



**ENVIRONMENTAL COUNCIL  
OF ZAMBIA**

A photograph of a large-scale construction site, likely a dam or reservoir project. The scene shows deep earthen pits, exposed pipes, and a cloudy sky. A prominent green curved graphic element arches over the top of the image. The text 'ENVIRONMENTAL IMPACT ASSESSMENT PROCESS IN ZAMBIA' is overlaid in white, bold, capital letters at the bottom of the image.

**ENVIRONMENTAL IMPACT  
ASSESSMENT PROCESS IN  
ZAMBIA**



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# ENVIRONMENTAL IMPACT ASSESSMENT PROCESS IN ZAMBIA

## PART ONE:

### Introduction to the Environmental Impact Assessment Process

#### Development and the Environment

Development is the process of improving people's livelihood and welfare so as to attain a higher standard of living. On the other hand, environment is everything about and around us forming the basis of our livelihood. Thus development is all about people using the resources around them i.e. air, water, land and everything in it to satisfy their needs.

The traditional concept of development has for a long time been guided by economic considerations. Exploitation of resources for maximum benefits has been the norm and little regard was paid to the side effects of development initiatives. This led to the deterioration of the environment with unforeseen environmental costs ever building up. Projects, which looked clean on paper, had serious impacts after implementation. The environmental impacts of many of these projects turned out to be costly, outweighing the anticipated benefits. Wide ranging negative impacts manifesting in ecological disturbances, habitat destruction, loss of animal and plant species, desertification, soil loss and floods became more and more prevalent.

Growing awareness and realisation of the ranges and magnitude of environmental effects of development projects led to the worldwide discussion on the way forward for these projects. This led to the adoption of the concept of sustainable development. According to the World Commission on Environment and Development (WCED) sustainable development was defined as the development that meets the needs of today's generation without compromising those of future generations. Environment and development were thus seen as complementing one another where the carefully nurtured environment continued to provide the basis for continued development.

In today's world more pressure is being placed on industry both socially and legally to undertake new developments in a more environmentally responsible manner. Consequently, the concept of Integrated Environmental Management of which Environmental Impact Assessment (EIA) is a vital component has evolved as a management tool leading to sustainable development.

#### EIA – The Historical Perspective

The development of an EIA process dates back to the 1960s when increased concern about the effects of land use activities on people and the environment fostered development of a number of new decision aids in the United States of America (USA). Thus EIA was first legally mandated in the USA under the National Environment Policy Act of 1969. Implementation of this Act allowed for the adoption of similar EIA legislation in other countries with Canada and other European countries taking the lead in following the example set by the USA.

By the end of the 1970's many countries had created legislation, policies and institutions to co-ordinate EIA programmes. In addition, these countries sponsored research to develop and test tools and techniques to guide project planning and decision making. Over time the process has spread across the globe with most developed and many developing countries adopting EIA as an important tool for caring about the environment.

### **EIA in Zambia**

In Zambia, industrial and commercial development in Zambia, particularly large-scale mining, the growth in manufacturing activities, and a corresponding increase in population have brought about the risk of environmental damage by exerting unmitigated pressures on the environment.

In an effort to ensure that environmental concerns are integrated into economic development and as a way of preventing, minimising, mitigating or compensating for adverse environmental impacts, the government introduced the EIA process and therefore promulgated and gazetted the EIA Regulations, Statutory Instrument No.28 of 1997 (SI 28, 1997).



*Industrial and commercial development in Zambia, particularly large-scale mining and the growth in manufacturing activities, and a corresponding increase in population have brought about the risk of environmental damage by exerting unmitigated pressures on the environment.*

Although the development of EIA is new in Zambia, adequate groundwork has been laid down by spelling out the policy and legislative frameworks. This started with the adoption of the National Conservation Strategy as Zambia's first environmental policy framework in 1985, the enactment of the Environmental Protection and Pollution Control Act in 1990 (EPPCA), the review of the National Conservation Strategy into the National Environmental Action Plan (NEAP) and finally the passing of Statutory Instrument no. 28 to

specifically provide for matters of EIA. Since EIA is now a statutory requirement in Zambia, it is anticipated that the process will grow to become a model for other countries and bring about the much-needed balance between development and environmental protection.

## **The Role of Environmental Council of Zambia the EIA Process**

Environmental Council of Zambia was established, by the EPPCA, its mission is to regulate and coordinate environmental management, promote awareness, and ensure environmental protection through enforcement of regulations and the prevention and control of pollution in support of sustainable development so as to provide for the health and welfare of persons, animals, plants and the environment.

ECZ as an environmental regulator has a responsibility to ensure that potential polluters have in place systems and procedures to avoid or minimise pollution. ECZ promotes sustainable development which is central to the fight against poverty. ECZ achieves proper management of the environment and natural, which is central to the protection of vulnerable groups in sustainable development in the EIA process. Pollution Prevention and Control is regulated through permits and licences provided for by related regulations under the EPPCA.

In order to achieve this objective, the regulator apply social regulatory measures such as: requiring companies to get prior approval before undertaking potentially polluting activities; setting mandatory standards; requiring periodic information disclosure about their activities and release of pollutants and; imposing penalties for non-compliance to standards and regulations. In order to ensure compliance to mandatory standards or regulation and to limit the potential for occurrences, regulators undertake various inspections of plant and facilities of the regulated companies



*The Environmental Council of Zambia (ECZ) was established as an autonomous body through the enactment of the Environmental Protection and Pollution Control Act (EPPCA) No. 12 of 1990 (CAP 204 of the Laws of Zambia). The EPPCA is the supreme environmental law of Zambia and it prescribes the functions and powers of the ECZ as a corporate body.*

## PART TWO:

### WHAT IS EIA?

EIA is a systematic investigation of conditions within the environment of the proposed development or project followed by an assessment of the impacts that the development or project will have on the environment in its totality i.e physical, biological and socio economic aspects.

This is usually conducted before new projects are launched, an EIA provides prediction for decision-makers of the expected effects. It was normal in the past to address environmental problems after they had already occurred. However, years of experience have shown that addressing environmental issues when they have already occurred does not produce the expected results. EIA strives to bridge this gap by seeking to answer the following basic questions:

- What will happen if the project is implemented?
- How much change is going to occur?
- Do the changes matter?
- What should be done about the changes?
- How can the decision-makers be informed about the effects?

In order to ensure that the EIA process is implemented smoothly and in a satisfactory manner, it should meet all the following essential requirements.

- It must be open and involve all Interested and Affected Parties (IAPs) i.e local communities, government authorities, developers, investors, NGOs etc;
- It should focus on major positive and negative impacts of the project to facilitate decision making based on the range of alternative courses of action;
- The process should be able to identify the different IAPs;
- It must create effective co-ordination and communication avenues amongst planners, project proponents, government, private sector, NGOs, community, etc.
- It should include in-built environmental monitoring and auditing to ensure adherence to selected options and performance standards; and
- It must be able to quantify and evaluate identified impacts, where possible, for resource accounting purposes

As a result of addressing issues long before they occur, EIA has become a very effective preventive strategy in that it:

Integrates environmental consideration into development planning

Ensures that potential negative impacts are foreseen and discussed at an early stage in the planning process

- Identifies and enhances the positive impacts of the proposed development activity
- Examines the trade-offs and the possible alternatives
- Ensures that all the IAPs participate in the decision making process

- Ensures that development activities are people centred and promote sustainable livelihoods
- Sets up a machinery to carry our mitigation and monitoring measures, and
- Promotes inter-sectoral linkages.

### **What are the Benefits of EIA?**

The broad benefits of conducting an EIA include the following:

- It facilitates informed decision making by providing clear, well structured analysis of the effect and consequences of proposed projects thereby integrating environmental considerations into project planning;
- It ensures that potentially negative impacts are foreseen and discussed at an early stage in the project planning process thereby influencing both project selection and design by screening out environmentally unsound projects, as well as modifying feasible projects.
- It identifies and enhances the positive impacts of the proposed project;
- It assists in the selection of alternatives, including the selection of the best practicable and most environmentally friendly options.
- It ensures appropriate participation of the IAPs in the decision-making process;
- It guides formal approval, including the establishment of terms and conditions of project implementation and follow-up



*An EIA ensures that potentially negative impacts such as the creation of this dam through mining activities are foreseen and discussed at an early stage in the project planning process.*

## **MAJOR PLAYERS IN THE EIA PROCESS**

For EIA to be meaningful, it must allow for the participation of all Affected and Interested Parties (IAPs). These parties include project proponents, investors, government ministries and departments (lead agencies), the private sector, local communities, NGOs, politicians, traditional leaders and institutions, the general public and consultants. Each of these parties has an important role to play in order to ensure the satisfactory completion of an EIA process. The major players in the administration of the EIA Process in Zambia can be categorized into two namely Primary and Secondary Stakeholders.

### ***Primary Stakeholders***

Primary stakeholders include, the Developer or Project Proponent, Sectoral Agencies or Planning Authorities, and ECZ.

#### **1. The Developer or Project Proponent.**

The administration of the EIA process starts with the developer who conceptualizes a development project. The responsibility of the developer includes preparation of the project document, completing the EIA, meeting management requirements resulting from EIA recommendations and expectations of the public or IAPs.

#### **2. Sectoral Agencies or Planning Authorities**

Sectoral or authorizing agencies refer to any government ministry or department, public corporation, local authority or public officer in which, or whom any law regulation or by-law vests power and functions to authorize, control or manage any aspect of a proposed or existing government policy and legislation. Their main responsibility is to ensure that the proposed project meets all the sectoral requirements, for which the agency is mandated.

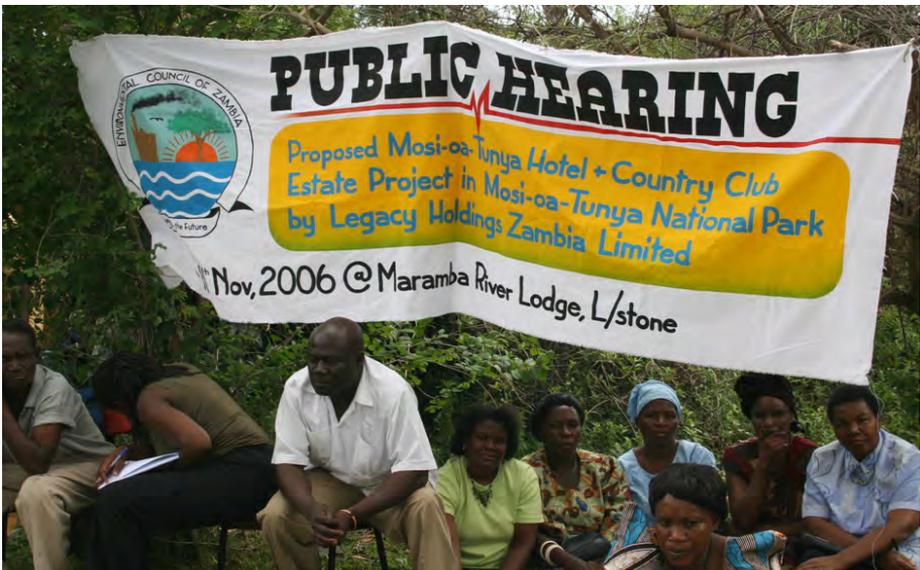
#### **3. Environmental Council of Zambia:**

ECZ implements the administration of the EIA process as outlined in the EIA Regulations, S.I. No.28 of 1997. It is empowered through this law to identify projects for which EIA are necessary. Simply put ECZ facilitates the review process of an EIA and issues decisions on projects submitted for review.

### ***Secondary Stakeholders***

Secondary stakeholders refer to the general public and all IAPs: The Public and IAPs are very important parties in the EIA process. Growing public concern for the environment spells out the need for involving the public in decision-making. This allows the developer to inform the public and IAPs about the project and afford them an opportunity to express their concerns so as to include them in the project management plans.

The responsibilities of the public and IAPs are to provide information about the local environment, community goals and aspirations in relation to the proposed development, contributing to the social, cultural and economic evaluation of the project and assisting in decision-making as well as the project management process.



## PART FOUR:

### **CATEGORIES OF ENVIRONMENTAL IMPACT ASSESSMENTS IN ZAMBIA.**

The EIA regulations provide schedules in which projects are classified in categories. All development projects listed under First and Second Schedules of the EIA regulations of 1997 are required to undertake an EIA. However, for projects not specified in these schedules, ECZ determines whether an EIA should be carried out. Projects which existed prior to the EIA regulations are also required to develop and put in place Environmental Management Plans (EMP).

All developers are required under the EIA regulations to submit an EIA Study Report to ECZ for review before commencement of a proposed project. EIA in Zambia fall in two classes depending on the nature of the project.

1. First Schedule - Environmental Project Brief; and
2. Second Schedule - Environmental Impact Statement (EIS).

The nature of the project determines whether the developer should prepare an EPB or EIS. Projects likely to have significant negative impacts on the environment tend to fall under the EIS category.

#### **ENVIRONMENTAL PROJECT BRIEF (EPB)**

This is an EIA report prepared in respect of projects with very low negative impacts on the environment. Under the EIA Regulations, the law states that a developer shall not implement a project for which a project brief is required, unless the project brief has been concluded in accordance with the said Regulations and ECZ has issued a decision letter. A decision letter on a project is issued within forty working (40) days of receiving the EPB from the developer.

The requirement for a project brief applies to:-

- a. A developer of any project set out in the First Schedule, whether or not the developer is part of a previously approved project;
- b. Any alterations or extensions of any existing project which is set out in the First Schedule, or;
- c. Any project which is not specified in the First Schedule, but for which the ECZ determines a project brief should be prepared.

#### **What is contained in a Project Brief?**

A project brief outlines the following:

- a. The site description of the environment;
- b. The objectives and nature of the project and reasonable alternatives;

- c. The main activities that will be undertaken during site preparation, and construction and after the development is operational;
- d. The raw and other materials that the project shall use;
- e. The products and by-products, including solid, liquid and gaseous waste generation;
- f. The noise level, heat and radioactive emissions, from normal and emergency operations;
- g. The expected socio-economic impacts of the project and the number of people that the project will resettle or employ, directly, during construction and operation etc;
- h. The expected environmental impact of the project, taking into account the provisions of paragraphs (c) to (g);
- i. The expected effects on bio-diversity, natural lands and geographical resources and the area of land and water that may be affected through time and space; and
- j. A description of adverse impact mitigation measures and any monitoring programmes to be implemented.

## Projects which require Project Briefs

### 1. Projects

- a. Urban area rehabilitation
- b. Water transport
- c. Flood control schemes
- d. Exploration for and production of hydrocarbons including refining and transport
- e. Timber harvesting and processing in forestry
- f. Land consolidation schemes
- g. Mining and mineral processing, reduction of ores, minerals, cement and lime kilns
- h. Smelting and refining of ores and minerals
- i. Foundries
- j. Brick and earthen manufacture
- k. Glass works
- l. Brewing and malting plants
- m. Plants for manufacture of coal briquettes
- n. Pumped storage schemes
- o. Bulk grain processing plants
- p. Hydro power schemes and electrification
- q. Chemical processing and manufacturing
- r. Resettlement schemes
- s. Storage of hydrocarbons
- t. Hospitals, clinics and health centres
- u. Cemetery designation
- v. Touring and recreational development in national parks or similar reserves
- w. Projects located in or near environmental sensitive areas such as indigenous forests, wetlands, zones of high biological diversity, areas supporting populations of rare and endangered species; and others.



## **ENVIRONMENTAL IMPACT STATEMENT (EIS)**

This is an EIA report prepared in respect of projects likely to have significant negative impacts on the environment. The period within which ECZ is required to make a decision on a proposed project requiring an EIS is within sixty five (65) working days of receiving the EIS from the Developer.

### **What is contained in an EIS?**

An EIS is an extensive evaluation of the effects likely to arise from a project significantly affecting the national and man-made environment. Consultation and participation are integrated to this evaluation. The study is undertaken by a group of experts approved by ECZ in accordance with ToR preferred by the Developer in consultation with ECZ.

An EIS contains an executive summary, stating the main findings and recommendations and is signed by every individual person involved in its preparation.

The EIS includes:

- A description of the project, reasonable alternatives, which may begin or increase operations to provide materials or services to the proposed project;
- A description of the proposed site and reasons for rejecting alternative sites;
- A brief description of the site and the surrounding environment including specifying any information necessary to identify and assess the environmental effects of the project;
- A description of the raw material inputs into the project and their potential environmental effects;
- A description of the technology and processes that shall be used;
- A description of the products and by-products of the project;
- The environmental effects of the project, and reasonable alternatives, including the direct, indirect cumulative, short-term and long-term effects;
- The socio-economic impacts of the project such as resettlement of the affected people.
- An impact management plan containing a description of measures proposed for preventing, minimising or compensating for any adverse impact, and enhancing beneficial effects, and measures to monitor effluent streams or important environmental features which may be affected by the project; and
- An indication of whether the environment of any neighbouring state is likely to be affected.

## Stages in conducting a full EIA

### **Stage 1: Preliminary Actions**

The project is screened to determine that project falls in Second Schedule

- The developer with the help of ECZ develops Terms of Reference
- The description of the project which is done in the project brief submitted to the ECZ.
- The developer appoints a Study Team Leader for the environmental impact study. The qualification of the Team Leader depends on the nature of the project.
- The developer submits the names and qualifications of all persons to carry out the study to ECZ for approval. Preference should be given to experts with specific knowledge of local or similar conditions. The team shall include at least one person resident in the potentially affected area.
- The Team Leader allocates work to the team members for the purpose of carrying out the scoping exercise.
- The team reviews and determines the applicable laws, regulations and standards.
- The developer, the Team Leader and the team identify the various alternatives for the development of the project (sites, technology, design etc).

### **Stage 2: Scoping (Or Identification of Potential Impacts)**

- The team under the guidance of the co-ordinator identifies all the possible environmental impacts of the project.
- The co-ordinator, the team, the Council and the potentially affected and interested parties determine which of the impacts shall be the subject of the study based on the following criteria:
  - a. **Magnitude:** to what extent environmental resources are going to be affected;
  - b. **Extent:** how much area will adversely or positively be affected by the project;
  - c. **Significance:** what value in terms of costs and benefits does society place on the resources and the different impacts affecting the resource (s); and
  - d. **Special sensitivity:** which impacts are significant in the specific local economic, social and ecological setting.

### **Stage 3: Baseline Study**

The team undertakes a detailed description of the existing environment including the social and economic activities of the population resident in the potentially affected area.

### **Stage 4: Impact Evaluation**

The team predicts and evaluates the various predicted impacts and ranks them in order of importance on the basis of two criteria:

- Quantitative change where change can be quantified.
- Qualitative change where change cannot be quantified, but instead the impact of the project depends on the social acceptability of the project.

### ***Stage 5: Public Participation in Environmental Impact Study***

- The team seeks the view of the community which are likely to be affected by the project.
- The views sought are considered in the development of mitigation measures.

### ***Stage 6: Identification of Mitigation Measures***

The team identifies measures for elimination (where possible), or reduction, of environmental impacts for various alternatives identified in the study such as:

- a. Engineering works in noise reduction, prior treatment of effluent, air pollution reduction measures and solid waste minimisation through reclamation, recycling and any other appropriate measures;
- b. Management measures especially in areas of natural resources, reforestation, control of soil erosion, desalinisation, desilting.

### ***Stage 7: Assessment (Or Comparison of Alternatives)***

- The team compares all the alternatives on the basis of economic, socio-cultural and environmental gains and costs.
- The team ranks and recommends all alternatives to the developer on the basis of sound environmental and economic analysis.

### ***Stage 8: Decision making by the Developer***

The developer makes a decision choosing one alternative and giving reasons for the rejection of other alternatives.

### ***Stage 9: Submission of the report to ECZ***

- The Developer submits a draft copy of the EIS for comments to ECZ
- ECZ comments on the draft EIS
- The developer incorporates comments into the final EIS report
- The developer submits the report ECZ.

### ***Stage 10: Decision Making by ECZ***

- Upon submission of the EIS ECZ reviews the project,
- ECZ either approves or rejects the project.
- If ECZ approves the EIS, the developer may implement the project
- If ECZ rejects the project the Developer can appeal to the Minister, Ministry of Tourism, Environment and Natural Resources within ten working days of receipt of such rejection letter. The Minister must respond to this letter within 14 working days.
- If unsatisfied with the Minister's Decision, the Developer may appeal to the High Court.

## ***Projects which require EIS***

### **1. Urban Development**

- a. Designing of new townships which are more than 5Ha or more or sites covering 700 dwellings and above
- b. Establishment of industrial estates
- c. Establishment or expansion of recreational areas such as golf course, which would attract 200 or more vehicles
- d. Shopping centres and complexes - 10, 000 m<sup>2</sup> and above, floor area

### **2. Transportation**

- a. All major roads outside urban areas, the construction of new roads and major improvements over 10 Km in length or over 1 Km in length if the road passes through a National Park or Game Management Area
- b. Railway lines 10 Km away from built up area
- c. Airport and airfields whose runway is 1, 800 m or more
- d. Pipelines: for water, diameter 0.5 m and above and length 10 Km outside built up area; for oil, 15 Km or more of which 5 Km or more of their length will be situated in a protected area, a seriously polluted or a water abstraction area
- e. Establishment of or expansion of harbours or pontoon areas

### **3. Dams, Rivers and Water Resources**

- a. Dams and barrages covering a total of 25 Ha or more
- b. Exploration for, and use of, ground water resources including production of geothermal energy: water to be extracted to be more than 2 million cumecs (m<sup>3</sup>/s)
- c. Water supply - reservoir surface area 50 m<sup>2</sup> or more

### **4. Mining: Including Quarrying and Open Cast Extraction**

- a. Copper mining, coal site
- b. Limestone, sand, dolomite, phosphate and clay extraction's of 2Ha or more
- c. Precious metals (silver, zinc, cobalt, nickel)
- d. Industrial metals
- e. Gemstones
- f. Radioactive metals

### **5. Forestry Related Activities**

- a. Clearance of forestry in sensitive areas such as watershed areas or for industrial use 50Ha or more
- b. Reforestation and a forestation
- c. Wood processing plants - 1, 000 tonnes or more

## **6. Agriculture**

- a. Land clearance for large scale agriculture
- b. Introduction and use of agrochemicals new to Zambia
- c. Introduction of new crops and animals especially exotic ones new to Zambia
- d. Irrigation schemes covering an area of 50 Ha or more
- e. Fish farms of which production is 100 tonnes or more a year
- f. Aerial and ground spraying - industrial scale

## **7. Processing and Manufacturing Industry**

- a. Cement works and lime processing - 1,000 tonnes or more a year
- b. Fertilizer manufacturing or processing - 1,000 tonnes or more a year
- c. Tanning and dressing of hides and skins - 1,000 skins a week
- d. Abattoirs and meat processing plants - 20,000 carcasses and above a month
- e. Fish processing plant - more than 100 tons a year
- f. Pulp and paper mills - daily out put 50 air dried tonnes and above a day
- g. Food processing plants - 400 tonnes or more output a year

## **8. Electrical Infrastructure**

- a. Electricity generation station
- b. Electrical transmission lines - 220 kV and more than 1 Km long
- c. Surface roads for electrical and transmission lines for more than 1 Km long

## **9. Waste Disposal**

- a. Sites for solid disposal: construction of permanent disposal site with 1,000 tonnes and above a day
- b. Sites for hazardous disposal of 100 tonnes or more a year
- c. Sewage disposal works - with a capacity of 15,000 litres or more a day

## **10. Nature Conservation Areas**

- a. Creation of national parks, game management areas and buffer zones
- b. Commercial exploitation of natural fauna and flora
- c. Introduction of alien species of flora and fauna to local ecosystems

## PART FIVE:

### ISSUES TO BE CONSIDERED WHEN PREPARING TERMS OF REFERENCE

The following impacts and issues may, among others, be considered for inclusion, as appropriate, in the preparation of the terms of reference:

#### 1. Ecological considerations including:

##### (a) *Biological diversity:*

- i. Effect on number, diversity, breeding sites, etc. of flora and fauna;
- ii. Breeding populations of fish and game;
- iii. Effects on the gene pools of domesticated and wild flora and fauna;
- iv. Effects on the survival of rare, endangered and/or threatened plant or animal species;
- v. Effect on plant or animal species of significant conservational, educational or scientific value;
- vi. Effect on plant or animal communities of significant recreational value;
- vii. The possibility of introducing plant or animal species alien to the region and which could have adverse effects on indigenous species; and
- viii. Effect on the ecological functioning of natural communities due to physical destruction of the habitat or reduction in the effective size of the community.

##### (b) *Sustainable use including:*

- i. Effect on sink functions of wetlands, rivers, soils and natural forests;
- ii. Effect on regenerative capacities of renewable resources;
- iii. Effects on soil fertility;
- iv. Nutrient cycles;
- v. Aquifer recharge capacity, water run-off rates, etc;
- vi. Physical extent of habitats;
- vii. Bio geographical processes; and
- viii. Effect on ecosystem functions and processes.

#### 2. Social, economic and cultural considerations including:

Growth rate of the local population;

- i. Location, distribution or density of the population;
- ii. Effects on generation or reduction of employment in the area;
- iii. Non-local labour remaining in the area after completion of the development;
- iv. Pressure placed on particular skills or services;
- v. Potential threats to health from pollution generation;
- vi. Social cohesion or disruption (resettlement);
- vii. Immigration (including induced development when people are attracted to a development site because of possible enhanced economic opportunities);
- viii. Communication e.g. roads opened up, closed or re-routed;
- ix. Local economic impacts;
- x. Effects on the distribution of income;
- xi. Effect on community groupings and life patterns;
- xii. Effect on existing lifestyles, household composition and family network;

- xiii. Effect on cultural lifestyle diversity and/or stability, and
- xiv. Effect on social services/amenities i.e. educational, health and recreational

### **3. Landscape:**

- i. Effect on the aesthetic quality of the landscape:
- ii. Effect on the character of the area:
- iii. Effect on the preservation of scenic views and valued features:
- iv. Effect on natural features such as streams or ridges:
- v. Visual impacts (features, removal of vegetation, etc.);
- vi. Compatibility with surrounding areas, and
- vii. Effect on natural heritage sites.

### **4. Land Use:**

- i. Effect on the compatibility of the land-use in the area;
- ii. Compatibility of development with the scale of development in the area;
- iii. Effects on land uses and land potential in the project area and in the surroundings areas;
- iv. Compatibility of development with raw materials in the area;
- v. Consideration of political aspects such as land claims and historical rights ;
- vi. Effect of development on the area due to change of use or intensity of use and
- vii. Possibility of multiple use.

### **5. Water:**

- i. Effects on surface water quality and quantity;
- ii. Effects on underground water quality and quantity;
- iii. Effects on the flow regime of the water course;
- iv. Effect on downstream uses and users;
- v. Effect on riverine ecosystems;
- vi. Effect on oxygen content of the water;
- vii. Effect on salinity, turbidity, flow rate, temperature, etc of water;
- viii. Effect on siltation patterns of water bodies, and
- ix. Potential secondary or cumulative impacts affecting other natural communities.

### **6. Air Quality:**

- i. Effects on the quality of the ambient air of the area;
- ii. type and amount of possible emissions (pollutants);
- iii. Effect on the extent of the local build up of pollutants due to inversions;
- iv. Potential compounding effect of emissions with existing pollutants or other chemicals in the atmosphere;
- v. Potential of smog formation and reduction of visibility;
- vi. Effect on quantity and type of particulate matter with reference to size, composition and chemical stability;
- vii. Potential effects on human health, crops, wildlife, livestock and other potentially affected organisms; and
- viii. Potential effects on stonework, buildings or works of art.

### **7. Study Team**

- a. Include curriculum vitae for every individual person undertaking the study.

## PART SIX:

### GENERAL STEPS IN THE EIA PROCESS

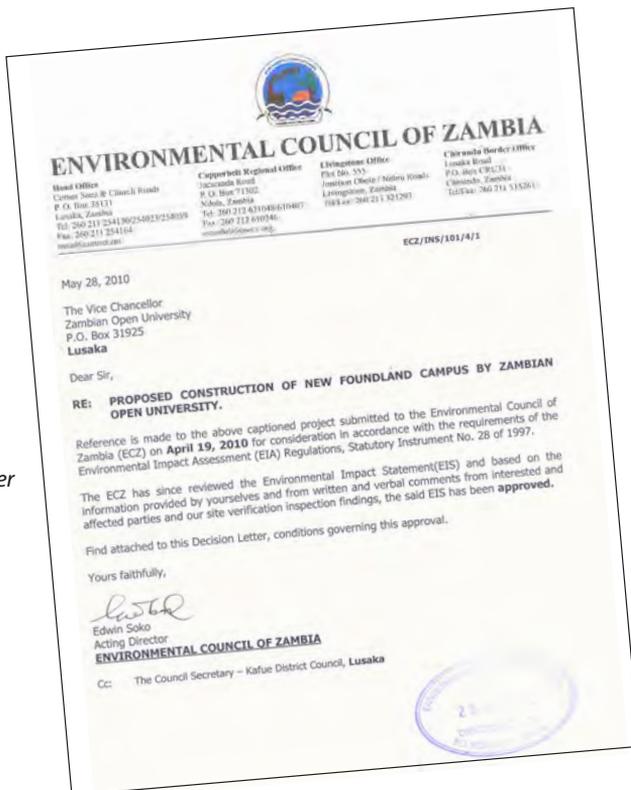
#### Environmental Project Brief (EPB)

- The Developer submits a draft copy of the EPB for comments to ECZ
- ECZ comments on the draft EPB
- The developer incorporates comments into the final EPB report
- The developer submits the report ECZ A developer submits to ECZ six complete copies of the EPB to the ECZ for review and pays a statutory review fee to ECZ.
- One copy of the EPB is transmitted to the authorizing agency for comments within seven days of receiving the EPB
- The authorizing agency makes comments and transmits them to ECZ within thirty working days of receiving the EPB failure to which ECZ proceeds to consider the EPB
- ECZ then considers the EPB and comments received.
- If ECZ is satisfied that the project will have no significant impact on the environment, or that the project brief discloses sufficient mitigation measures to ensure the acceptability of the anticipated impacts, ECZ shall within forty working days of receiving the EPB from the developer, issue a decision letter, with conditions as appropriate, to that effect, to the Developer.
- ECZ either approves or rejects the project.
- If ECZ approves the EPB, the developer may implement the project
- If ECZ rejects the project the Developer can appeal to the Minister, Ministry of Tourism, Environment and Natural Resources within ten working days of receipt of such rejection letter. The Minister must respond to this letter within 14 working days.
- If unsatisfied with the Minister's Decision, the Developer may appeal to the High Court.

#### Environmental Impact Statement (EIS)

- The Developer submits ToRs for approval by ECZ
- The Developer submits a draft copy of the EIS for comments to ECZ
- ECZ comments on the draft EIS
- The developer incorporates comments into the final EIS report
- A developer submits to ECZ 12 complete copies of the EIS in accordance with ToRs prepared by the developer in consultation with ECZ and pays a statutory review fee to ECZ
- ECZ within seven days of receipt of the EIS transmits a single copy of the EIS to the authorizing agency for comments
- The authorizing agency makes comments and transmits them to ECZ within working thirty days of receiving the EIS failure to which ECZ proceeds to consider the EIS
- ECZ also distributes copies of the EIS to relevant ministries, local government units, parastatals, NGOS and IAPs
- ECZ places copies of the EIS in public buildings in the vicinity of the site of the proposed project for general public to access and make comments and notifies the public on these locations.

- Any person wishing to make a comment on any copy of an EIS sends the comments to ECZ within twenty days from the date of last notification of the display of the EIS
- ECZ may extend the period for receipt of the comments if many contentious issues have arisen indicating the sensitive nature of the project or if the remoteness of the project location causes logistical problems for the consultation process.
- ECZ then considers the EIS and all comments received or may hold a public meeting if as a result of the comments received ECZ is of the opinion that a public meeting will enable it to make a fair and just decision or if ECZ considers it necessary for the protection of the environment.
- Taking into account the whole EIA review process and comments received, ECZ may decide to approve a project, subject to the developer meeting stipulated conditions or reject a project with reason.
- ECZ either approves or rejects the project.
- If ECZ approves the EIS, the developer may implement the project
- If ECZ rejects the project the Developer can appeal to the Minister, Ministry of Tourism, Environment and Natural Resources within ten working days of receipt of such rejection letter. The Minister must respond to this letter within 14 working days.
- If unsatisfied with the Minister's Decision, the Developer may appeal to the High Court.



Sample  
Decision Letter

## DECISION LETTER

An ECZ decision on a proposed project is given in the form of a decision letter, consisting of a headed letter informing the developer on the out come of the EIA review of the project. This letter outlines the project, the nature of the project, the potential impacts and mitigation proposed by the developer with conditions under which the project should operate to minimise effects it will have on the environment.

## FEE SCHEDULE

APPENDIX  
(Regulation 2)

## FIFTH SCHEDULE

(Regulation 37)

	Fee Unit
<b>1. Review of EPB</b>	43, 333
<b>2. Review of EIS</b>	
<b>(a) Less than US\$100, 000</b>	43, 333
<b>(b) US\$ 100, 000—500, 000</b>	216, 665
<b>(c) US\$ 500, 000—1, 000, 000</b>	541, 662
<b>(d) US\$ 1, 000, 000—10, 000, 000</b>	1, 083, 324
<b>(e) US\$ 10, 000, 000—50, 000, 000</b>	2, 166, 650
<b>(f) US\$ 50, 000, 000 or more</b>	3, 249, 975

\*Note that 1 fee Unit = K180

## DECISION MAKING AND THE PUBLIC HEARING

A public hearing is a form of participation in which stakeholders and proponents are brought together in a forum to express their opinions and offer suggestions on a proposed undertaking in order to influence the decision making process. The main objectives of a public hearing as part of the review process are to:

- i. Provide a forum for the proponent to inform the entire community of the outcome of the Environmental assessment of the proposed undertakings.
- ii. To verify the accuracy of the EIA findings in relation to the situation on the ground.
- iii. To confirm that affected and parties have been part of the various decision making processes.
- iv. To offer the affected and interested parties as well as other stakeholders the opportunity to express their opinions on issues considered outstanding and;
- v. To promote effective public participation and ensure confidence in ECZ EIA process as well as support for the proposed undertaking.



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