget resources continues to follow essentially a compartmentalised logic whereby the budget for each budget management unit is negotiated in isolation.

PARPA II therefore concludes that sectoral ministries frequently lack the resources to collaborate with MICOA.

According to PARPA II, the major environmental priorities in Mozambique for the period under analysis focused on the following areas: (i) sanitation, (ii) territorial planning (iii) prevention of land degradation, (iv) management of natural resources, including control of fires, (v) legal and institutional aspects, i.e. environmental education, compliance of the law and capacity building, (vi) reduction of air pollution, waters and soils pollutions, and (vii) prevention and reduction of natural disasters.

Analyzing these priorities against the data on projects by environmental code, we can see that there is a huge tendency of allocating resources to environmental protection (50%, on average), and a relative shift of resources

from waste water management (42% in 2008) to projects on protection and biodiversity and landscape (50% in 2010).

And as indicated elsewhere in this report, MICOA executed around 70% of projects, followed by the Ministry of Public Works and Housing (MOPH)), which has accounted for 26% of project expenditures since 2008.

One other aspect raised in the ODI (2008) report which is still noticeable is the fact that "budget formulation in Mozambique is still fundamentally incremental in nature and little driven by the particular priorities and activities programmed for a certain year". As the ODI report still indicates, the "incremental approach is partly a consequence of the fact that there are limited discretionary resources and hence little room-for-manoeuvre in the OE to fund anything else than recurrent expenditure (which is incremental by nature) and counterpart funding of externally funded investments. Hence, by and large the real resource negotiation occurs outside the frame of OE: either through (i) external financing agreements with donors (which are often negotiated directly between the donor and the recipient sector), or through (ii) the largely unrecorded[43] internal revenue collection and use.

Comparing geographical allocation and poverty levels can provide information on adherence to priorities. Geographic distribution of expenditures does not give a clear indication of the existing link between priorities and expenditures. More importantly, it is hard to conclude that there is a link between allocation of resources and poverty alleviation. For instance, considering that Sofala and Inhambane are two provinces considered to be more prone coastal erosion, the disproportion of resources allocated between the two, over the last three years, makes it hard to believe that there is geographic prioritization of resource allocation. Besides, over the same period, Inhambane has received the second least amount of resources only surpassing Niassa province.

However, looking at the overall distribution of resources across provinces vis-à-vis poverty pattern, the distribution of expenditure seems to fall in line with geographic distribution of poverty. The two provinces with the highest poverty incidence, namely Zambézia (70.5, in 2009) and Maputo Province (67.5, 2009), also recorded the highest second and third overall environmental expenditures, respectively, over the 2005-2010 period.

Sofala and Nampula (which have also had higher poverty incidences have also had higher overall expenditures, ranking first and fourth, respectively (compare Figure 10 below with Figure 7).

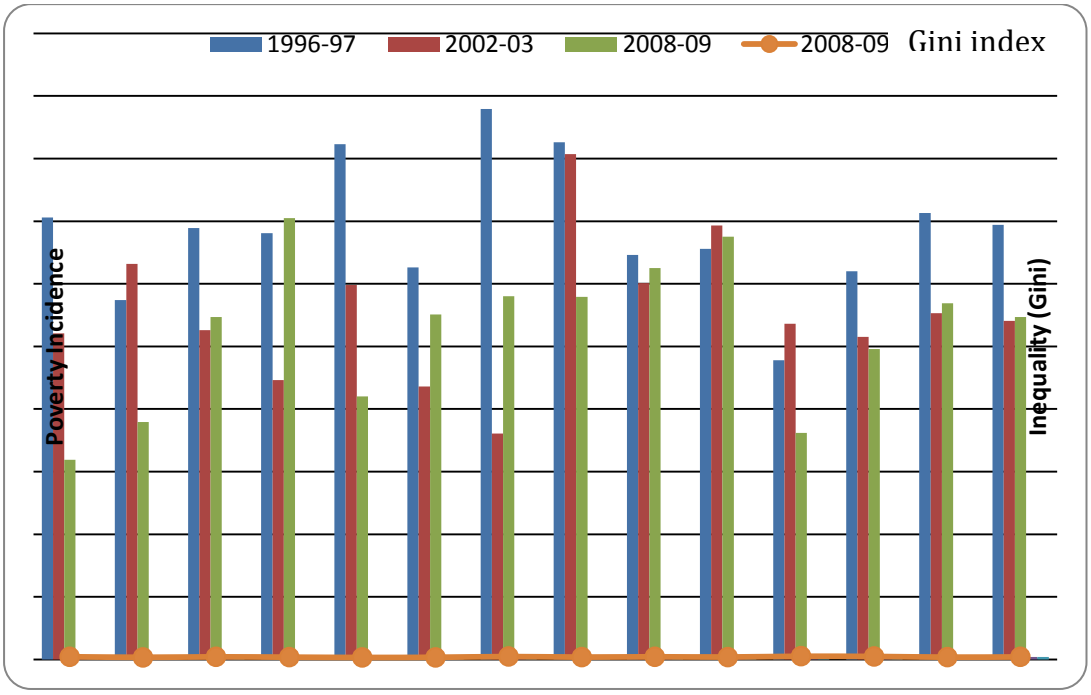
The exceptions seem to be the southern provinces of Inhambane and Gaza, which despite recording high poverty incidence (third and fifth, in 2008/9, but first and second, on average for the period 2006-09). These provinces also

[43] A positive note should be placed here to indicate the improvement in recording and reporting in the State budget of internally generated revenues, thanks to the use of e-SISTAFE. However, the process is weakened by the fact that there is no central unit within the sectors that collect and consolidate this information. Districts send their data directly to central authorities at MF and delays in the transmission of information renders the final statistics full of inconsistencies.

having severe coastal erosion problems, and other climate change related problems. However, they have had about the same level of expenditures as the least poverty hit provinces of Niassa and Cabo Delgado. This trend may be due to the fact that the northern and central provinces are benefitting more from external funds, the Danida-lead environmental basket fund allocated for the P13 municipal programme. The gap may even widen given that the northern and central provinces have just began to benefit from the Millennium Challenge Corporation funding (mainly for water and sanitation projects, but also for farming assistance).

As shown by the continuous line in Figure 10, the provinces with the highest poverty also had the highest inequality in terms of income distribution. Hence, as above, expenditures were consistently high among them. As indicated by the urban-rural figures, inequality is high because of higher rates in the urban centres (especially in the cities of Maputo, Beira and Nampula).

Figure 10 – Evolution of poverty incidence (1996/7, 2002/3 and 2008/9) and inequality (2008/9)



Source:

External funding - The key donors in the environmental sector are DANIDA who supplied just less than one third of all funding in 2007 and 2008[44]. Problems associated with the rise in off-budget donors, e.g. China and Japan[45]. Their funds are not incorporated into the budget and difficult to know the full amounts. No information was provided on these off-budget expenditures in these core environmental agencies. However, according to a report by FAO (2009)[46], Japan and UNDP would are responsible for

[44] Source: DANIDA. The consultants are awaiting details of expenditures for the entire time period from MICOA DAF.
[45] Source: Stakeholder interviews.
[46] FAO (2009): Relatório de Moçambique: Formulação de um Programa para a Implementação do Programa das Nações Unidas de Combate a Desertificação (UNCCD) nos Países da CPLP.

channelling US$ 5million for the iintegration of a mechanism of adaptation to climate change in the policy, development and investment framework for the period 2009-2011. There is further information on external funding covering the all Ministries in section 8.3 below.

8.2 Environmental Activity in Other Ministries

The analysis above only refers to the narrow definition of what constitutes the environmental sector in Mozambique. This section will follow the environmental investment expenditures for the entire public sector. This is broken down into projects coded into the official COGOF environmental codes and those which are not but are related to environmental issues. This will allow analysis of all project expenditures in the environmental sector across all government ministries.

On-budget environment projects totaled 1,273.2 million MZN from 2008 to 2010, as shown in Table 9 – On-budget projects across government (2008-10)Table 9. This equates to 0.5% of the state budget and 0.2% of GDP. This funded a total of 240 projects in the environmental sector across more than 30 government institutions. Investment expenditure accounts for the majority of the project costs as would be expected (more than 55% on average).

Table 9 – On-budget projects across government (2008-10)

	2008	2009	2010
As % Total Projects			
TOTAL (Million MNZ)	**487.6**	**400.8**	**384.7**
Recurrent	36.6%	43.9%	54.1%
Total Investment	63.4%	56.1%	45.9%
Internal Investment	44.1%	26.9%	39.1%
External Investment	27.1%	29.2%	6.8%
Execution as % Total State Budget			
TOTAL	**0.7%**	**0.5%**	**0.4%**
Recurrent	0.3%	0.2%	0.2%
Total Investment	0.4%	0.3%	0.2%
Internal Investment	0.3%	0.1%	0.2%
External Investment	0.2%	0.1%	0.0%
Execution as % GDP			
TOTAL	**0.2%**	**0.2%**	**0.1%**
Recurrent	0.1%	0.1%	0.1%
Total Investment	0.1%	0.1%	0.1%
Internal Investment	0.1%	0.0%	0.1%
External Investment	0.1%	0.0%	0.0%

Source: SISTAFE

Over such a short time period it is difficult to extract any trend conclusions. However, there has been a reduction in the annual executed expenditures, in nominal terms as well in real terms over the three years.

By environmental code it is clear that Environmental protection (05611) accounts for the greatest proportion of expenditure (53% on average). Table 10 shows the breakdown for each environmental code. There are no projects concerning waste management and pollution abatement,

Table 10 – On-budget projects by environmental code (2008-2010)

		2008	2009	2010
TOTAL (Million MZN)		**487.6**	**400.8**	**766.7**
As percentage of Total				
05111	Waste Management	0%	0%	0%
05211	Waste Water Management	42%	11%	2%
05311	Pollution Abatement	0%	0%	0%
05411	Protection of Biodiversity & Landscape	2%	1%	50%
05511	Research & Development on Environmental Protection	6%	22%	6%
05611	Environmental Protection	50%	66%	42%

Source: SISTAFE

By Ministry MICOA has executed the greatest amount of expenditure; with around 70% of projects being carried out through MICOA (this includes the DPCAs and other institutions under MICOA). The Ministry of Public Works and Housing (Ministério das Obras Públicas e Habitação, (MOPH)) is the second largest recipient accounting for 26% of project expenditures since 2008.

Comparing the environmental codes and Ministries there is a responsibility split as follows:

- The majority of Sanitation and Waste Water Management projects are operated through MOPH;
- Almost all the projects labelled as Protection of Biodiversity and Landscape are carried out by the central Ministry of Tourism or a Provincial Directorate for Tourism;
- Research and Development on Environmental Protection has generally been the responsibility of the CDSs;
- Leaving the Environmental Protection projects to be undertaken by MICOA and the DPCAs.

However, there are other environmentally related projects outside of the COGOF environmental codes. These refer to agricultural activities such as reforestation, or the installation of wind turbines. Table 11 shows the value of these projects and the governmental agencies involved.

On Budget non-environmental coded projects totalled 1,157.8 million MZN from 2008 to 2010. This equates to 0.4% of the state budget and 0.1% of GDP over this time period. This funded a total of 114 projects in the environmental sector across four key institutions:

- National Institute of Disaster Management accounts for 42% of these expenditures. This paid for contingency plans, agriculture conservation practices amongst other investment expenditures.
- Agriculture (Ministry and Provincial Directorates) accounted for 54%. This paid for reforestation, irrigation, drought mitigation, soil fertility, coastal management, rehabilitation of dams, as well as wildlife audits, forestry reviews and so forth. The majority of the expenditures are carried out centrally.
- Mineral Resources (Ministry and Provincial Directorates) make up around 2% of the total expenditures. Projects include installation of wind systems for pumping water (2008), rehabilitation of laboratories and seismology stations (2008-2010), environmental ± (2009-2010), and natural resource management.
- Ministry of Energy accounts for 1%, this was expenditure in 2009 for the installation of a wind turbine system for pumping water and the electrification of 20 locations through solar photovoltaic systems.

Table 11 – Other on-budget projects (2008-2010)

	2008	2009	2010
TOTAL (Million MZN)	**257.9**	**506.3**	**393.6**
As percentage of Total			
National Institute of Disaster Management	33%	57%	38%
Agriculture	67%	40%	57%
Ministry of Agriculture	59%	28%	48%
Provincial Directorates	7%	11%	8%
Mineral Resources	1%	1%	5%
Ministry of Mineral Resources	1%	1%	5%
Provincial Directorates	0%	0%	0%
Ministry of Energy	0%	2%	0%
As percentage of Total State Budget			
TOTAL	**0.4%**	**0.6%**	**0.4%**
National Institute of Disaster Management	0.1%	0.3%	0.2%
Agriculture	0.2%	0.2%	0.2%
Ministry of Agriculture	0.2%	0.2%	0.2%
Provincial Directorates	0.0%	0.1%	0.0%
Mineral Resources	0.0%	0.0%	0.0%
Ministry of Mineral Resources	0.0%	0.0%	0.0%
Provincial Directorates	0.0%	0.0%	0.0%
Ministry of Energy	0.0%	0.0%	0.0%
As percentage of GDP			
TOTAL	**0.1%**	**0.2%**	**0.1%**

Source: SISTAFE
Note: Excludes general operating expenses

Total environmentally coded and non-coded projects reached 2,748.4 million MZN from 2008 to 2010, as shown in Table 12. Together they have accounted for 1% of the state budget and 0.3% of GDP. Environmentally coded projects make up the majority (57%)

Table 12 – On-budget projects (2008-2010)

	2008	2009	2010
TOTAL PROJECTS (Million MZN)	**745.6**	**842.5**	**1,160.3**
As percentage of Total State Budget	1.1%	0.9%	1.2%
As percentage of GDP	0.3%	0.3%	0.4%

Source: SISTAFE

8.3 External Funding

External funding to MICOA and its sub-agencies accounted for 47% of investment expenditure since 2005. Now standing at 55.3 million MZN in 2010 the majority of this is funded by DANIDA. However, as environmental projects are carried out in ministries other than MICOA so too are externally funded projects.

The analysis will focus on on-budget external financing as this is part of the public expenditure on environment, although off-budget funding will be briefly mentioned. Table 13 provides a summary of the results found for environmental projects in a diverse range of sectors from 2007 to 2010.

On-budget external financing provides just less than 100 million USD per year to the environmental sector. This is made up of 115 projects registered in the state budget which accounts for approximately 3% of the total state budget and 1% of GDP.

The largest sectors attracting foreign financing are: Water and Sanitation (40%); Energy (15%); Agriculture Forestry and Fishing (14%); Transport (12%); and Urban and Rural Development Management (11%). Together since 2007 these make up more than 90% of on-budget external funding.

A breakdown of on-budget external funding by donor is shown in Table 14.

Multilaterals make up the majority of on-budget external funding (around three quarters). This pays for large projects in Water and Sanitation; Energy; Transport; and Urban and Rural Development Management. Within multilaterals the World Bank supplies more than half the funds.

Bilaterals also contribute to environmental public spending. As we have already mentioned DANIDA are the important external funders in MICOA. This ODAMoz data shows they contribute 13% of all bilateral environmental funding – this is solely in the area of General Environmental Protection. Ireland, Italy, France and Switzerland are the four other large contributors. Respectively, they focus on Agriculture, Forestry and Fishing; Urban and Rural Development Management; Water and Sanitation; and Agriculture, Forestry and Fishing.

Table 13 – On-budget projects by sector as a percentage of total disbursements (2007-2010)

	2007	2008	2009	2010*

115 ON BUDGET PROJECTS (USD)	94,746,	120,591,	96,030,	67,752,
General Environmental Protection (28 Projects)	0.0%	1.4%	2.3%	1.6%
Health General (1 Project)	0.0%	0.0%	0.0%	0.0%
Water and Sanitation (25 Projects)	39.7%	33.1%	42.7%	41.2%
Government and Civil Society (5 Projects)	2.5%	1.9%	1.7%	1.1%
Transport (6 Projects)	14.9%	21.7%	5.1%	8.2%
Energy (6 Projects)	6.1%	12.2%	26.6%	16.4%
Agriculture, Forestry and Fishing (18 Projects)	15.5%	13.4%	9.8%	18.6%
Mineral Resources, Oil and Gas (3 Projects)	2.7%	1.3%	0.1%	0.0%
Trade and Tourism Policies (2 Projects)	2.1%	3.0%	2.0%	0.0%
Urban and Rural Development Management (18 Projects)	15.1%	10.8%	8.3%	9.9%
Material Relief / Reconstruction Relief and Disaster Prevention (3 Projects)	1.4%	1.2%	1.4%	3.0%

Source: http://www.odamoz.org.mz/
Note: * = Delays in receipt of full donor disbursements in 2010

Table 14 – On-budget external funding by donor (2007-2010)

	2007	2008	2009	2010*
TOTAL (USD)	**99,692,309**	**122,659,501**	**101,836,305**	**64,827,062**
Total Multilaterals	**83%**	**85%**	**75%**	**62%**
Total Bilaterals	**17%**	**15%**	**25%**	**38%**
Multilateral as percentage of Total Multilaterals				
ADB	22%	33%	26%	49%
EC	13%	10%	26%	20%
FAO	1%	1%	2%	6%
MCC	0%	0%	0%	24%
UNDP	1%	0%	0%	0%
UNHABITAT	0%	0%	0%	1%
WORLD BANK*	63%	55%	46%	0%
Bilaterals as percentage of Total Bilaterals				
BELGIUM	0%	0%	5%	6%
CANADA	0%	0%	2%	0%
DENMARK	9%	14%	24%	6%
GERMANY	8%	8%	5%	7%
IRELAND	20%	16%	5%	0%
ITALY	8%	3%	0%	33%
JAPAN	0%	0%	0%	0%
FINLAND	0%	0%	0%	28%
FRANCE	11%	9%	17%	16%
NETHERLANDS	0%	0%	0%	0%
PORTUGAL	0%	0%	0%	0%
SPAIN	7%	7%	5%	2%
SWEDEN	0%	5%	12%	2%
SWITZERLAND	31%	34%	22%	27%
UK	7%	4%	1%	0%

Source: http://www.odamoz.org.mz/

*Note: * = Missing data for 2010*

Off-budget external financing provides an average of 23.0 million USD per annum from 2007 to 2010. This has been carried out through 125 environmental projects. Although this is a larger number of projects than those on-budget the value is only one quarter in monetary terms.

The total value of external financing to the environmental sector is 471.3 million USD. Table 15 gives the annual breakdown from 2007 and shows that this is equivalent to 1.3% of GDP.

The sectors receiving the lion's share of external financing do not vary widely from the priorities seen in the On-budget priorities, namely Water and Sanitation; Agriculture, Forestry and Fishing; Energy; Transport and Urban and Rural Development Management.

Table 15 – Total external funding (2007-2010)

	2007	2008	2009	2010*	Total
Total (Millions USD)	116.0	140.8	128.8	85.7	**471.3**
On-Budget	94.7	120.6	96.0	67.8	**379.1**
Off-Budget	21.3	20.2	32.8	18.0	**92.1**
As Percentage of Total					
On-Budget	82%	86%	75%	79%	**80%**
Off-Budget	18%	14%	25%	21%	**20%**
As Percentage of Total State Budget					
Total	4%	5%	4%	3%	**4%**
On-Budget	3%	4%	3%	2%	**3%**
Off-Budget	1%	1%	1%	1%	**1%**
As Percentage of GDP					
Total	1.3%	1.5%	1.3%	0.9%	**1.3%**
On-Budget	1.1%	1.3%	1.0%	0.7%	**1.0%**
Off-Budget	0.2%	0.2%	0.3%	0.2%	**0.2%**

Source: http://www.odamoz.org.mz/
*Note: * = Delays in receipt of full donor disbursements in 2010*

8.4 Total Environmental Expenditure

Table 16 gives the resultant estimation for total environmental expenditures in Mozambique. According to the methodology used this totaled 18,806.5 million MZN from 2007 to 2010, averaged 4.3% of the state budget, and 1.4% of GDP.

Table 16 – Total environmental expenditure (2007-2010)

Million MZN	2007[3]	2008	2009	2010[4]
Total Environmental Expenditure	**2,975.5**	**3,871.1**	**3,863.0**	**3,097.1**
As percentage of Total Budget	**4.2%**	**5.6%**	**4.3%**	**3.1%**
As percentage of GDP	**1.4%**	**1.6%**	**1.5%**	**1.0%**
MICOA	191.5	281.7	285.2	354.3
SISTAFE Projects		966.9	952.0	1,221.9
Environmentally Coded[1]		221.3	109.6	61.6

Non-Environmentally Coded		745.6	842.5	1,160.3
Externally Financed	2,784.0	2,622.5	2,625.7	1,520.8
On-Budget[2]	2,273.9	2,108.2	1,715.7	946.2
Off-Budget	510.1	514.3	910.0	574.6

Source: SISTAFE and ODAMoz
Notes:
1) *Minus MICOA projects*
2) *Excludes value for SISTAFE projects to avoid double counting*
3) *2007 data not available for SISTAFE projects*
4) *Externally financed data for 2010 is incomplete*

This estimate is larger than that estimated in the previous environmental expenditure analysis carried out by the ODI[47]. Follow up work will need to be carried out to filter the projects to ensure that they are concerned with environment alone.

As compared to other Ministries, expenditures from core environmental agencies rank well below those of PARP priority sectors (such as Education, Health, Justice and Agriculture), as shown in Table 17.

Table 17 – Expenditures as some selected Ministries (2005-2009)

	2005	2006	2007	2008	2009
Ministry of Environment (MICOA) (a)	0.6%	0.8%	0.7%	0.9%	0.6%
Education Sector as a whole	36.0%	36.6%	38.9%	43.1%	25.6%
Health Sector as a whole	26.3%	28.2%	26.9%	23.6%	33.2%
Justice Sector as a whole	26.3%	28.2%	26.9%	23.6%	33.2%
Ministry of Agriculture	4.1%	3.6%	3.3%	3.5%	2.3%
Ministry of Fisheries	0.1%	0.1%	0.1%	0.1%	0.1%
Ministry of Mineral Resources	1.8%	0.5%	0.5%	0.3%	0.2%
Ministry of Energy	2.5%	0.4%	1.7%	3.8%	2.1%
Ministry of Industry and Trade	1.8%	1.0%	0.6%	0.6%	2.0%
Ministry of Tourism	0.4%	0.6%	0.4%	0.5%	0.8%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**

8.5 Environmental Revenues

Before we assess how these expenditures relate to policy and strategic plans a brief look at how the revenues have contributed to the environmental sector. As we have seen above the external funding to the environmental sector has been substantial. This section will examine the domestic sources of funding from fees and taxes as discussed in sections 6.3 and 7.4.

[47] *ODI Study - Environmental Institutions, Public Expenditure and the Role for Development Partners - Mozambique Case Study 2008.*

Total environmental revenues totalled 1,048.8 million MZN from 2008 to 2010. This equates to 0.4% of the state budget and 0.1% of GDP. The annual data is shown in Table 18.

In 2010 there has been a significant rise in revenues. This introduction of fines and the fee for the fisheries development fund has been the main source of this. The introduction of mining fees and a doubling of the FUNAB fees also contributed.

By sector fishing and hunting have contributed the largest proportion to total revenues since 2008 (46%). Within this the fishing accounts for almost all, and the fishing license provides the greatest proportion of revenues. One third of revenues are sources from timber and coal revenues.

The 'direct' environmental revenues – FUNAB fines, conservation areas and slaughter (abatement) fees - provide only 4% of all revenues.

Table 18 – Environmental revenues: fees and fines only (2008-2010)

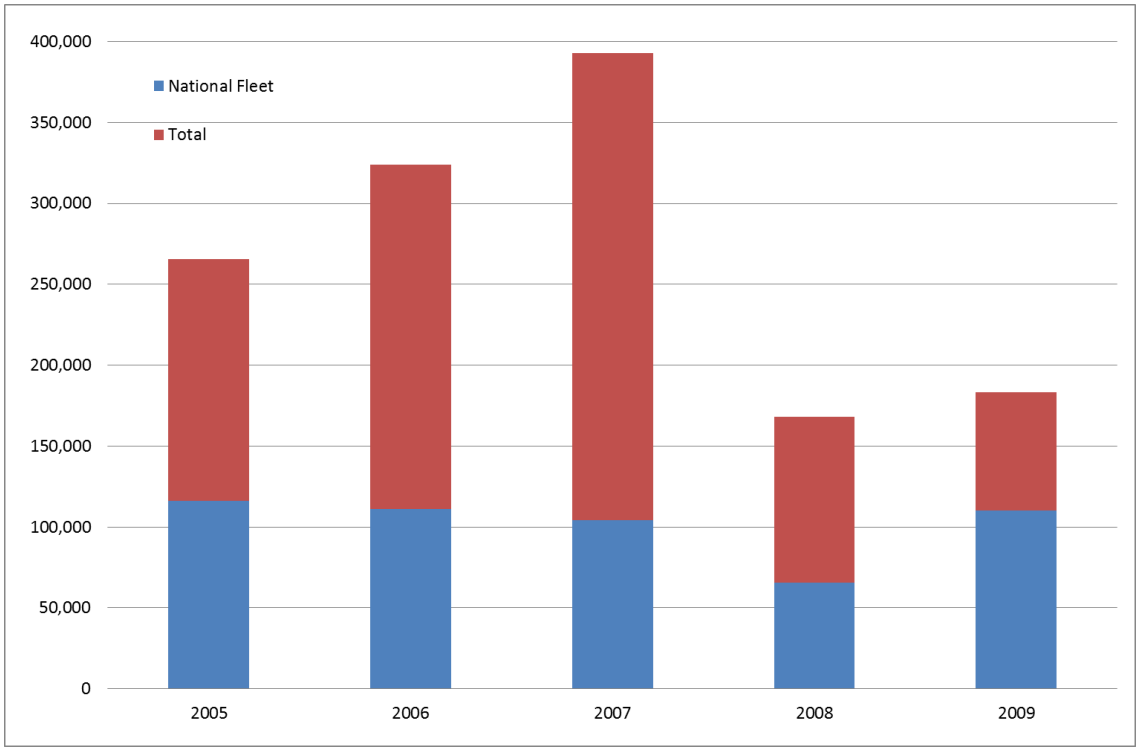
(Thousand MZN)	2008	2009	2010
Total Fees and Fines	**169,795**	**368,460**	**510,543**
Direct Environmental Revenues	**9,000**	**10,992**	**26,624**
Fees and Fines from the National Environment Fund	9,000	8,662	23,291
Revenues on Conservation Areas for Tourism Purposes	--	--	630
Slaughter Fees - SPP	--	2,330	2,703
Land Revenues	**11,077**	**29,791**	**30,176**
Rent (Fee) on Land	--	--	4,829
Fee for Land Use	11,077	27,800	21,908
Annual Fee for Land Use	--	1,385	2,343
Fines of the Use and Utilization of Land - SPGC	--	606	1,097
Fishing & Hunting Revenues	**149,718**	**113,049**	**218,096**
Fee for Fisheries Development Fund	--	--	92,678
Fishing Licence	119,159	85,333	98,001
Fisheries License Fees	30,560	24,573	22,900
Hunting Fee - SPFFB	--	1,643	1,518
Hunting Fee - DNTF	--	1,500	3,000
Mining Revenues	**0**	**0**	**13,900**
Registration Fee Request Mining Concession	--	--	700
Fee for the Extension of a Mining Concession	--	--	2,200
Fines of Mining Activities - 60%	--	--	10,000
Fee for Issuance of Mining Concession Title	--	--	500
Fee for Late Submission of Application for the Extension of Mining Concession	--	--	500
Timber and Coal Revenues	**0**	**165,674**	**199,146**
Fee of Coal Mining and Firewood - SPFFB	--	16,843	21,128
Fee for Timber Extraction - SPFFB	--	134,621	163,905
Wood Certified - SPA	--	14,210	14,113
Petroleum Revenues	**0**	**48,954**	**22,600**
Fees and Fines from the Institute of National Petroleum	--	48,954	22,600

Source: SISTAFE – Ministério das Finanças da Republica de Moçambique

As discussed in the methodology this refers only to the fees and fines and excludes taxation. If taxation revenues were included the total would be 11,546.7 million MNZ (3.9% of the budget and 1.3% of GDP). The most substantial taxation is for petroleum which brought in a total of 10,107.6 million MZN in 2010 alone.

Revenues from Fisheries are shown in Figure 11. After a decline in performance in 2008, because of a decline in the national component as well as in the external component of the European Union Compensation Fund, revenues from fisheries show a recovery in the internal component, albeit far from the previous year's levels. It would have been more informative to see the trend into 2010, since, overall, the sector is still struggling to fully recover, but the data is still being processed.

Figure 11 – Revenues from licences, fees, fines and compensation funds from the EU 2005-2009 (MZN)



Source: Ministry of Fisheries

Table 19 – – Revenues from licences, fees, fines and compensation funds from the EU 2005-2009 (2005-2009)

Description	2005	2006	2007	2008	2009
Industrial fishing licence	93,095	87,848	82,356	47,078	57,152
Semi industrial fishing licence	18,379	18,530	15,316	11,609	8,379
Artisanal fishing licence	1,351	1,052	1,269	1,222	709
Recreational fishing licence	368	464	866	3,161	799
Late collection	2,824	3,268	4,465	2,678	43,078
National Fleet	**116,017**	**111,162**	**104,272**	**65,748**	**110,117**
Royalties (tuner licences)	35,690	44,514	55,102	39,924	37,453
Sub-Total (Fishing Licences)	**151,707**	**155,677**	**159,374**	**105,672**	**147,570**

Fishing inspection fees	6,273	5,256	7,471	6,000	7,720
Prevous balances (inspect. fees)	-	-	-	-	463
Fines	1,862	2,800	1,327	212	1,827
Compensation Funds (E. Union)	105,723	160,281	224,795	56,262	28,130
Total	**265,566**	**324,015**	**392,967**	**168,146**	**183,420**

Source: Ministry of Fisheries (2010): Relatório de Balanço Anual de Actividades de 2009

Revenues from Parks and Wildlife are shown in Table 20 and Table 21. Revenues from the tourism sector (from parks, protected areas and game reserves) have increased steadily over the period 2005 – 2010. The main source of revenues are hunting tickets (*senhas*), representing 45% of all sources, followed by entry fees (41%).

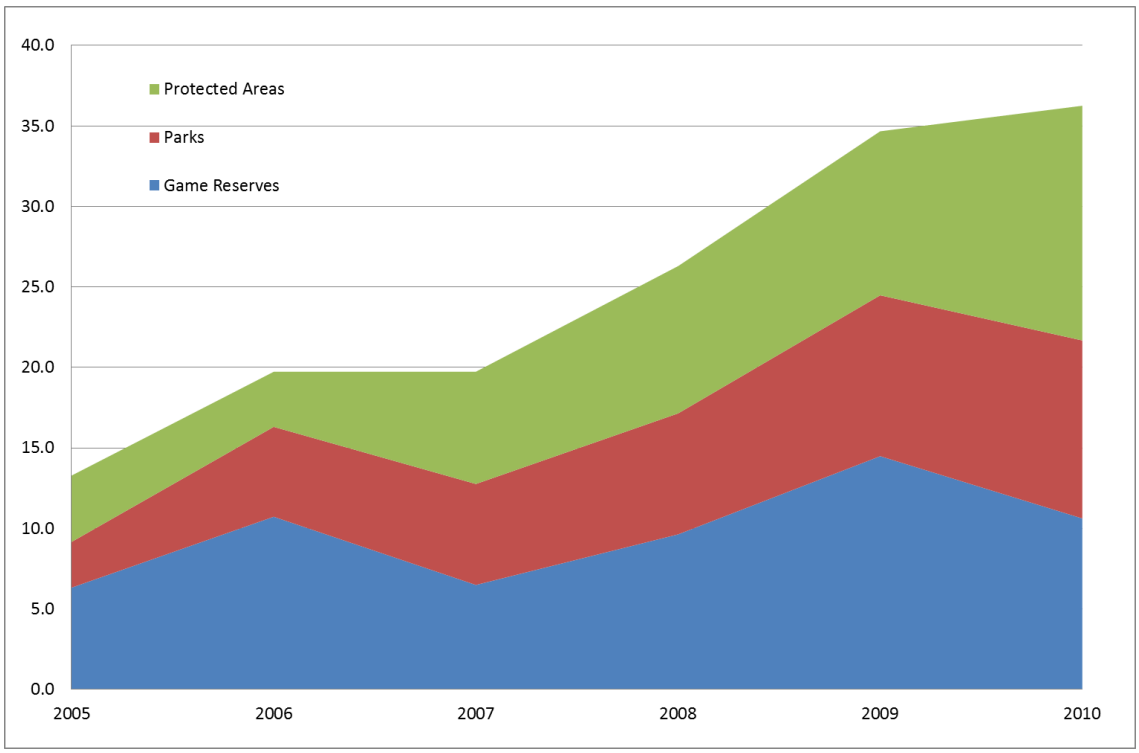
Table 20 – Revenue from Tourism (2005-2010)

Description	2005	2006	2007	2008	2009*	2010
Annual Fee	0.5	1.0	0.8	1.0	-	2.0
Recreational License	0.2	0.3	0.0	0.3	-	0.4
Special License	0.0	0.0	0.0	0.4	-	1.5
License w/ Guide	0.0	0.1	0.2	0.1	-	0.1
Hunting tickets	8.9	11.6	5.4	12.6	-	14.3
Entry fees	3.6	6.7	8.1	11.6	-	17.9
Other	0.0	0.0	5.1	0.0	-	0.1
Total (Million MT)	**13.3**	**19.7**	**19.7**	**26.2**	**34.7**	**36.3**

Source: MITUR
*Note: * In 2009, available data is in aggregate form in terms of its nature or type but it is at least disaggregated in terms of geographic origin (see next table).*

In terms of type of area and geographic location, game reserves (spread all over the country) account for 39% for the source of revenues, followed by parks (29%, which could be higher if we moved Banine into this category-see table 20 for more info), and protected areas (32%). Individually, Tchuma Tchato and Limpopo National Park represent the largest contributors to these categories of revenues.

Figure 12 – Revenues from parks and wildlife (2005-2010)



Source: MITUR

Table 21 – Tourism Revenue from Parks and Protected Areas (2005-2010)

Area	2005	2006	2007	2008	2009	2010
Game Reserves	**6.3**	**10.7**	**6.5**	**9.6**	**14.5**	**10.6**
Parks	**2.8**	**5.6**	**6.3**	**7.5**	**10.0**	**11.1**
Gorongoza NP	0.1	0.8	1.8	0.7	0.6	1.3
Bazaruto NP	2.6	3.0	1.2	0.0	0.0	0.0
Limpopo NP	0.0	1.4	2.7	4.9	8.0	7.1
Quirimbas NP	0.2	0.3	0.6	1.9	1.4	2.6
Zinave NP	0.0	0.0	0.0	0.0	0.0	0.0
Protected Areas	**4.1**	**3.4**	**7.0**	**9.2**	**10.2**	**14.6**
RE Maputo	0.8	1.1	1.8	1.5	1.8	3.1
PN Banine	0.0	0.0	0.0	3.2	1.5	5.2
RE Chimanimani	0.0	0.0	0.0	0.0	0.0	0.0
Tchuma Tchato	3.3	2.3	5.1	4.5	6.2	6.3
Q. to Communities	0.0	0.0	0.0	0.0	0.7	0.0
Total (million MT)	**13.3**	**19.7**	**19.7**	**26.3**	**34.7**	**36.3**

Source: MITUR

Revenues to Local Communities are shown in Table 22. Apart from the Law[48] which stipulates that 20% of the revenues from the exploration of forest and

[48] Ministerial Decree 93/2005, of May 2005. I Series No. 18.

wildlife resources as well as from tourism based on site-seeing be channelled to a "Community Fund", little is known in the public domain about the amounts thus far involved and the number of existing Funds. For instance, De Wit, P. and Norfolk (2010: 33)[49], estimated that there were about 436 communities in 2008 benefiting from the 20% stake from local generated revenues. Moreover, the authors had estimated that a considerable amount of total funds owed to the communities had not been paid out. It should be stressed that being a specifically dedicated study into the community revenues, the report went further as to estimate figures close to reality, since DNTF does not seem to have a full control of the statistics.

Table 22 – Payment for the 20% community stake from forestry and wildlife revenues (2006-2008)

Province	Number of Registered Communities	Amounts Paid (USD)	Amounts still owed (USD)	% of payment rate
C. Delgado	79	230,015	386,167	37.3%
Gaza	35	53,175	90,501	37.0%
Inhambane	30	113,816	188,539	37.6%
Manica	32	168,845	144,023	54.0%
Maputo	25	19,934	29,343	40.5%
Nampula	63	216,069	44,424	82.9%
Niassa	10	22,345	46,862	32.3%
Sfala	18	233,207	759,619	23.5%
Tete	35	162,475	141,966	53.4%
Zambezia	109	597,006	-25,504	104.5%
Grand Total	**436**	**1,816,887**	**1,805,940**	**50.2%**

Source: De Wit, P. and Norfolk (2010)

Some discrepancy can be seen from information gathered at DNTF, which indicates the existence of only 331 communities, in 2008. DNTF has recognized the fact that not all information required to produce a complete dataset goes through them, hence the discrepancies. Thus, the following table should be seen as indicative of the trend but actual statistics may be far greater than the reported.

Reporting problems at the source of information also add to the difficulties faced by DNTF. For instance, data for 2006 and 2007 for Tete and Nampula is original aggregated (hence the table shows an equal division for both years). Further, Nampula is said not to have complied with the law, at least not until recently. Data for 2009 has also not been consolidated, hence the many missing figures in the table.

In any event, looking at the first three years (2006 – 2008) when data seems to be more consistent, one can see an upward trend both in terms of

[49] De Wit, P. and Simon Norfolk (2010): *Reconhecer Direitos sobre os Recursos Naturais em Moçambique*. Documento de trabalho para Rights and Resources Initiative. Janeiro 2010.

community funds and the amount of money they receive in accordance with the law.

Table 23 - Disbursement of Community Funds (2006-2010)

Province	Beneficiary Communities	2006	2007	2008	2009	2010	Total
Maputo	# of Communities	12	16	19	11	0	58
	Million MT	***0.2***	***0.1***	***0.2***	***0.1***	***0.0***	***0.6***
Gaza	# of Communities	33	26	2	4	1	66
	Million MT	***0.8***	***0.4***	***0.2***	***0.1***	***0.1***	***1.6***
Inhambane	# of Communities	23	28	18	0	34	103
	Million MT	***0.7***	***1.6***	***0.7***	***0.0***	***0.9***	***4.0***
Sofala	# of Communities	1	10	13	10	26	60
	Million MT	**0.2**	**4.5**	**2.7**	**1.0**	**6.6**	**15.0**
Manica	# of Communities	20	18	12	0	9	59
	Million MT	**1.8**	**1.6**	**1.2**	**0.0**	**0.7**	**5.2**
Tete (*)	# of Communities	22	22	21	8	0	73
	Million MT	**1.1**	**1.1**	**2.2**	**0.7**	**0.0**	**5.1**
Zambezia	# of Communities	83	93	102	0	0	278
	Million MT	**5.8**	**5.8**	**4.5**	**0.0**	**4.7**	**20.8**
Nampula (*)	# of Communities	63	63	69	0	0	195
	Million MT	**1.1**	**1.1**	**3.7**	**0.0**	**0.0**	**5.8**
Niassa	# of Communities	0	2	10	0	3	15
	Million MT	**0.0**	**0.1**	**0.5**	**0.0**	**0.1**	**0.7**
Cabo Delgado	# of Communities	13	36	65	28	6	148
	Million MT	**1.4**	**1.5**	**3.4**	**1.6**	**0.1**	**7.9**
TOTAL	# of Communities	**270**	**314**	**331**	**61**	**79**	**1,055**
	Million MT	**13.1**	**17.8**	**19.3**	**3.5**	**13.1**	**66.8**

Source: Ministry of Agriculture (MINAG – DNT)

Note: Figures highlighted in red were originally given in an aggregate form but referring to 2006 and 2007. The author assumed that the variation from one year to another could have been small. It can be seen the assumptions sounds reasonable since figures reported for the following year (i.e. 2008) do not change significantly.

9. CONCLUSION AND RECOMMENDATION

The purpose of this study was to make an assessment of the environmental sector expenditure in Mozambique, focussing on trends, distribution by relevant sectors, and level in relation to priorities and poverty reduction objectives. The study also analyzed key aspects of environmental governance such as link between policies and budgets and, like its predecessor, the ODI study, it identifies important constraints relate to the expenditure functioning of the whole of the public sector as well as specific issues concerning the environment sector.

The analysis undertaken is based on the assumption that albeit from a small base, Mozambique has been enjoying significant economic growth over the past two decades. In effect, GDP growth averaged 8% over the 2001-2010 decade, although poverty remains high at 54.7% nationwide, and there is persistent high level of dependence on foreign aid (14.5% of GDP and 50% of government revenues).

Further, as indicated by the Millennium Development Goals (MDGs) report, the country has had some mixed results with regard to ensuring environmental sustainability. There are significant concerns over the loss of biodiversity and vulnerability of ecosystems due to severe droughts and flooding, as well as desertification in some areas. This is despite some progress achieved since the end of the civil war with regard to increased protected areas and access to water and sanitation.

The scope of the study included defining environmental expenditure and revenue in the context of Mozambique. While Mozambique's 1997 Environment Law defines clearly what is meant by environment, the study faced difficulties with regard to defining **environmental expenditure**, as such expenditure goes beyond environmental sector's dedicated agencies. Rather, as indicated in PARPA, environment is a cross-cutting issue which spans many different areas of government. Hence, to avoid the risk of using too narrow a definition of environmental expenditure such as COFOG, the study resorted to a wider definition of environmental expenditure, encompassing expenditure towards environmental management but also expenditure towards protection and control of human activities that may affect the environment. Environmental expenditure is therefore found within a large number of budget lines, although this review focused mainly ***but not exclusively*** on the environmental sector

With regard to the **environmental revenue**, the study identifies three sources of funding to public sector activity in the environment in Mozambique, namely (i) un-earmarked funding allocated through the budget negotiation process originating from ordinary government revenue (i.e. tax revenues) and general budget support provided by development partners; (ii) earmarked revenue generated by environmental management activities; and, (iii) earmarked funding provided by development partners. A closer look at the list of revenues from the State Budget, however, shows that the potential

sources of revenues (tax and non-tax revenues) for the wider environmental sector is far more than what can be suggested by just looking at the fees and fines collected by FUNAB, MINAG and MITUR.

With regard to **policy governance**, as reported in previous studies (i.e. ODI), major constraints remain in terms of lack of linkage between environmental priorities and budget allocation and transparency of budget planning and accounting instruments (realignment of COFOG coding in SISTAFE), and the dependence of external funding. The particular governance difficulties also arise because MICOA, the government agency with overall responsibility for coordination of environmental activities, faces human and financial resources challenges. It also has little scope for influencing sector policies, though there is an improvement in this area. However, it is hoped that the establishment of the Institute for Physical and Environmental Planning (IMPFA) which will see its first graduates in 2013, will in part address the availability of qualified personnel. Other key players in the environmental sector, such as FUNAB, also seem not to be operating at it potential capacity mainly because of not benefitting from the full range of possible environmental revenues that it could be entitled to.

CONDES, the consultative body of the Cabinet of Ministers on environmental issues, which should promote dialogue and monitor policy implementation, is still in the process of increasing its technical capacity and hence its presence in environmental policy debate requires a higher degree of dynamism. As institutions, MICOA and CONDES need to improve their performance; in practice they have difficulties to exhibit strong influence over high level government policy decisions, although there are significant improvements in this area. Inter-sectoral exchanges and debate are rare and do not often lead to coordinated decision-making. The effectiveness of the **Environmental Units / Departments** in selected ministries has been limited in terms of co-ordination of intra-government policies and facilitation of dialogue. Indeed the consultants were not able to gain any information on environmental expenditures from these units and relied on other staff members in the ministries. Moreover, the level of allocation of material and financial resources also varies from ministry to ministry, and only a few ministries (e.g. Energy) have full time staff while in others the tasks of storing, recording and disseminating budgetary information are assigned to people who have other formal responsibilities within the ministries. Nonetheless, most environmental units or focal points are filled with reasonably qualified and experienced people.

The sector **Environmental Working Group (EWG)**, formally established in 2008, and led by MICOA, was expected to be one of the main arenas for an invigorated dialogue between the Government and Partners. But, so far, the civil society participation and that of other sectors remains weak and formal meetings have not been regular. In contrast, the **Development Partners Environment Working Group (EDP)**, which aims at ensuring a harmonised policy dialogue among donors, has been relatively active.

The assessment of **expenditure distribution** shows little alignment with national plans. According to PARPA II, the major environmental priorities in Mozambique for the period analysed focused on sanitation; territorial planning; prevention of land degradation; management of natural resources, including control of fires; legal and institutional aspects, i.e. environmental education, compliance of the law and capacity building; reduction of air pollution, waters and soils pollutions; and, prevention and reduction of natural disasters. The study finds that **planning and budgeting practices** in Mozambique do not allow an easy establishment of a clear link between policies (e.g. the priorities above) and budget allocation and expenditures. Further, even when policy documents indicate priorities, they fail to specify concrete activities and targets/indicators associated with a particular policy objective. However, this constrain is being gradually removed through wider use of the tri-annual planning tool, the Medium Term Financial Framework. Moreover, the budget does not provide sufficiently detailed information to indicate how resources are distributed across areas of intervention below the level of the ministry, provincial directorate or district administration (i.e. within the categories specified by the organic classification of expenditure). This is a key limitation to conducting a comprehensive PEER analysis. Therefore, where possible, the analysis compared the priorities against the data on projects by environmental code, an exercise that has allowed an assessment of the extent of alignment of environmental expenditures with actual needs in Mozambique.

A **geographical analysis** has also been possible as a result of the internal institutional breakdown. Trends in spending by province were reviewed using the changes in the DPCA's expenditures. Whilst this is not a full view of the provincial expenditures (some can be allocated to MICOA centrally instead of directly to the budget of the DPCAs) it does provide an indication of the **decentralisation policy** and the extent of capacities of the provincial agencies. Further, because the environmental expenditures in Mozambique stretch beyond MICOA, key Ministries were highlighted where significant environmental activities are undertaken. However, the review is limited to the code of the ministry as there are no sub-codes that allow to pinpoint environmental expenditure.

The introduction of the new system – **SISTAFE** – from 2008, and the consistent budget coding system applied to projects thereof, allows the projects to be filtered along environmental codes regardless of which ministry the expenditures were made from, but only for the period 2008-2010. The assessment of the environmental expenditure in the study is therefore carried out in line with the data availabilities and as such it examines the expenditures of MICOA, followed respectively by a wider view of other ministries expenditures on the environment, and a review of external financing, and eventually a breakdown of these estimates of environmental expenditure as a proportion of total expenditures and GDP.

For the core environmental agencies at **MICOA total expenditure** have risen from 115.6 million MZN in 2005 to 354.3 million in 2010, or the equivalent of an annual average growth rate of 26 percent. Despite this sharp rise, the total

environmental expenditure remains at around 0.3 percent of the total state budget and 0.1 percent of GDP. Whilst expenditures have remained relatively stable as a proportion of the total state budget there has been slight growth in these environmental expenditures as a share of the economy (rising from 0.08 to 0.12 percent of GDP).

Recurrent expenditure accounts for the majority of spending at 66% but this has been declining consistently from 77% in 2005, while **investment expenditures** has shown the opposite trend, growing faster than recurrent over the time period and now accounting for 44% of total expenditures. Within investment expenditure internal funding has been growing faster than external funding. As a result, since 2007 **domestic financing** has contributed the greater proportion of funding to investment expenditure.

By **economic classification**, expenditure at core MICOA shows staff costs representing 56% of the current expenditure, on average, with a tendency to increase, while expenditures on goods and services tend to be stabilized at 35%, with a slow tendency to decrease. On the **capital expenditures** side, constructions (48%) and goods and services (32%) account for 80% of the costs, on average. Overall, while current expenditures tend to increase over time, investment costs show a steady decline after a pick in 2008, mainly justified by construction.

By agency, expenditures carried out directly by **MICOA** has traditionally accounted for the largest proportion averaging 56% over the time period. However, in line with the GoM's decentralisation policy the growth of funding to MICOA - the central agency - has fallen from 62 to 45% of the total MICOA budget as more responsibility and funding has been allocated to the DPCA's which now account for one third of all spending by the core environmental agencies.

Expenditure **by province** shows that across all provinces funding has been rising since 2005. Overall, **DPCA's** were responsible for 36% of all the investment expenditure for the period 2008-2010. Among the provinces, the Municipality of Maputo (42%) and Sofala (13%) were the major beneficiaries. The share of all other provinces remained at 8% (Gaza) or slightly below.

Capacity building projects and erosion control and protection absorbed 72% of the resources, followed by the rehabilitation of infrastructure with 11%. Natural resource management (mainly on national parks) and sanitation and water received the least, 9% and 7%, respectively.

Priority areas of investment varied significantly across the provinces. For instance, Niassa, Tete and Manica recorded no material investment and all of their resources went into capacity building. The Northern provinces of Cabo Delgado and Nampula invested heavily into capacity building (60% and 79%, respectively) followed by sanitation (30% and 9%, respectively) and infrastructure (10% and 12%, respectively).In the central part of the country, priorities vary considerably. In the central part of the country, Zambézia (25%) and Sofala (41%) puts some emphasis on erosion control.However, Natural

resource management in Gorongoza (46%) and capacity building in Zambézia (58%) take up the major share of the resources. The southern provinces tend to allocate more of their resources into erosion control and protection: Gaza (87%), Inhambane (65%), and Maputo City (54%). Maputo Province, on the contrary, spent most of its investment resources into capacity building(68%).

As explained above, DPCA's were responsible only for 36% of the total aggregate investment in the 2008-2010 period. The remaining (64%) was executed through central agencies in Maputo. However, although a significant amount of this share may have been spent in activities in some provinces, SISTAFE does not show its geographic distribution. MITUR (1.6%) invests all of its resources in natural resource management (i.e. national parks and reserves), while MOPH (48.8%) spends 100% in sanitation and water projects. MICOA (8.5%) also made huge investments in capacity building at the central level, while FUNAB (5.1%) allocated funds to other entities managing environmental program 62% of which into erosion control and 38% to natural resource management activities.

The **execution rates** of each DPCA have, on average, been lower than that of the national agencies over the 2005-2010 period, but the trend shows a general rise. The DPCAs in Gaza, Tete and Cabo Delgado have registered the lowest execution rates for current expenditures in recent years and hence need to improve as they have done so in 2010. For the CDSs, the average execution rate for current expenditures is also below that of the national agencies and their rates for internal investment average only 54%, despite marked improvement in 2010.

Analysis of the priorities against the data on projects by environmental code show that there is a huge tendency of allocating resources to environmental protection (50%, on average), and a relative shift of resources from waste water management (42% in 2008) to projects on protection and biodiversity and landscape (50% in 2010).

Further, comparing **geographical allocation of resources and distribution of expenditures across areas of activity and poverty levels** does not give a clear indication of the existing link between priorities and expenditures. More importantly, it is hard to conclude that there is a link between allocation of resources and poverty alleviation. For instance, the disproportion of resources allocated between Sofala and Inhambane, two of the provinces with serious concerns over coastal erosion, makes it hard to come to conclusion that there is geographic prioritization of resource allocation.

However, looking at the overall **distribution of resources across provinces vis-à-vis poverty pattern**, it is striking to see that the distribution of expenditure seems to fall in line with geographic distribution of poverty. The two provinces with the highest poverty incidence in 2009, namely Zambézia (70.5%) and Maputo Province (67.5%), also recorded the highest second and third overall environmental expenditures, respectively, over the 2005-2010 period. Sofala

and Nampula (which have also had higher poverty incidences have also had higher overall expenditures, ranking first and fourth, respectively. But there are exception to this rule, as witnessed by the cases of Inhambane and Gaza, which despite recording high poverty incidence (third and fifth, in 2008/9, or first and second, on average for the period 2006-09), and besides having also severe coastal erosion problems, have had about the same level of expenditures as the least poverty hit provinces of Niassa and Cabo Delgado.

Overall, **On-budget environment projects** totaled 1,273.2 million MZN (of which more than 55%, on average, were investment expenditure), from 2008 to 2010, or, 0.5% of the state budget and 0.2% of GDP. Over such a short time period, it is difficult to extract any trend conclusions, despite a reduction in the annual executed expenditures, both in nominal and in real terms. By environmental code, environmental protection (05611) accounts for the greatest proportion of expenditure (53% on average). One remarkable fact is that the breakdown for each environmental code does not show any projects concerning waste management and pollution abatement. **Total environmentally coded and non-coded projects** reached 2,748.4 million MZN from 2008 to 2010, and they accounted for 1% of the state budget and 0.3% of GDP. Environmentally coded projects make up the majority (57%)

External funding to MICOA and its sub-agencies, the majority of which is funded by DANIDA, accounted for 47% of investment expenditure since 2005, on average, and is now standing at 55.3 million MZN in 2010. However, as environmental projects are carried out in ministries other than MICOA, so too are externally funded projects. **On-budget external financing** provides just less than 100 million USD per year to the environmental sector, accounting for approximately 3% of the total state budget and 1% of GDP, compared to **Off-budget external financing** which provides an average of 23.0 million USD per annum from 2007 to 2010. **The largest sectors** attracting foreign financing are: Water and Sanitation (40%); Energy (15%); Agriculture Forestry and Fishing (14%); Transport (12%); and Urban and Rural Development Management (11%). Together since 2007 these make up more than 90% of on-budget external funding.

A breakdown of on-budget external funding by donor shows that **Multilaterals** make up the majority of on-budget external funding (around three quarters), whereas **Bilaterals** contribute with the rest, of which DANIDA contribution accounts for 13% (solely in the area of General Environmental Protection). Ireland on Agriculture, Forestry and Fishing, Italy (Urban and Rural Development Management), France (Water and Sanitation) and Switzerland (Agriculture, Forestry and Fishing) are the four other large contributors.

The total value of external financing to the environmental sector is 471.3 million USD, that this is equivalent to 1.3% of GDP, with no major variation in priorities as seen in the on-budget priorities, namely Water and Sanitation; Agriculture, Forestry and Fishing; Energy; Transport and Urban and Rural Development Management.

Estimation for **total environmental expenditures** in Mozambique stands at 18,806.5 million MZN from 2007 to 2010, an average of 4.3% of the state budget, and 1.4% of GDP. This estimate is larger than that estimated in the previous environmental expenditure analysis carried out by the ODI. However, follow up work will need to be carried out to filter the projects to ensure that they are concerned with environment alone.

An overall assessment of **MICOA expenditures as compared to other Ministries** shows that the core environmental sector, with an average of 0.7% of total expenditure out of 10 sectors, falls well below PARP priority sectors such as Education (36%), Health (28%), Justice (28%) and Agriculture (3.4%).

Total environmental revenues totalled 1,048.8 million MZN from 2008 to 2010, or 0.4% of the state budget and 0.1% of GDP. However, the inclusion of taxation revenues (the most substantial of which is for petroleum) would increase the total to 11,546.7 million MNZ (3.9% of the budget and 1.3% of GDP). Over this period, there has been a rising trend in revenue collection, with a significant rise specifically in 2010 with introduction of fines and the fee for the fisheries development fund. The introduction of mining fees and a doubling of the FUNAB fees also contributed to the rise. **By sector,** fishing and hunting have contributed the largest proportion to total revenues since 2008 (46%). **The 'direct' environmental revenues** (i.e. FUNAB fines, conservation areas and animal slaughter fees) provide only 4% of all revenues. Revenues from the tourism sector (i.e. parks and wildlife) have also increased steadily over the period 2005 – 2010, mainly from hunting certificates (45%) and fees on park visitation (41%). Regarding the **revenues to local communities** little is known about the amount and the number of funds generated by the 20% earmarked revenue stipulated by Law to benefit Community Funds. Agencies such as DNTF are faced with serious challenges regarding data collection. Existing data, however, seems to suggest an upward trend both in terms of community funds and the amount of money channeled to them.

In a final note, this study reinforces the ODI report that Development Partners are still a vital driver of change in Mozambique, where there are responsible for more than 70% of public investment. Hence, they play an important role in improving environmental management performance, specifically with regard to the need to "*(i) build internal policy coherence, (ii) reinforce harmonization across donors, (iii) nurture policy dialogue with the whole of government, (iv)focus capacity building efforts on core environmental functions of government, and (v) strengthen demand for sound environmental governance.*"

Implications of the anaysis

The purpose of the PEER in Mozambique is to provide answers to a number of questions, including where the funds for environment are being allocated, how the decisions on the funding of the sector are currently made, how effectively and efficiently the funds are being spent and who the principal beneficiaries of the expenditure are.

After analysing the allocation, disbursement of funds, and revenue (geographic and thematic, internal and external sources) to the environmental sector and trends compared to other sectors, this study makes the following recommendations:

- In order to establish an effective budget process, the environmental sector need to introduce the program based budget approach (*Orçamento Programa*). With this approach, MICOA would have to claim ownership of all environmental programs, some at the coordination level, making sure that all programs implemented outside its core institutions appear in its M&E instruments. The correct coding of the program and its projects and activities, including recurrent costs, would allow the accurate accounting of all environmental activities across different Ministries and sectors.

- In order to reduce dependence of external sources of funding, and in light of the current willingness to broaden the tax base and other internal source of revenue, the Government needs to undertake specific studies on potential sources of environmental revenues. Further, key stakeholders in the environmental sector need to be encouraged to collect the due stipulated revenues, as well as the revenues which currently not yet defined and adopted. This can be effectively achieved though carrot-and-stick incentive programs, for example, the 20% community fund aimed at actively involving communities in sustainable management of resources. Besides, more earmarked revenues to the environmental sector can facilitate the process of targeting not only priorities within the sector but also specific environmental poverty born issues.

- With regard to revenues, relevant government institutions (e.g. AT, the fiscal authority) need to provide more detailed information on sources of data (geographic and thematic) not only for transparency purposes but more importantly to allow for proper trend and cross-sectional analysis with regard to sustainability of internal resources. Initially, the AT should increase its technical and administrative capacity to have a greater of control of and to systematize the data on tax and non tax revenues, provided that it is mandated to collect data on non tax revenues.

- Environmental stakeholders outside MICOA need to cooperate in terms of providing data and information regarding their environmental activities. This task will be greatly facilitated with the introduction of COFOG coding across the sectors and down from programs to projects and activities, including also the municipalities and international partners who provide off budget funds currently registered in ODAmoz database.

- MOCOA and CONDEs need to be more active in their roles, with a certain degree of predictability of their inter-sector coordination programs and activities.

- Much more emphasis is required in ensuring a clear linkage between planning and budgeting. Correct and wide use of the MTFF (including definition of sub-activities and measurable targets) could offer a starting point for this.

- Prioritisation of expenditure should be based on "evidence" on the ground rather than generic country wide interventions, or simply proportionally to the increase in the budget.

- Environmental activities at municipalities and private sector entities need to be take into account in future PEER. For that to happen, the coding system needs to be introduced beyond SISTAFE into ODAMoz and private sector accounting charts. For the latter, a proper questionnaire into the private sector through usual statistical data collection mechanism through the National statistics Institute can capture the essence.

10. ANNEXES

Annex 1 – MICOA human and institutional capacity[50]

At MICOA, inadequate human and institutional capacity constitutes a constraint to the achievement of more coherent results. As Figure 13 shows, the distribution of the personnel by units, presents DAF as the unit with the highest number of staff, followed by DPCA Maputo, DINPOT and DPCA Nampula. However, the overwhelming majority of these people are responsible for providing different kinds of administrative support and/or executing manual

[50] The information in this section is mainly based on GoM (2010): *Environmental Sector Programme Support Programme II (2011 – 2015).*

activities (typing, cleaning, driving, security and general maintenance of property and equipment, etc.).

Figure 13 – Distribution of MICOA's staff by units

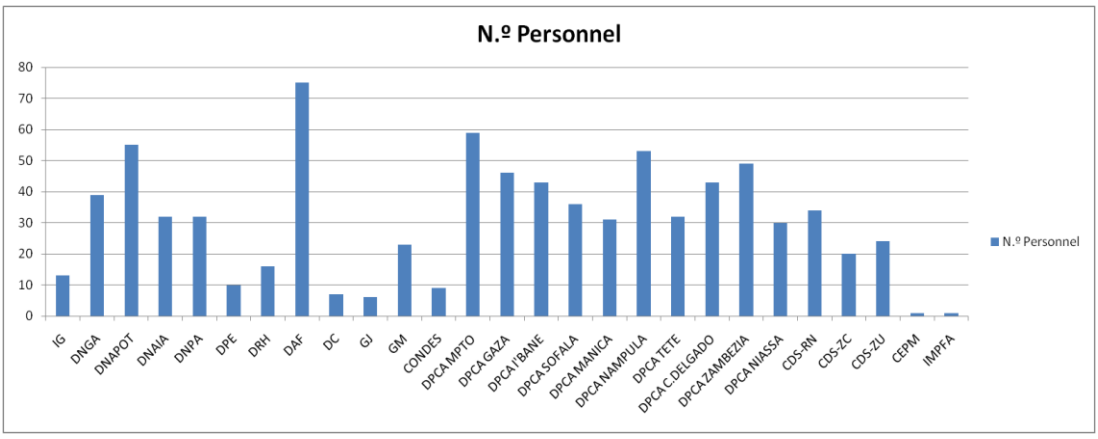
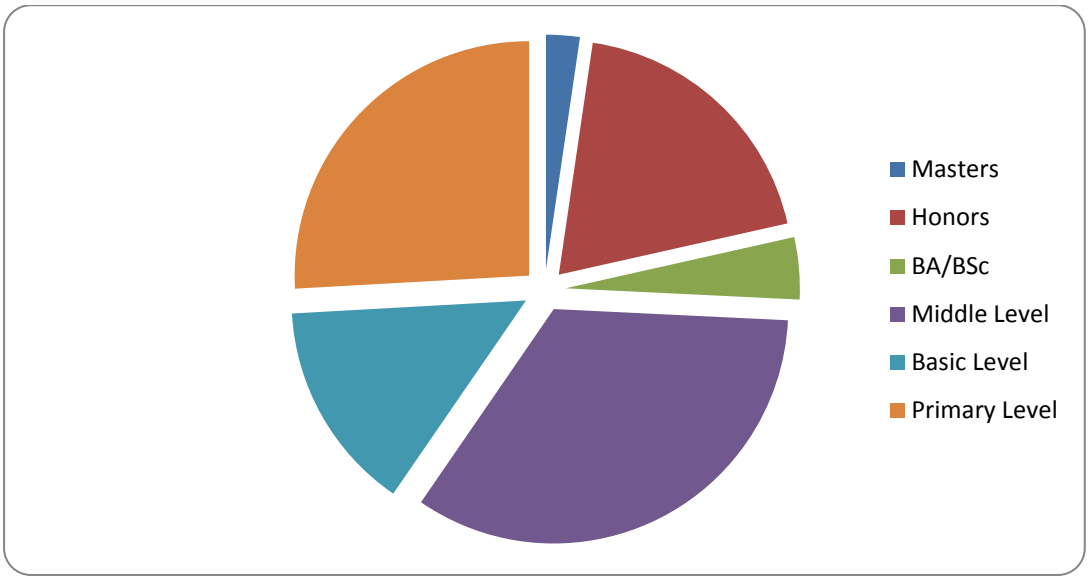


Figure 14 depicts the distribution of MICOA's personnel by academic qualifications, which shows the prevalence of people who completed the middle level of education, followed by primary level, graduate (honours (licenciate) and bachelor's degree holders), basic education and post graduate (at the master's level only).

Figure 14 – Distribution of MICOA's personnel by units



The middle level graduates is the dominant group, which depicts a typical trend in the public sector, also explained by the relative youth of the ministry and its ability to attract the rapidly growing pool of young graduates.

Table 24 shows 153 MICOA staff members by area of specialization, drawn from a list of 321 staff at the central level, representing 13 units:

Table 24 – Distribution of MICOA's staff at the central level by areas of speciality

Area of Specialisation	Quantity
Law	7
Physics	3
Mechanics	2
International Relations	3
Geology and Land Management	2
Urban and Physical Planning & Architecture	24
Biology/Chemistry	18
Public and Municipal Administration	11
Civil Engineering	1
Agronomy/Livestock & Agricultural Development	17
History/Geography	14
Meteorology	1
Environmental Engineering/Environmental Management & Auditing	4
Economy/Commerce/Accounts and Auditing	22
Languages	5
Tourism	2
ICT	5
Documentation	2
Education including Psychology	8
Sociology/Journalism	2
Total	**153**

Those who did not specify their areas of speciality are trained in general areas and are mainly made of graduates from primary and secondary school levels, including high school level. Of the 153 staff members who specified their speciality, only 4 have academic background in Environmental Engineering/Environmental Management & Auditing. The distribution is dominated by Urban and Physical Planning and Architecture (24) followed by Economy/Commerce/Accounts and Auditing (22), Biology/Chemistry (18), Agronomy/Livestock & Agricultural Development (17), History/Geography (14), etc. Some of these do not have any relevant training in environmental management as such while other require refreshment and updating in order to develop relevant knowledge and skills in environmental management as per MICOA's current mandate.

From the perspective of a sector that is expected to lead the dialogue with the other sectors and stakeholders it becomes evident that the development (formal[51], non-formal and informal education) and retention of MICOA's human resources needs attention.

The establishment of **IMPFA** in Maputo, which is likely to be followed by the establishment of a similar institution in the central region, is seen by MICOA leadership as having the potential to address availability of qualified personnel in land use planning and environmental management at the local level, mainly at provincial and district level. 2013 will see the first group of graduates from the Institute. At present the institution relies on temporarily

[51] Mainly at the graduate and post-graduate levels, inside and outside the country.

hired premises and teachers and is in the process of acquiring basic material for its operations.

Annex 2 – Planning system in e-SISTAFE

This annex[52] gives a description of the planning system in e-SISTAFE and how it is linked to the four planning tools used by government (CFMP, OE, PES and BdPES), and the classifiers used in the State Budget (the OE). This is briefly present below.

E-SISTAFE uses a module for budgeting, the MEO "*Módulo de Elaboração Orçamental*" and a module for budget execution, the MEX "*Módulo de Execução Orçamental*" for classifying the state budget.

The four programme classifiers used in e-SISTAFE, with an example applicable to the environmental sector, are as follows:

Programmatic classifier	RBA-AMB-00-MEC02-01-MEC-2009-0003
Sectoral classifier	Vacant
Sectional classifier	Vacant
Functional classifier	Vacant

According to the source, while it is not clear why the programmatic classifier agglomerates various strings used to code the budget, it is presumed however that the procedure leaves room for two unused classifiers to be developed later.

The Programmatic Classifier ("*Classificador Programático*") as it is used today evolved from a simple string of codes to a more complex one, as shown in the following example for the environmental sector:

2008: INH-2008-0013 – Integrated management of Natural Resources at Costal Zones

2009: MCA02-04-INH-2008-0013 – Integrated management of Natural Resources at Costal Zones

2010 RPA-AMB-00-MCA02-04-INH-2008-0013 – Integrated management of Natural Resources at Costal Zones

For 2010 the programmatic code is built up as follows: **PQG-AE-SAE-PG-SPG-Project**
– **PQG – 5 year plan** (6 objectives):

AE – strategic area
SAE – sub strategic area
PG – government programme
SPG – government sub-programme
Project – actions or project

An example of the code for 2010 for a project in MICOA is the following:

[52] The information presented here is based in the document by Erskog and Rasmussen (2009): *Analysis of External Funds Registered in the State Budget 2009*.

RPA is one of the central objectives in the "Plano Quinquenal do Governo", namely "Redução da Pobreza Absoluta",

RPA-**AMB** is the strategic area (AE), environment (Ambiente), one of the AE's under the central objective of "RPA",

RPA-AMB-**00** is a strategic sub-area (SAE) in environment. "00" means that no SAE has been defined,

RPA-AMB-00-**MCA02** is a programme (PG) of MICOA, "Gestão Ambiental",

RPA-AMB-00-MCA02-**01** is a sub-programme (SPG) of MICOA, "Gestão da qualidade ambiental",

INH-2008-0013 is the "Acção" or Project, indicating implementing sector (or province or district), year project initiated and a random 4 digit project number.

The section code is available if a sector is willing to develop a standard chart of accounts, cost centres, or linking to its internal plans, but according to the source, UTRAFE has not developed it due to lack of interest by sectors and prioritisation of other developments in e-SISTAFE. The Functional Code (Código Funcional) is a detailed functional classifier which allows for a budget structure that costs policies and programs undertaken by public institutions in line with international best practices (COFOG – Classification of the Functions of Government a United Nation Common System). The source indicates that this code can be further developed by a sector using the last two digits in the code that consists of 5 digits.

Annex 3 - Sector revenues collected and earmarked revenues collected (2006-2009)

Description	2006		2007		2008		2009	
	Own Revenues	Earmarked revenues	Own Revenues	Earmarked revenues	Own Revenues	Earmarked revenues	Own Revenues	Earmarked revenues
Ministry of Agriculture	11,825			40,151	957	88,547	1,155	971
Ministry for the C. of Environmental Action	0	1,470		3,309		2,681	0	21,210
Ministry of Tourism		22,088		19,325	26,236	27,228	31,901	41,688
Tourism Fund	7	33,835	61					
Ministry of Mineral Resources		4,203					9,741	20,245
Fund for Mineral Promotion				8,530		17,823		
Energy Fund/Min Energy						104,256	70,710	161,218
Ministry of Fisheries				154		47,074	5,787	84,795
Fund for the Promotion of Fisheries								
Licensing Fees		12,657						
Other fees		0						
TOTAL	**11,832**	**74,253**	**61**	**71,469**	**27,193**	**287,609**	**119,294**	**330,127**

Source: CGE Reports (2006, 2007, 2008, and 2009)
Note: In the 2005 CGE Report, all the tables are omitted.

Annex 4 - List of Institutions and Ministries Working with the Environment

Ministries and Institutions
Ministry for the Coordination of Environment Action (MICOA)
Directorate of Planning and Studies
The Environment Fund (FUNAB)
National Council for Sustainable Development (CONDES)
National Directorate for Environmental Promotion and Awareness (DNPA)
National Directorate for Territorial Planning and Regulation (DNAPOT)
National Directorate for Environmental Management (DNGA)
National Directorate for Environmental Evaluation (DNAIA)
Sustainable Development Centre (CDS)
Pollution Control Directorate
Provincial Directorate for the Coordination of Environmental Action (DPCOA)
Ministry of Finance (MF)
Ministry of Planning and Development (MPD)
Ministry of Agriculture (MINAG)
National Directorate of Land and Forest
Provincial Directorate of Agriculture (DPAG)
Ministry of Tourism (MITUR)
National Directorate of Conservation Areas (DNAC)
Provincial Directorate of Tourism (DPTUR)
Regulation and Control Department
Ministry of Mineral Resources (MIREM)
Ministry of Energy (MINEN)
Ministry of Fisheries
Ministry of Public Works (MOPH) – Sanitation
National Directorate of Water – Sanitation
Provincial Directorate of Public Works (DPOPH) – Sanitation
Ministry of Science and Technology and Public Universities
Ministry of Health, National Directorate for Public Environmental Health (DNSP)