

## 10. MOZAMBIQUE

### 10.1 Constitutional Requirement for Environmental Protection in Mozambique

The Constitution of the Republic of Mozambique (2004) addresses matters relating to environment and quality of life in its articles 90, 98, 102 and 117. Article 90, which is part of Chapter V (economic, social and cultural rights and duties) of Title III (fundamental rights, duties and liberties) provides humans the right to live in a balanced environment, and commits *“the State and local authorities, in collaboration with other appropriate partners, to adopt policies for the protection of the environment and care for the rational utilisation of all natural resources”*.<sup>172</sup>

Article 98 deals with State property and public domain and establishes that *“natural resources situated in the soil and on the subsoil, the internal waters, in the sea, in the continental shelf, and in the exclusive economic zone are property of the State.”* In paragraph 2 of the same article, items constituting the public domain of the State are listed, some of them being (a) the maritime zone; (d) zones of the nature protection; (e) water and naturally occurring minerals.

Article 102 specifies that the State shall determine how natural resources may be exploited so that both human well-being and national interests will be safeguarded. Article 117 of the Constitution goes further by stipulating that the State is responsible for promoting initiatives that ensure ecological balance and the conservation of the environment for improving the quality of life of the citizens (paragraph 1). According to paragraph 2 of this article, *“the State shall adopt policies aiming at:*

- a) *Preventing and controlling pollution and erosion;*
- b) *Integrate the environment objectives in sector policies;*
- c) *Promoting the integration of environmental values in educational policies and programmes;*
- d) *Ensuring the rational utilisation of natural resources within their capacity to regenerate and bearing mind the rights of future generations.”*

As a developing country, and following a long period of armed conflict (1980–1992), Mozambique's vision is focused primarily on poverty reduction and rapid economic growth on a sustainable long-term basis.<sup>173</sup> The adoption of sound policies and laws relating to land, the environment, forestry, wildlife and coastal resources, for example, has provided a solid basis for improving environmental planning and natural resource management. The fundamental challenge remains translating these good intentions into practice. Elevating the political status of the relevant government agencies, and enhancing their capacity, is central to the effective implementation of these provisions. The systematic development of legislation and regulations regarding environmental impact assessments (EIA), and the country's improving capacity to implement the EIA process, reflects one significant positive step towards meeting this challenge.

<sup>172</sup> Government of the Republic of Mozambique, 2000. *Programa do Governo para 2000-2004*. Published in Government Bulletin No 12. Maputo.

<sup>173</sup> Op. Cit. Footnote 172.

### 10.2 Institutional and Administrative Structure

The EIA process in Mozambique involves three key players, the authorities, the proponent of a project or a donor (as the case may be) and the EIA team - which can comprise national and foreign companies, universities, research institutions and individuals. Donor-funded projects are typically large-scale and the service contract often includes conditions which require the proponent(s) to adhere to donor-specific EIA protocols e.g. World Bank, USAID (United States Agency for International Development) and DFID (Department for International Development), in addition to complying with Mozambique's EIA regulations.

#### 10.2.1 Ministério para a Coordenação da Acção Ambiental

Created in 1995, the *Ministério para a Coordenação da Acção Ambiental* (MICOA) has two broad domains of responsibility:

1. Implementing the National Environmental Management Plan (NEMP) and associated environmental policy and legislation, and
2. Coordinating with other ministries on environmental matters to integrate environmental aspects into their projects, programmes and policies.

MICOA is organised into the five national directorates shown below and Figure 10.1:

- Environmental Impact Assessment;
- Management of Natural Resources;
- Land Planning;
- Promotion of Environmental Awareness; and
- Planning.

MICOA is in charge of regulating EIAs, which involves approving the terms of reference for EIAs, reviewing completed EIAs and implementing an audit process. During MICOA's first mandate (1995–2000), its EIA responsibilities and capacities evolved from scratch, with staff numbers gradually expanding to a contingent of five or six professionals housed within a department dedicated to EIA matters. This period was characterised by high staff turnover, including the Head of Department and, although generally positively motivated, the EIA Department lacked the human resources to efficiently implement EIA procedures.

In December 1999, the EIA Department was upgraded to the National Directorate of Environmental Impact Assessment,<sup>174</sup> effective with MICOA's second mandate which started in early 2000. The institutional and political importance of EIA is increasingly recognised both within and beyond MICOA. Regulating EIAs requires significant interaction and coordination with other government sectors involved in development and investment projects and consequently MICOA has assumed a more visible profile in recent years.

<sup>174</sup> *Direcção Nacional de Avaliação de Impacto Ambiental.*

The National EIA Directorate currently comprises a team of professional staff including the National Director, who are deployed flexibly for the tasks arising within the Directorate while formally assigned to two departments – an EIA Department and an Environmental Auditing Department. Consistent with MICOA's coordinating role, the EIA Directorate works closely with other government sectors involved in development or investment projects. Agreements of understanding have been informally negotiated and accepted by the national directors in charge of tourism, industry, forestry and wildlife.

The roles and responsibilities of the EIA Department are set out under Article 5 of the EIA Regulations 45/2004. These may be summarised as follows:

- a) Manage and coordinate the EIA process;
- b) Issue and release guidelines on the EIA process;
- c) Make a pre-assessment of each activity submitted for its consideration;
- d) Designate and chair the Technical Assessment Commission for each Category A activity whenever it may be deemed necessary;
- e) Begin the proceedings and outline the review of the Environmental Pre-visibility Report and Scope Definition (EPDA) reports, Terms of Reference (TOR) and Environmental Impact Report (EIR), as well as begin the approval process for Category A activities;
- f) Request the participation of experts from the public sector or begin the process of engaging consultants from the private sector whenever necessary for the EIA process;
- g) Conduct public hearings and ensure that the public participation process observes the requirements stipulated in the EIA Regulations;
- h) Notify the proponent regarding the payment of environmental licensing fees as per the requirements of the EIA Regulations;
- i) Notify the proponent and key government stakeholders, of the granting of the environmental licence;
- j) Ensure that the information concerning the environmental licence is made available to the public;
- k) Issue environmental licences;
- l) Conduct, in coordination with the protection agencies, the post-assessment process comprising the analysis of monitoring reports, environmental audits, site inspections, and the control and surveillance of licensed activities;
- m) Record, keep and publish the register of professionals and consultancy companies qualified to conduct environmental impact studies;
- n) In coordination with the protection agencies, set in motion the legal mechanisms to prevent or demolish any illegal work or stop any illegal activities, including those of environmental consultants, which by their nature may compromise the quality of the environment.

#### **Provincial Directorates**

In order to discharge its mandate more effectively, and in line with the government's decentralisation policy, MICOA has been establishing an

increasing institutional presence at lower government levels since 1995 and provincial directorates for the coordination of environmental affairs (DPCAs) have been set up in all ten provinces (Figure 10.1).<sup>175</sup> The roles and responsibilities of the DPCAs are to:

- a) Manage and coordinate the EIA process in compliance with the guidelines issued for that purpose;
- b) Make a pre-assessment of the activities submitted to them;
- c) Designate and chair the Technical Assessment Commission for each Category B activity, whenever it may be deemed necessary;
- d) Begin the proceedings and guide the review of the specific TOR for the simplified environmental reports (SERs) for Category B activities, as well as their approval;
- e) Ensure that the public consultation process is carried out and hold public hearings as per the requirements of the EIA Regulations;
- f) Approve the SERs;
- g) Coordinate with the Environmental Impact Assessment Authority, all the formalities required for the EIA, taking into consideration compliance with the provisions of the EIA Regulations;
- h) Notify the proponent for the payment of environmental licence fees as per the requirements of the EIA Regulations;
- i) Notify the proponent and key government stakeholders of the granting of the environmental licence;
- j) Issue environmental licences for the Category B activities; and
- k) Conduct the post-assessment process consisting of the analysis of monitoring reports and environmental audits, either by DPCA officials or by delegation to a competent person or agency.

The role of the provincial directorates is, in principle, to facilitate the local implementation of centrally developed environmental legislation, policies and programmes, including the EIA regulations and guidelines. Most provincial government structures by now include Departments of Environmental Management, and some (e.g. those in Nampula and Cabo Delgado Provinces) even have separate EIA departments.

### 10.2.2 Other Key Government Ministries and Departments

#### **National Commission for Sustainable Development**

A National Commission for Sustainable Development, linked to the Council of Ministers, was created in October 2000 by a provision in the Framework Environmental Act. This commission seeks to ensure the effective coordination and integration of sectoral policies and plans related to environmental management at the highest level.

#### **Intersectoral Cooperation**

Environmental management responsibilities are thinly spread across a spectrum of government sectors. The largest ministry, the Ministry of Agriculture and Rural Development, has broad responsibility for natural resource management in key sectors, including agriculture, livestock,

<sup>175</sup> *Direcção Provincial para a Coordenação da Acção Ambiental (DPCA).*

forestry and wildlife. This ministry's National Directorate of Forestry and Wildlife is in charge of managing the country's vast forestry and wildlife resources outside national parks and reserves, while responsibility for the country's protected area system has been shifted to the National Directorate for Conservation Areas under the Ministry of Tourism. The National Remote Sensing and Cartography Centre, linked to the Ministry of Agriculture and Rural Development, handles satellite data and is developing a geographic information system (GIS) database. Other key ministries are the Ministry of Fisheries, and the Ministry of Trade and Industry which are involved in larger development projects for which EIAs are required.

### 10.3 Legal and Policy Framework for EIA in Mozambique

The existing legislation in Mozambique includes a great deal of the former colonial legislation and laws enacted after independence, with the latter gradually replacing the former. Mozambique inherited from the colonial power the Roman-Germanic legal system that has a cascade of legal instruments. Table 10.1 presents a summary showing the hierarchy of various laws with the State bodies competent for enacting them. The Constitution has the highest status.

Table 10.1: Hierarchy of Legal Instruments

Ranking	Instruments	Enacting Organ
I	Constitution ( <i>Constituição</i> )	Assembly of the Republic (Parliament)
II	Law ( <i>Lei</i> )	Assembly of the Republic
III	Decree-Law ( <i>Decreto-Lei</i> )	Council of Ministers
IV	Decree ( <i>Decreto</i> )	Council of Ministers
V	Presidential Decree ( <i>Decreto Presidencial</i> )	President of Republic
VI	Ministerial Regulation ( <i>Diploma Ministerial</i> ) <sup>176</sup>	Ministry or Ministries, jointly
VII	Ministerial Order ( <i>Despacho</i> )	Minister

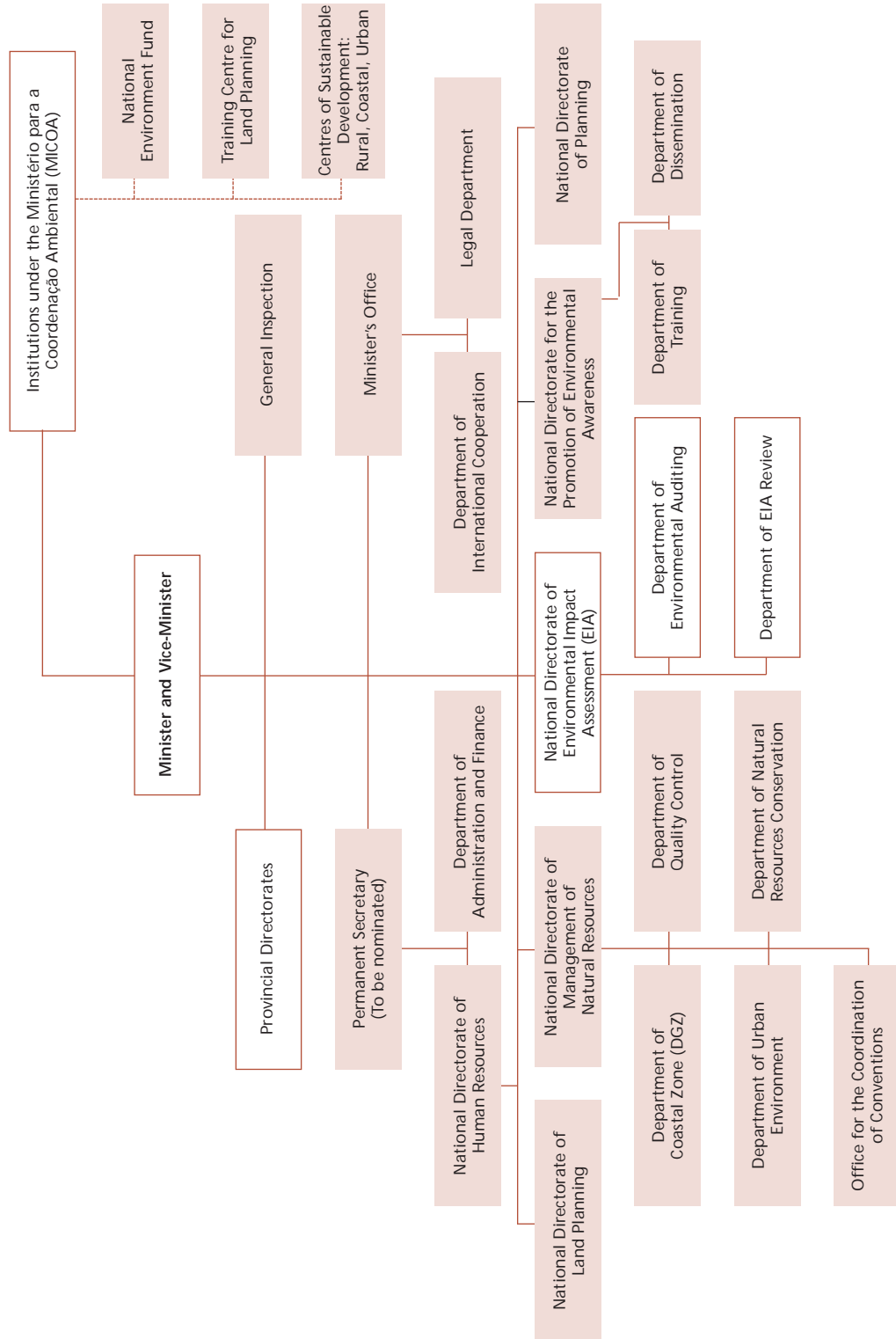
#### 10.3.1 National Environmental Management Programme, 1995

In the early 1990s, it was recognised that many of Mozambique's policies and laws relating to environmental protection and natural resources management were outdated, both nationally and globally. Following the creation of the National Environmental Commission (NEC) in 1990, environmental issues began to receive an increasingly higher profile. In an effort to ensure sustainable development in its drive for economic growth, the Government created the Ministério para a Coordenação da Acção Ambiental<sup>177</sup> (MICOA) from the NEC shortly after the holding of the first democratic election in 1994. One of the first documents produced was the National Environmental Management Programme in 1995. This document outlines the priorities for environmental management and sustainable development in Mozambique.

<sup>176</sup> Equivalent to Ministerial Regulations, then enacted by Portuguese Ministers were "*portarias*", and were made applicable to Portuguese colonies, including Mozambique.

<sup>177</sup> Ministry for the Coordination of Environmental Affairs.

Figure 10.1: Organisational Structure of MICOA



### 10.3.2 Environment Law

The Environment Law (Lei do Ambiente), Law n° 20/97, of 1 October is the foundation for the whole set of legal instruments regarding the preservation of the environment. This is an umbrella law for environmental matters and is an important instrument for the enactment of specific regulations.

As established in Article 2, the objective of the Environment Law is to define the legal basis for judicious utilisation and management of the environment and its components, with a view to achieving sustainable development in the country. The ambit of the Environment Law comprises all activities public or private, which directly or indirectly may influence the environment. Taking into account the constitutional provision for “an ecologically balanced environment” for all citizens, Article 4 of the Law establishes, *inter alia*, the following basic principles for environmental management:

- a) Rational utilisation and management of the environment with a view to the promotion of improved quality of life of citizens and for the maintenance of biodiversity and ecosystems;
- b) Recognition of traditions and local knowledge which may contribute to the conservation and preservation of natural resources and the environment;
- c) Precaution - in the sense that activities that might harm the environment must be prevented even if there is insufficient scientific certainty on the likelihood of the occurrence of such impacts;
- d) A global, integrated vision of the environment as a grouping of inter-dependent ecosystems which must be managed in such a way as to maintain their functional equilibrium without exceeding their intrinsic limits;
- e) Public participation;
- f) Equitable access to natural resources by all; and
- g) Commitment to minimising trans-boundary impacts.

In legal terms, principles can be defined as statements expressing the direction of the law. The above principles appear to be central to the Environment Law, as they contain the main policy statements regarding environment.

The Environment Law sets out the following:

Chapter I	General Dispositions including definitions;
Chapter II	Environmental Management Institutions;
Chapter III	Environmental Pollution;
Chapter IV	Special Measures for Environmental Protection;
Chapter V	Prevention of Environmental Damage;
Chapter VI	Citizen's Rights and Duties;
Chapter VII	Exercise of Economic Activities;
Chapter VIII	Environmental Supervision; and
Chapter IX	Final Dispositions.

Chapter V of the Environment Law refers to the Prevention of Environmental Damage. Under this clause, licensing of activities that are liable to cause significant environmental impacts is required. The issuance of an Environmental Licence is dependent on an appropriate level of EIA being completed and accepted by MICOA. Importantly, the Environment Law obliges all sectoral legislation that deals in any way with the management

of components of the environment to be reviewed and revised so that it is in conformity with the new act (Article 32).

### 10.3.3 Regulations

MICOA have developed a number of regulations relating to environmental management in terms of Article 16(2) of the Environment Law.

The EIA process is set out in *Regulations on the EIA Process*, Decree No 45 of 2004.<sup>178</sup> These regulations replace those of Decree No 76 of 1998. The regulations apply to all public or private activities which may have a direct or indirect impact on the environment. However specific regulations may be made for activities relating to the prospecting, exploration and production of petroleum, natural gas and mineral resources.<sup>179</sup> The regulations also set out in the Appendices the listed activities for which an EIA or SER may be required as well as a list of sensitive environments (see Appendix 10-1 of this chapter)

To date (2007) the following additional regulations have been made for:

- **Industrial activities** (*Regulamento do licenciamento da actividades industrial, Decreto 39/2003*);
- **Mining** (*Regulamento ambiental para actividade mineraria, Decreto 26/2004*);
- **Standards for environmental quality and effluent emissions** (*Regulamento sobre os padrões de qualidade ambiental e de emissão de efluentes, Decreto No 18/2004*);
- **Environmental auditing** (*Regulamento relativo ao processo de auditoria ambiental, Decreto No 32/2003*).

The EIA process is described in more detail in section 10.4 and the environmental standards are set out in section 10.3.8 below.

### 10.3.4 Permits and Licences

Article 15 of the Environment Law states that the licensing and registration of activities which may cause a significant impact on the environment must be carried out according to the EIA regulations and that the issuance of an *Environmental Licence* must be based upon an approved EIA of the proposed activity. The Environmental Licence is a pre-requisite to the issuance of any other licence or permit which may be legally required.<sup>180</sup>

The activity for which an Environmental Licence has been issued has to start within 2 years from the date of issue of the licence. If the developer fails to commence his activity within that period, he can request permission from MICOA to extend the licence period, in writing, no less than 90 days before the licence expires. MICOA will then decide to extend the period of validity, request new information or request a new EIA.<sup>181</sup>

Environmental Licences for Category A projects will be valid for a period of 5 years, renewable for an equal period. The application for renewal has to be submitted at least 180 days before the licence expires.

<sup>178</sup> Decreto No 45/2004 of 29 September. *Regulamento sobre o processo de avaliação do impacto ambiental.*

<sup>180</sup> Article 2(2) of the EIA Regulations.

<sup>180</sup> Article 15(2) of the Environment Law.

<sup>181</sup> Article 20 of the EIA Regulations.

### 10.3.5 Penalties

The penalties are set out in Article 26 of the EIA Regulations and the grading of fines is set out in Article 27. A summary of the offences and penalties is provided in Table 10.2 below.

**Table 10.2: Offences and Penalties**

Offence	Penalty
Administrative offences such as the obstruction or hindrance of authorities without just cause, while carrying out their duties under the regulations.	Fine of between 20-50 million MT, as well as the imposition of any other sanctions provided for in law.
Failure to update the Environmental Licence as per Article 20(4) of the EIA Regulations	Fine of between 10-20 million MT. The lower value would be applied to a first offence and the higher value to subsequent or multiple offences.
Implementation of a listed activity without an Environmental Licence; Conducting an EIA study without being registered in terms of Article 21 of the EIA Regulations; Submitting an application for an Environmental Licence for a listed activity after commencing implementation of said activity; Alteration of a licensed activity without prior approval from the competent authority; Presentation of fraudulent information, falsification of facts or omissions during the EIA process; Failure to implement the proposed mitigation measures proposed in the EIS, as well as the non-compliance with the terms and conditions of the Environmental Licence; and repeated offences.	A fine equivalent to double the licensing fee for the particular activity, as well as the immediate suspension of the activity. Fine of between 24-240 million MT (see Article 27 for the calculation of individual fines for these offences).

### 10.3.6 Fees

Article 25 of the EIA Regulations sets out the fees for environmental licensing and for registration as an environmental consultant.

**Table 10.3: Licensing and Registration Fees**

Activity	Fee
Licensing of Category A and B projects	0.1% of the total value of the investment in the activity
Issue of a declaration of exemption for Category C projects	0.01% of the total value of the investment in the activity
Registration and issuance of a certificate for individual environmental consultants	10 million MT
Registration and issuance of a certificate for environmental consulting companies	30 million MT
Updating of registration every 3 years for individual environmental consultants	5 million MT
Updating of registration every 3 years for environmental consulting companies	15 million MT

## MOZAMBIQUE

### 10.3.7 Guidelines

No guidelines have been developed in Mozambique relating to the EIA process itself or as may be applied to an industry sector.

### 10.3.8 Environmental Standards

Regulations relating to standards for environmental quality and effluent emissions were published in the Government Bulletin on 2 June 2004 (Decree No 18/2004). The purpose of these regulations is to establish the standards for environmental quality and of effluent emissions, aiming at the control and maintenance of the admissible levels of concentration of pollutants in the environment.

The provisions of these regulations are applicable to all new public and private activities that directly or indirectly may affect the environment. Existing plants have to adapt their equipment to ensure compliance within 5 years from the date of publication of the regulations.<sup>182</sup>

Article 6 of the regulations requires them to be reviewed (and updated) every 5 years unless the obligations deriving from an international convention require more urgent action. The regulations cover air quality (Chapter II), water quality (Chapter III), soil quality (Chapter IV), and noise (Chapter V).

Non-compliance with any of the pollution standards set out in the tables below as well as for failure to report exceedances, is punishable with a fine of between 20 million and 200 million MT.<sup>183</sup>

Table 10.4: Air Quality Standards

Parameter	Sampling time							
	1 hour		8 hours		24 hours		Annual arithmetical mean	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Sulphur dioxide (SO <sub>2</sub> )	800				365		80	
Nitrogen dioxide (NO <sub>2</sub> )	400				200		100	
Carbon monoxide	40,000		10,000					
Ozone	160				50		70	
Total suspended particles					200			
Lead	3						0.5 – 1.5	

Values in (mg/Nm<sup>3</sup>)/Nm<sup>3</sup> – normal cubic metre (0° C, 101.3 Kpa);

<sup>182</sup> Article 26 of the Regulations on environmental quality standards.

<sup>183</sup> Article 24 of the Regulations on environmental quality standards.

Table 10.5: Standards of emission for gaseous pollutants by industries

Type of activity	PTS	SOx	NOx	Others
Aluminium manufacture	30			Total fluorine = 2//Hf = 1// VOCs 20
Cement manufacture	50	400	600	
Chlorine-alkaline industry				Cl = 3
Production and extraction of coal	50			
Coke manufacture	50			Benzene = 5//VOCs = 20// reburning of sulphur at least 97%
Copper works	Smelting = 20 Others = 50	1000 (SO <sub>2</sub> )		As = 0.5// Cd = 0.05// Cu = 1// Pb = 0.2// Hg = 0.05
Dairy	50			Acceptable odour for the neighbours
Ink manufacture (dyeing)				Cl = 10// VOCs = 20
Electronic manufacture				VOCs = 20, // phosphine 1// arisine 1// HF = 5 // HCl = 10
Smelting	20 where there is presence of toxic metals 50 in others			
Fruits and vegetable processing: general environmental scripts	-50 if >50 Mwe 100 if <50 Mwe	2000 (SO <sub>2</sub> )	Coal = 750 Oil = 460 Gas = 320	Dioxins = maximum 1 ng/Nm <sup>3</sup>
Glass manufacture	-20 where there is presence of toxic metals -50 in others	1800 oil burning 700 gas burning	1000 - 2000	Pb + Cd = 5 // total of heavy metals = 5 // As = 1 // F = 1 // HCl = 50
Paper and pulp	100 (reburning kiln)		2 Kg/t ADP	H <sub>2</sub> S = 15 (lime kiln) // s TOTAL 1.0 – 1.5 Kg/t
Sugar	100 150 for small kilns > 8.7 MW	2000	Liquid fuel 460 Solid fuel 750	Odour acceptable for the neighbourhood
Fur industry (tanning)				Acceptable odour
Textile industry				VOCs 20
Thermo-electrical stations (new)	50	0.2 per day (500 MW) 0.1 per day (<500 MW)	Coal = 750 Diesel = 460 Gas = 320	
Vegetal oil	50			Acceptable odour
Wood preservation	50			VOCs 20

- O & G – Oils and grease, TSS – total suspended solids, AOX – absorbable organic halite, MM – monthly mean;
- Values in (mg/Nm<sup>3</sup>)/Nm<sup>3</sup> – normal cubic metre (0° C, 101.3 Kpa);
- PTS = Total of suspended particles.

## MOZAMBIQUE

**Table 10.6: Standards of emission of domestic liquid effluents**

Parameter	Permissible maximum value	Units	Remarks
Colour	Dilution 1:20	Presence / absence	
Odour	Dilution 1:20	Presence / absence	
pH, 25° C	6.0 – 9.0	Sorensen scale	
Temperature	35° C	° C	Increase in the receiving medium
Chemical oxygen demand (COD)	150.0	mg/l O <sub>2</sub>	
Total suspended solids (TSS)	60.0	mg/l	
Total phosphorus	10.0	mg/l	3 mg/l in sensitive zones
Total nitrogen	15.0	mg/l	

Appendix III of the environmental quality regulations specifies the effluent quality limits for a range of industries, listed below. The reader is referred to the regulations as the tables are too voluminous for inclusion in this handbook.

**Table 10.7: List of Industries which have Specific Effluent Standards (see Appendix III)**

Aluminium production	Meat processing	Vegetable oil production
Brewery	Production of phosphate and nitrate fertilisers	Wood treatment and preservation
Cement industry	Petrochemical industry	Production of vehicle batteries
Mining and production of coal	Pharmaceutical industry	Sundry chemical industries
Coke production	Petroleum industry	Metallurgy
Dairies	Printing	Minerals and metallurgical processing
Smelting processes	Pulp and paper industry	Production of plastics and synthetics
Vegetable and fruit processing	Sugar industry	Rubber manufacture
Electronics industry	Tanning industry	Production of soaps and detergents
Glass manufacture	Textiles	Workshops and filling stations
Iron and steel production	Thermal power stations	Food processing

Table 10.8: Standards of the Receiving Medium (Sea/Ocean)

Parameter	Maximum Limit <sup>184</sup>
Floating solids	virtually absent
Oils and grease	virtually absent
Substances that produce colour, odour and turbidity	virtually absent
Artificial colorants	virtually absent
Substances that form objectionable deposits	virtually absent
Substances and conditions that give rise to undesirable aquatic life e.g. invasive organisms	virtually absent
BOD	5 at 20° C ≤5 mg/l
Dissolved oxygen (DO)	≤ 6 mg/l
pH	between 6.5 and 8.5; there should not be a change in the value of normal pH greater than 0.2 units
<b>Potentially harmful substances</b>	
Aluminium	1.5 mg/l
Ammonia	0.4 mg/l
Antimony	0.2 mg/l
Arsenic	0.05 mg/l
Barium	1.0 mg/l
Beryllium	1.5 mg/l
Boron	5.0 mg/l
Bromine	0.1 mg/l
Cadmium	0.005 mg/l
Lead	0.01 mg/l
Cyanide	0.005 mg/l
Residual chlorine	0.01 mg/l
Copper	0.05 mg/l
Total chrome	0.05 mg/l
Tin	2.0 mg/l
Phenols	0.001 mg/l
Soluble iron	0.3 mg/l
Fluorides	1.4 mg/l
Manganese	0.1 mg/l
Mercury	0.0001 mg/l
Nickel	0.1 mg/l
Nitrates	10.0 mg/l
Nitrites	1.0 mg/l
Silver	0.005 mg/l
Selenium	0.01 mg/l
Surface-active substances that react to methylene blue	0.5 mg/l
Sulphides such as H <sub>2</sub> S	0.002 mg/l
Thalium	0.1 mg/l
Uranium	0.5 mg/l
Zinc	0.01 mg/l

Standards are also provided for organo-chlorines and herbicides (see Appendix V of the Regulations).

### 10.3.9 Registration of Environmental Consultants

In terms of Article 21 of the EIA Regulations, only specialists, intermediate or advanced EIA professionals (*técnicos médios e superiores*) who are registered as environmental consultants can undertake an EIA in Mozambique. Consultants can be registered as individuals, companies or as a consortium of companies (e.g. for a specific project).

<sup>184</sup> In the calculation of the permissible maximum concentrations, the discharge of liquid effluents obtained through the dilution of the effluent with unpolluted water shall not be considered (for example: supply water or water used in cooling).

## MOZAMBIQUE

To be registered as an 'advanced' EIA professional, the consultant must have at least 5 years relevant experience. Only an 'advanced' professional can act as a project manager and sign off on EIA reports. Intermediate and advanced professionals with less than 5 years relevant experience can only work as members of an EIA team under the leadership of a consultant registered as an 'advanced' professional.

Non-Mozambican companies who wish to conduct an EIA in the country, must either be sub-contracted to a registered Mozambican company or as part of a consortium with a registered company. In addition, the company must submit documentation listing similar projects undertaken, CVs and the qualifications of each member of the proposed EIA team.

In order to become registered, the consultant must submit the following to the authorities:

- Name, nationality, profession, place of work and residential address;
- Certificates of tertiary academic qualifications;
- CV demonstrating relevant experience and environmental knowledge;
- Tax number;
- Statement to the effect that the consultant is not employed by MICOA; and
- Proof of professional insurance, either for an individual or company.

If the applicant is a company, they must submit information about each of the professional consultants as above, as well as the company registration number and tax numbers.

After receiving the application in writing, together with the fee specified in Table 10.3 above, the EIA Authority must issue a Certificate of Registration within *10 days* of receiving the application.

The registration certificates must be renewed every *3 years* on the presentation of an updated CV and payment of fees as shown in Table 10.3 above

### 10.4 EIA Procedural Framework in Mozambique

The steps to be taken in conducting an EIA are set out in the EIA Regulations 45/2004 and are summarised below. The process to be followed is slightly different depending whether the project is in Category A, B or C. Table 10.9 and Figure 10.2 will assist readers to determine which components of the process they must follow.

**Table 10.9: Components of the EIA Process Required by Project Category**

Component of EIA Process	Category A Projects (EIA required)	Category B Projects (EIA or SER required)	Category C Projects (no EIA or SER required)
Application	Yes	Yes	Yes
Pre-Assessment	No	Yes	No
Environmental Pre-Viability Report and Scope Definition (EPDA)	Yes	No	No
Terms of Reference	Yes	Yes	No
Environmental Impact Assessment (EIA)	Yes	No	No
Simplified Environmental Report (SER)	No	Yes	No
Public Participation Programme	Yes	Maybe	No
Review by Technical Assessment Commission	Yes	Yes	No

#### 10.4.1 Application and Screening

As a first step, a proponent must consult Appendices I, II and III of the EIA Regulations (reproduced in Appendices 10-1, 10-2 and 10-3 of this Handbook) to determine which category his project falls into:

- Category A projects (Appendix I of the regulations) are those projects which may have a significant impact on the environment and therefore require an EIA.
- Category B projects (Appendix II of the regulations) are those projects which do not significantly affect communities or environmentally sensitive areas. The likely negative impacts are expected to be of minor duration, intensity, extent, magnitude and significance compared to Category A projects and few impacts are likely to be irreversible. The impacts which may occur can readily be mitigated. Therefore only a Simplified Environmental Report (SER) is required for Category B projects.
- Category C projects (Appendix III of the regulations) are those projects which are likely to have an insignificant, negligible or minimal effect on the environment, none of which are likely to be irreversible. The benefits of the project clearly outweigh the negative impacts. Therefore these projects do not require either an EIA or SER.

All proponents (irrespective of which category of project they may be proposing) must submit the following information to either the central EIA Authority or the respective DPCA:<sup>185</sup>

- Description of the activity;
- Need and desirability of the project;
- Legal framework for the activity;
- Brief description of the biophysical and socio-economic structure of the region;

<sup>185</sup> Article 6 of the EIA Regulations.

- Current land use on the proposed site;
- Environmental information from the site;
- Description of each stage of the EIA process e.g. submission of ToR, EPDA, EIA, SER etc.; and
- Completion of the preliminary environmental information sheet (Appendix IV of the regulations and attached as Appendix 10-4 of this chapter).

### 10.4.2 Pre-Assessment

Only Category B projects need to be pre-assessed. The pre-assessment is based on the following:

- The information provided in the application (see section 10.4.1 above);
- The assessment criteria listed in Article 8 of the regulations, which include:
  - Number of affected people and communities;
  - Nature and type of affected ecosystems and species;
  - Extent of the area affected;
  - Probability, nature, duration, intensity and significance of potential impacts;
  - Direct and indirect impacts, global and cumulative effects;
  - The reversibility of impacts and the likelihood of compliance with Mozambican environmental quality standards;
- Previous knowledge of the proposed site; and
- Checking whether the activity should be classified as a Category A, B or C project.

If the project is found to be exempt from an EIA or SER, MICOA will issue a Declaration of Exemption within *5 working days* and the proponent is encouraged to follow specific guidelines on good environmental management.

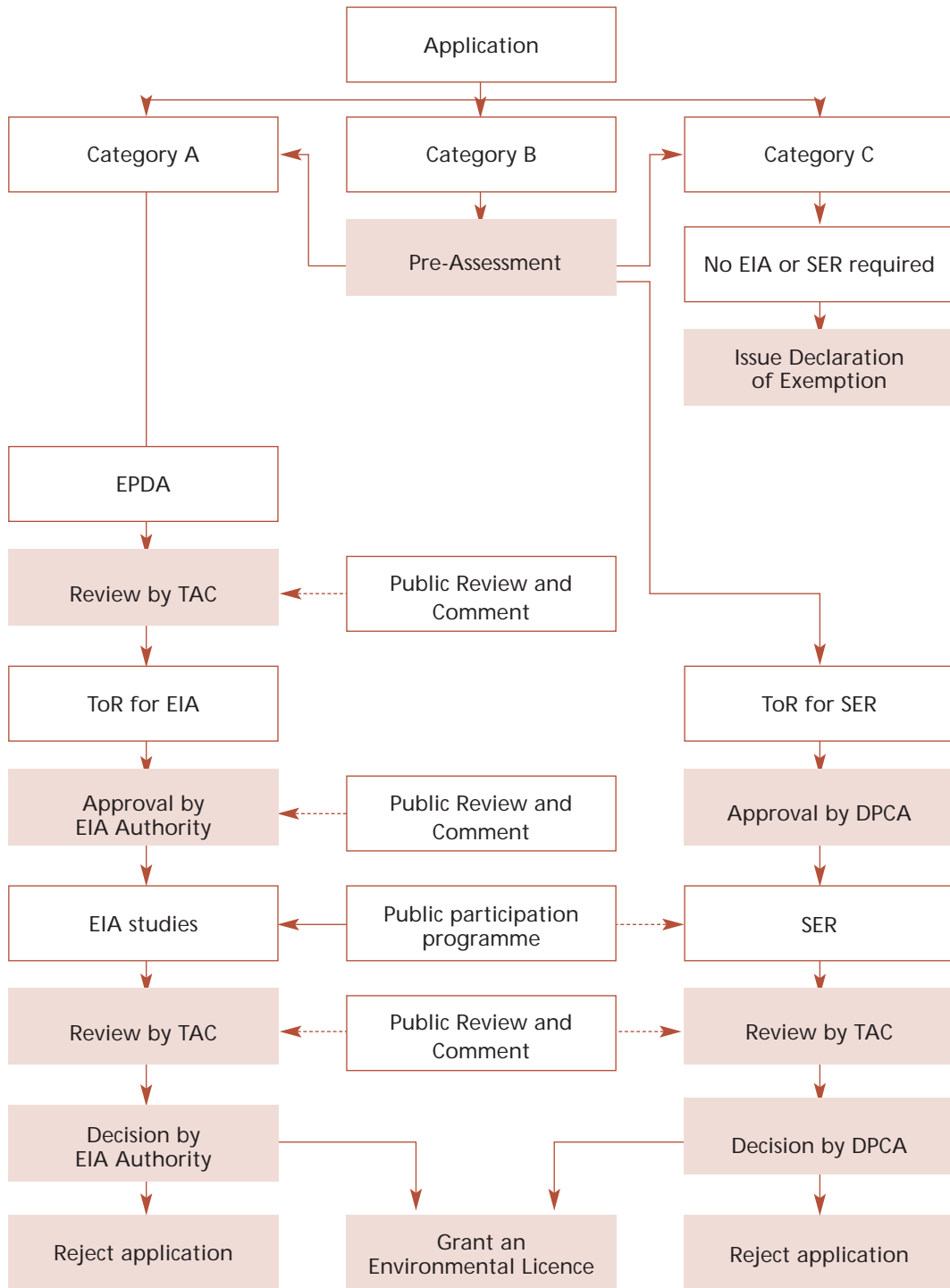
### 10.4.3 Environmental Pre-Viability Report and Scope Definition (EPDA)

An EPDA is compulsory for all Category A projects (see Figure 10.2). Its main purpose is to determine any fatal flaws in the project and if none, to determine the scope of the EIA and the design of the ToR.

The EPDA must contain the following information:

- Non-technical summary highlighting the key issues and conclusions;
- Names and contact details of the proponent and the lead EIA consultant;
- The sphere of influence of the proposed activity (both direct and indirect), and the pre-development land use in this zone;
- Description of the activity, including all actions relating to the planning, construction, exploration and decommissioning (if a short-term project) stages and all reasonable alternatives;
- Description of the biophysical and socio-economic environments;
- Identification and assessment of any fatal flaws;
- Indication of potential environmental impacts; and
- Identification and description of the aspects to be investigated in detail in the EIA (specialist studies).

Figure 10.2: EIA and SER processes



Shaded blocks indicate activities by the competent authority.

The EPDA, written in Portuguese, must be submitted to the EIA Authority together with the ToR for the EIA. The number of copies will be determined during the pre-assessment. The EPDA will be reviewed by the Technical Assessment Commission and their comments passed back to the EIA Authority (Figure 10.2).

### 10.4.4 Terms of Reference

The Terms of Reference (ToR) set out the process to be followed in the EIA or SER and should contain at least:

- Description of the specialist studies (Category A projects only);
- Location of the project, its sphere of influence and current land use (Category B projects only);
- The compatibility of the project in the land use planning context (Category B projects only);
- Description of reasonable alternatives which will be investigated in the EIA or SER;
- Methodology to be used to identify impacts during each stage in the project life-cycle;
- Description of the proposed public participation process;
- Name and address of the proponent;
- Names of the EIA team; and
- Any other additional information as necessary.

For Category A projects, the ToR must be submitted to the EIA Authority for approval prior to commencing with the EIA, while the ToR for Category B projects will be reviewed by the TAC appointed by the DPCA (see Figure 10.2).

### 10.4.5 Environmental Impact Study

Article 12 of the regulations defines the content of an EIA report (EIR), which must contain at least the following:

- A non-technical summary covering the main issues and conclusions;
- The legal and planning context of the activity;
- A description of the activity and its alternatives in the planning, construction, operation and, in the case of a short-term activity, decommissioning phases;
- Geographical location of the area of influence of the activity, as well as a description of the baseline environmental situation;
- A comparison of the alternatives and a prediction of the environmental impacts of each alternative with and without mitigation measures applied;
- Identification and assessment of the impacts and mitigation measures;
- An environmental management plan which includes the monitoring of impacts, environmental education and accident prevention and contingency plans;
- Names of the team that carried out the study; and
- A report on the public participation programme.

The specialist study reports must be attached to the EIR in the form of appendices.

The EIR must be submitted to the EIA Authority in Portuguese (see Figure 10.2). The number of copies to be submitted will be determined in the approval of the ToR.

#### 10.4.6 Simplified Environmental Report

Once the ToR for the Simplified Environmental Report (see section 10.4.4 above) has been approved by the DPCA, the proponent must commence the SER and submit a report, which should contain at least the following:

- A non-technical summary covering the main issues and conclusions;
- The legal and planning context of the activity;
- The location and description of the activity;
- A brief description of the baseline environmental situation;
- Identification and assessment of the impacts;
- An environmental management plan which includes the monitoring of impacts, environmental education and accident prevention and contingency plans;
- Names of the team that carried out the study; and
- A report on the public participation programme.

The report must be submitted to the relevant DPCA, written in Portuguese (see Figure 10.2). The number of copies will be determined in the approval of the ToR.

#### 10.4.7 Public Participation Process

The proponent is responsible for the public participation process during the compilation of the EIR or SER. However, MICOA may seek public comment or hold public hearings during the review process of any documents submitted for their approval (Figure 10.2).

Public participation is mandatory for Category A projects but is optional for Category B projects, depending on the number of people who may need to be resettled by the project and whether access to natural resources by local communities will be restricted as a result of the project.

Article 13 of the regulations sets out in broad terms the basic components of the public participation process. A public meeting must be advertised at least *15 days* in advance, to which all interested and affected parties (I&APs) must be invited and the technical reports of the EIR must be made available for public comment.

#### 10.4.8 Review of the Environmental Impact Report

The EIR will be reviewed by the same TAC that reviewed the EPDA. The TAC will submit a report on its comments to the EIA Authority, taking into account all the comments and submissions made by the public during the review period. During this period the proponent may be asked to submit additional information to assist the TAC in its review. The findings of the TAC's report will form the basis for the decision taken by the EIA Authority regarding the granting of an Environmental Licence.

## MOZAMBIQUE

### 10.4.9 Review of the Simplified Environmental Report

The SER must be submitted to the relevant DPCA for review. The DPCA will in turn appoint a TAC to review the SER. In making its decision on the SER, the TAC must take into consideration all the comments and submissions made by the public during the report review period. During this period, the TAC may request additional information to ensure that all the proposed actions in the approved ToR have been fulfilled. The findings of the TAC will be submitted to the DPCA in a signed report, which will form the basis for the decision taken by the DPCA regarding the granting of an Environmental Licence.

### 10.4.10 Timetable for Decision-making

Article 18 sets out the timetable for decision-making, shown in **Table 10.10** below.

EIA Component	EIA Authority	DPCA
Pre-Assessment	5 days <sup>186, 187</sup>	8 days
EPDA	30 days	-
ToR	30 days	15 days
EIR	45 days	-
SER	-	30 days

## 10.5 Other Relevant Environmental Legislation

The following table provides a brief overview of the various laws and regulations developed by other sectors that may have a bearing on the EIA.

**Table 10.11: Potentially Applicable Sector Legislation**

Sector	Primary Agency	Title and Date of Document	Purpose
Water Resources	Ministry of Public Works	National Water Policy 1995	There is a National Water Council (CNA) – an advisory committee.
		1990 Constitution Act and Water Law (Law 16/91)	There are regional water authorities too. They are called ARAs (regional water administrations) and are governed by the Ministry for Public Works and Housing through the National Directorate for Water.
		SADC Protocol on Shared Water courses is important.	There are 3 in the country – ARA-sul, ARA-centro, ARA-norte. The GPZ , Zambezi Planning Office might also have jurisdiction over water matters on the basin.

<sup>186</sup> 'Days' are defined as working days.

<sup>187</sup> The periods indicated are counted from the date of registration of documentation by the competent authority, being interrupted when supplementary information is required from the proponent.

## MOZAMBIQUE

Sector	Primary Agency	Title and Date of Document	Purpose
			Concessions and licences for the use and enjoyment of water and release of effluents are subject to mandatory registration in the National Waters Register. Implemented by ARA-SUL. Current water policy and law focuses on the use of water for domestic, livelihood and industrial uses.
Air	MICOA	New Regulations on Environmental Quality and Effluent Discharge (Decree 18/2004)	MICOA is responsible for the implementation and monitoring of this regulation. The regulation sets out potential fines.
Noise	Department of Labour	Legislative Diploma 48/73 General Regulations on Hygiene and Safety on Industrial Plant	Does not specify standards but relates to measures to protect workers.
Waste-Liquid Effluents	MICOA	Decree No 18/2004 Regulations on the Parameters for Air Quality and Effluent Emissions	The regulations have standards for the discharge to marine and coastal environments, as well as standards for surface irrigation of waters.
Waste	Each Municipality (i.e. only urban)	Municipality Law No 2/97	Local municipalities need to ensure basic sanitation and quality of life. Municipal responsibility to develop programmes for ecological protection and procedures for the removal of solid, treatment and disposal of solid residues including medical and hazardous waste.
Planning and Zoning	Ministry of Planning and Development	Legislation in preparation	This is a new ministry (formed in February 2005), which is supposed to coordinate all planning by sectors. Current opinion is that this will become an extremely important and powerful ministry in the future.
Land use planning and Development	National Land Cadastre / Ministry of Agriculture / Council of Ministers	Land Law No 19/97 Decree No 66/98 Land Law Regulations	Determines the method and process of land rights. Identifies which developments can apply for partial protection zones and the distances, aerial, surface and underground installations of electricity, gas, and telecommunications. The law sets the special licence requirements for activities in the PPZ. <sup>188</sup>

<sup>188</sup> The law designates Partial Protection Zones (PPZ) which include: The 100 metre strip of land surrounding sources of water; and the 250 metre strip of land surrounding dams and reservoirs

## MOZAMBIQUE

Sector	Primary Agency	Title and Date of Document	Purpose
Mining and Mineral Resources	Ministry of Mineral Resources and National Institute for Petroleum (INP)	Petroleum Law 3 of 2001. Petroleum Operations Regulations No. 24 of 2004. Decree 26 of 2004 provides Environmental Regulation for Mining activities.	Provides a legal framework for the sector, including protection of investor rights.
Conservation	Ministry of Tourism: National Directorate for Conservation Areas		Is the primary agency in charge of the protection of national parks, unless these parks have specifically been declared and are administered by another sector agency. The conservation agency is thus not under one jurisdiction, which makes coordination and efficiency difficult to achieve.
Wildlife and Natural Resources (including Forestry)	Ministry of Agriculture and Rural Development: National Directorate of Forestry and Wildlife	Forestry and Wildlife Law, No. 10 of 1999	<p>It should be noted that wildlife and conservation issues are split along sectoral lines. For example, the Ministry of Agriculture is in charge of game ranching and forest reserves and the Ministry of Fisheries is empowered to declare Marine Reserves.</p> <p>The overall objective of this law is extremely broad - "to conserve, utilise and develop forest and wildlife resources for the social, ecological and economic benefit of the present and future generations of the Mozambican people".</p> <p>The holder of the land rights and development rights must obtain a licence for the exploitation of fauna and flora resources.</p> <p>Identifies protected areas: national parks, national reserves and cultural heritage sites.</p>
Agricultural and Land	Ministry of Agriculture and Rural Development	Land Law, No. 19 of 1997 and regulations (Law 66/98) and Technical Annex (29 - A of 2000)	This law provides the legal framework for ownership and control of land and natural resources in Mozambique. It defines certain land use allocations, including areas intended for nature conservation, defence etc.
Fauna and Flora	Ministry of Agriculture and Rural Development	Decree No 12/2002 regulation for Flora and Fauna Resources Protection	Applies to all activities of protection, conservation, use and production of fauna and flora.

## MOZAMBIQUE

Sector	Primary Agency	Title and Date of Document	Purpose
Fisheries	Ministry of Fisheries	Fisheries Law No 3 of 1990	Responsible for the management of freshwater and marine fish resources, as well as overseeing aqua and mariculture industries.
Transmission (electricity)	Ministry of Energy	Electricity Law 21/97	Applies to the production, transport, distribution and sale of electric energy in Mozambique as well as import or export of electricity.
Human Resettlement, Compensation and Rehabilitation	Ministry of Gender and Social Affairs		Particularly relevant in the case of a project requiring the displacement (involuntary resettlement) of people.
Archaeological, Historical and Cultural	Ministry of Culture (Department of Monuments)	National Heritage Protection Law (Law 10/88 of 22 December 1988). Decree No 27/94 are Regulations on the Protection of archaeological Heritage Property	This Ministry will need to be consulted in the context of archaeological finds in the area of a proposed project.  Any fortuitous find must be communicated within 48hrs to district administrators or City Council. Work must be suspended to avoid damage.