

## CHAPTER -2

# ESIA METHODOLOGY AND REGULATORY FRAMEWORK

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### 2.1 THE NEED FOR EIA

Environmental Impact Assessment (EIA) is an important tool for incorporating environmental concerns at the project level. EIA should be carried out as early as the project planning stage as part of feasibility thus it can ensure that the project will be environmentally feasible. The general objectives of the EIA study are to:

- i. Provide an opportunity to for the various stakeholders
- ii. Generate baseline information about the environmental, social, and economic conditions in the project area;
- iii. Assess potential impacts of the project and the characteristic of the impacts, magnitude, distribution, who will be the affected group, and their duration;
- iv. Provide information on potential mitigation measures to minimize the impact including mitigation costs;
- v. Assess the best alternative project at most benefits and least costs in terms of financial, social, and environment. In addition to alternative location of the project, project design or project management may also be considered; and
- vi. Provide basic information for formulating environmental management plan.
- vii. Guide the decision makers on the evaluation and approval of the project

EIA requires an in-depth analysis of the potential significance of environmental impacts from the project. EIAs demand: (i) comprehensive analysis of the potential impacts; (ii) works to be carried out to formulate practical mitigation measures; (iii) in-depth valuation of impact to screen and evaluate the best alternative; and (vi) in-depth analysis to prepare an adequate environmental management plan.

EIA studies aim at providing the decision makers with information regarding both the positive impacts and benefits, but also the negative consequences related to the proposed development so as to enable them make an informed decision. As such, the EIA provides the framework for enhancing the positive impacts and mitigating the negative ones. The EIA process provides an opportunity to improve the transparency by involving the public and other stakeholders in the decision making process at the early planning phases of the project. The whole EIA process, based on the Ugandan criteria is outlined in **Figure 2.1**.

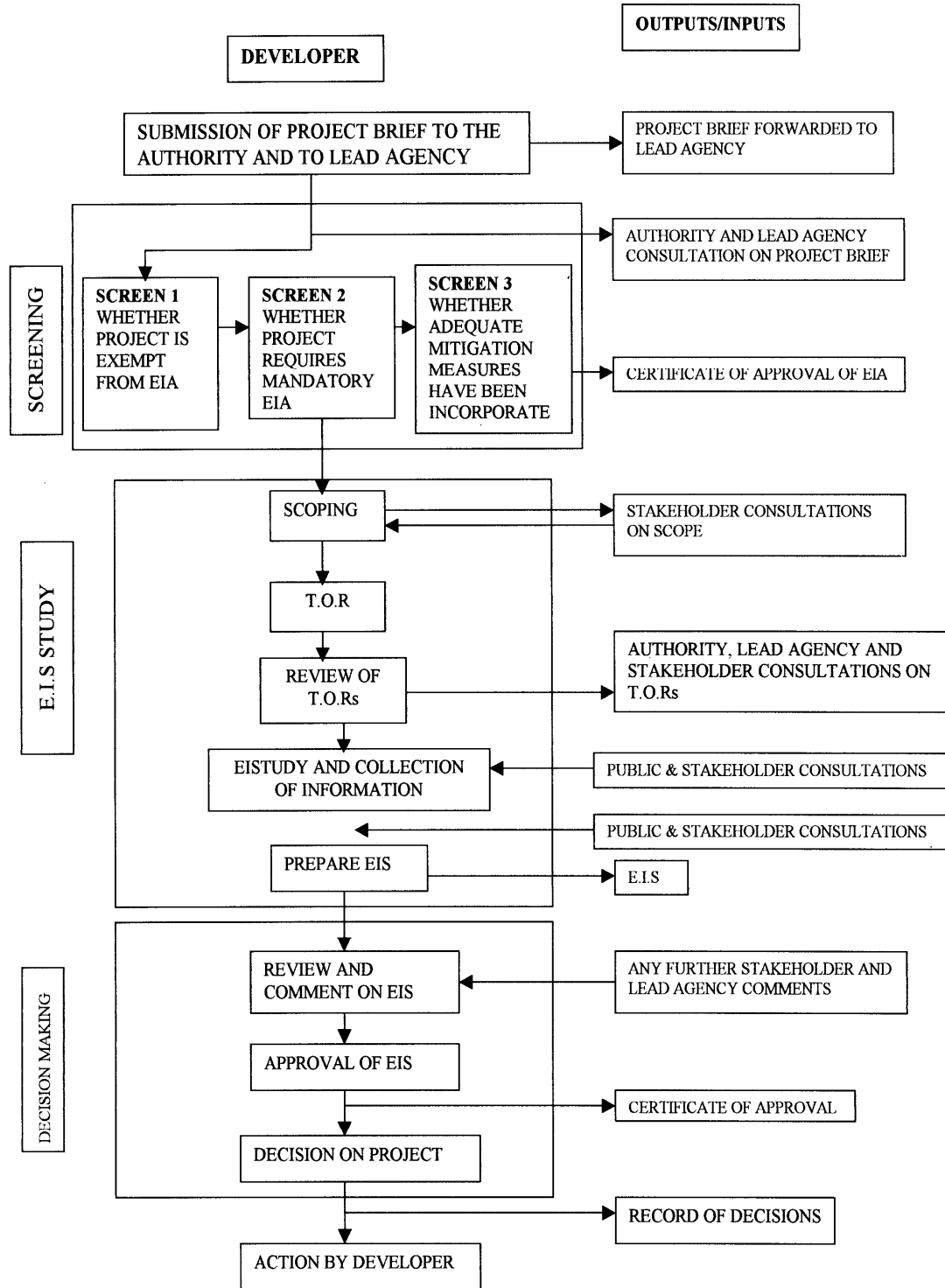


Figure 2.1: A graphical representation of the Uganda EIA process

## 2.2 ESIA FOR KARUMA HPP

In 1999, NORPAK POWER Ltd, a Norwegian consortium made the first Environmental and Social Impact Assessment (ESIA) for the development of a hydropower generation facility around the proposed site. This ESIA, which was for a proposed run of the river hydropower scheme was to generate about 200MW. This ESIA and the other related permits were duly approved by NEMA. The Project definition report as per NORPAK plan covered technical studies and investigations upstream of the Karuma Bridge over a 2.5 Km stretch only and did not look at the site specifics for the remaining 7 km of the project area which is located within the Karuma Wildlife Reserve as per the new project concept and design. Considering the changed scope and layout of the works, a fresh ESIA has been deemed necessary due to various reasons, including;

- The lay out has changed, with the tail race system (about 8-9 km long), access adits and surge chambers will be located within the KWR;
- An access road has been constructed in the KWR for the survey and investigation and it is proposed that this access road remains during the operation phase for accessing the project facilities in the KWR;
- Site conditions especially the intake area need to be re-examined to cater for additional requirements, such as more land acquisition, resettlement etc.
- As demography changes with time, another socioeconomic study needed to be carried out, especially given the change from the 1999 situation where a lot of demographic changes have taken place owing to host of socio – political reasons.

**Table 2.1:** Summary comparison of the NORPAK and Current Proposal features

Salient Features	Project	
	NORPAK	Current Proposal
Proposed Capacity (MW)	200	600
Land Take (Ha)	123.23	465.52
Tail Race Tunnel (Km)	2.2	8.3
Weir/Dam Height (M)	20	20
By passed River length (Km)	2.8	14
Proposed Environmental Flow (cumecs)	50	100

## 2.3 OBJECTIVES OF THE CURRENT ESIA STUDY

The fundamental objective of the study was to assess the potential impacts that the construction and operation of the Karuma Hydro Power Project may induce on the environment and on the communities living within the Project area, with special reference to social aspects and economic

activities that rely on the river Nile. The study should ensure that the Project is environmentally sound and contributes to sustainable social, economical and environmental development.

It is also expected to provide a means whereby the overall environmental performance of the project can be enhanced through:

- i. Provision of baseline information on the physical and biological environment and social, cultural, demographic and economic characteristics of the population in the project area and downstream areas;
- ii. Identification and evaluation of potential impacts associated with project implementation, and subsequent operation;
- iii. Preparation of scenarios and recommendations measures that will minimize adverse impacts and enhance beneficial aspects; and
- iv. Gather official and community attitudes towards the project and identify potentials and challenges for mitigation strategies.

## **2.4 SCOPE OF WORK**

The full Scope of Work for this environment and social impact assessment (ESIA) is given in the Terms of Reference (ToR) as approved by NEMA, the authorized body for ESIA process (**Annexure 2.1**). The main elements of the study included:

- i. Review of NORPAK EIA report and the accompanying baseline study
- ii. Review of other relevant reports and material;
- iii. Visits to relevant governmental and other institutions to collect information and undertake interviews.
- iv. Undertake necessary field/baseline studies, as supplements to previous studies and to fulfill special requirements in the ToR as approved by NEMA;
- v. Conduct public consultation and information disclosure activities in the Project-affected Area;
- vi. Prepare review reports, baseline study, main ESIA report and RAP report in accordance with the Uganda National and other International Guidelines.

## **2.5 METHODOLOGY**

Republic of Uganda Guidelines for EIA in Uganda (NEMA, 1997) was followed as summarized below for conducting the present ESIA studies, however due consideration was also given to international procedures for hydropower projects for international financing institutions:

**Characteristics of the Project:** A review of the project design, construction and operation has been carried out, with particular reference to establishing main features and scope of planned operational characteristics in order to identify potential consequences of the project on the downstream environment along the Nile River.

**Collection of Available Information:** Available primary and secondary data from different sources were collected and analysed. Primary data, especially relating to the socio-economic and cultural issues were collected through sample household survey and discussion with informant groups and the local elders committee (LEC) in the project area. Other knowledgeable stakeholders including environmental Non Governmental Organizations (NGOs), government agencies, development workers provided important socioeconomic, biological and cultural information during the course of the field survey.

With regard to the secondary data collection, the main sources of information and data were the Uganda Wildlife Authority (UWA) field and head office staff and various staff of the districts bordering the project area i.e. Nwoya, Oyam and Kiryandongo (then part of Masindi). As part of the data collection activities, the consultant's team collected and reviewed published relevant National documents as well as census reports and papers. Information on existing environmental conditions, necessary to provide the basic background for impact identification and assessment, has been obtained from the various reviewed documents.

**Documentation of relevant Rules, Acts and Legislation:** The environmental and social impact assessment study for the proposed Karuma Hydro power project has been carried out within the framework of local, national and international environmental regulations. The legislative, Policy and Institutional framework applicable to the proposed project within the Ugandan context and the funding agencies (World Bank) has been followed.

**Field Investigation:** In order to gain first-hand knowledge of existing environmental conditions and to put the proposed design, construction and operation works into context, members of the Study Team have carried out extensive site investigations and baseline studies. The methods used for the different baseline studies are highlighted in chapter 3; Methodology for Baseline Environment.

## 2.6 AUTHORISATION PROCESS

Environmental authorization in terms of the Environmental Impact Assessment (EIA) Regulations, 1998 of the Republic of Uganda and other legislation is required before the infrastructure

components of the project can be implemented. EIA process was commenced in September 2009. The National Environment Management Authority (NEMA) is the lead authority for the EIA in Uganda, and will make the final decision on whether the proposed project may go ahead or not, and under what conditions. NEMA will use the inputs from other relevant government departments and agencies, for example, the Ministry of Water and Environment, the Uganda Wildlife Authority before making a final decision.

### 2.6.1 Project Brief and Screening

Generally, screening is carried out to evaluate the significance of environmental impact of the proposed project considering the site-specific condition, context of the activities to be taken up, its scope and magnitude, and the uniqueness of the existing environment in the area where the project is located. It determines the need for, and the level of environment impact assessment required for a particular development activity or project. Screening is required for all projects likely to cause impact on the environment and is generally guided by the following criteria.

- i. Project size and scale
- ii. Project location
- iii. Type/nature of project
- iv. Potential impacts against set thresholds and standards
- v. Nature and magnitude of impacts

The KHPP falls under sections 4 and 10 of the Third Schedule of the National Environment Act Cap 153 of 1995, which lists (projects to be considered for Environmental Impact Assessment (EIA) :

*Sections 4: Dams, rivers and water resources including: a) storage dams, barrages and weirs; b) river diversions and water transfers between catchment; c) flood control schemes;*

*Section 10: Electrical infrastructure, including: a) electricity generation stations; b) electrical transmission stations; c) electrical substations; d) pumped storage stations.*

MEMD submitted an Environmental Project Brief (EPB) to NEMA in October 2009 in order to obtain an approval to proceed with the EIA process and be able to:

- (a) Allow accessibility of concerned personnel of MEMD, its Consultants Energy Infratech PVT Ltd (EIPL) and its authorized sub-contractors to Karuma Wildlife Reserve area for the bonafide purposes of field studies and data collection;
- (b) Carryout necessary Technical and Environmental studies within the Karuma Wildlife Reserve (KWR) area to assess the techno-commercial viability and environmental sustainability of the now revised Karuma Hydropower project;

(c) Take up field survey and investigation in terms of Drilling, Topographical Survey, Geo-physical and in-situ testing, environmental baseline data collection.

NEMA in its communication dated 16<sup>th</sup> December 2009 (**Annexure 2.2**) in response to the environmental project brief of the Karuma Hydro-Electric Power Project has indicated Environmental Impact Statement will be mandatory and is to be conducted as per section 20 of the National Environment Act CAP 153.

It was therefore a requirement that an Environmental Impact Assessment (EIA) study is carried out for the project and an Environmental Impact Statement (EIS) be prepared and submitted to the National Environment Management Authority (NEMA) for consideration.

### **2.6.2 Scoping**

Scoping is the initial step in the Environment Impact Study and it is undertaken when the environmental screening has indicated that there is a need for EIA or when according to the relevant guidelines, as in this case of hydropower development, the project falls under those that will automatically require a mandatory EIA. The purpose of scoping is to determine the scope of work to be undertaken in assessing the environmental impacts of the proposed project.

It defines the key issues that should be covered by the EIA and identifies the critical environmental impacts of the project for which in depth studies are required, and elimination of the insignificant ones. The scoping exercise should involve all the project stakeholders so that consensus is reached on what to include or exclude from the scope of work. It is also at this stage that project alternatives are identified and taken into consideration. The views gathered through the consultation and discussion with stakeholders refined and included as part of the project EIA terms of reference that are submitted to NEMA for approval.

A clear description of the nature and anticipated extent of the potential impacts is important to enable decision makers and the developer to appreciate the need for substantial investment in the detailed environmental analysis. It is during scoping that the composition of the EIA team is fully determined, after key issues that need to be considered are revealed by the scoping exercise.

### **Scoping Meetings**

In order to take stakeholders views into account in determining the scope of the present ESIA study, two scoping meetings were held. The first meeting was held at the MEMD in Kampala on the 3<sup>rd</sup> of February 2010. This was attended mainly by representatives of lead agencies, line ministries and

NGOs. A second meeting was held near the proposed dam site at Karuma Town on 26<sup>th</sup> March 2010 and was attended by the relevant Government agencies, local authorities from the project area (Masindi, now Kiryadongo, Oyam and Nwoya Districts), NGOs and other interested and affected parties (**Figure 2.2**). This meeting mainly targeted the members of the local community including the local political leadership, religious and cultural heads. Relevant Government agencies from line ministries of water, agriculture, trade and tourism also attended.

The scoping meeting at the project site was also attended by the representatives of key lending institutions (AfDB and the World Bank). Copies of the minutes of the two meetings are attached on this report (**Annexure 2.3 and Annexure 2.4**).



**Figure 2.2:** Stakeholder consultations at the project site in Karuma

Specific concerns and issues raised at the meetings regarding the project were incorporated in the ToR and have been addressed as part of the ESIA. The ToR was subsequently approved by NEMA in the communication dated 28<sup>th</sup> June 2010.

### **2.6.3 Consultative Meetings**

At the inception stage and during the preparation of the project brief, a meeting was held between the Uganda Wildlife Authority (UWA), the MEMD and the consultant's team. In the meeting, the five proposed design alternatives were presented and UWA gave their views on the designs. In addition, discussions regarding the need for an access road to enable the surveys to be made, and subsequently to be used during construction were held. The construction of the access road was contracted and has been undertaken by UWA. Further discussion on the public consultation and public disclosures are given subsequently in Chapter 7.



The EIA study process was completed and an EIS was prepared. The EIS has taken into account the issues raised in the ToR, and those raised by the various stakeholders during the consultation process and those encountered on ground during the baseline/field studies. The EIA study has also looked and analysed the legal, policy and institutional framework for the EIA, project level alternatives, assessed the identified impacts and determined the significance of each impact and formulated mitigation measures that will minimise the negative or maximise the positive impacts. These investigations were compiled in a set of draft reports that will be made available for public comment. Comments received will be considered and incorporated into the final reports for submission to NEMA for review and consideration. The Present EIS covers the construction, development and operation of the hydropower scheme only; a separate EIA study will be carried out for the construction and operation of the associated power transmission lines by Uganda Electricity Transmission Company Ltd.

The EIA has been carried out following national requirements as provided for in the National Environment Act, Guidelines for Environmental Impact Assessment in Uganda (1997), The Environmental Impact Assessment Regulations (1998); and safeguard policies and guidelines of partners and key lending institutions. Consideration has also been given to other applicable international requirements for such a project that might be relevant, especially the World Bank Operational safeguards. A review of the policy, legal and Institutional framework is provided in the next section of this chapter.

## **2.7 POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK**

This section provides a review of the legal, policy, institutional framework relevant to the implementation of KHPP. The review of these regulatory requirements provides a policy, legal and institutional background against which the acceptability of KHPP shall be determined by NEMA in consultation with different lead agencies e.g. UWA and DWRM.

### **2.7.1 The Policy Framework**

#### ***2.7.1.1 The National Energy Policy, 2002***

The policy goal in the energy sector is to meet the energy needs of the Ugandan population for social and economic development in an environmentally sustainable manner. The broad objectives of the energy policy are to:

- Establish the availability, potential and demand of the various energy resources in the country;
- Increase access to modern, affordable and reliable energy services;

- Improve energy governance and administration;
- Stimulate economic development and;
- Manage energy-related environmental impacts.

In pursuit of these objectives, MEMD will ensure that environmental considerations are given priority by energy suppliers and users to protect the environment and will put in place a monitoring mechanism to evaluate compliance with established environmental protection guidelines. This policy is very relevant to KHPP as it falls under the energy development sector. The policy helps in assessment of alternatives, because it gives strategic direction to the option taken.

#### ***2.7.1.2 The National Environment Management Policy, 1994***

The overall goal of this policy is the promotion of sustainable economic and social development mindful of the needs of future generations and EIA is one of the vital tools it considers necessary to ensure environmental quality and resource productivity on long-term basis. It calls for integration of environmental concerns into development policies, plans and projects at national, district and local levels. Hence, the policy requires that projects or policies likely to have significant adverse ecological or social impacts undertake EIA before their implementation. This is also reaffirmed in the National Environment Act, Cap 153, which makes EIA a requirement for eligible projects like KHPP (*Third Schedule* of the National Environment Act, Cap 153).

#### ***2.7.1.3 The National Water Policy, 1999***

The National Water Policy is one of the fundamental policies for the governance of water resources in Uganda. The overall policy objective is “*to manage and develop the water resources of Uganda in an integrated and sustainable manner, so as to secure and provide water of adequate quantity and quality for all social and economic needs, with the full participation of all stakeholders, and so as not to leave the future generations any worse off than ourselves*”.

The leading institution on water issues in Uganda is the Ministry of Water and Environment, which implements a Water Action Plan and the National Wetlands Policy (1995). The plan ensures sustainable management of water resources.

The policy states that the development of water for energy production shall be subjected to an Environmental Impact Assessment (EIA) in accordance with procedures established by the National Environment Management Authority (NEMA) and approved by the Authority in consultation with the lead agencies. This policy is relevant since KHPP falls under the dams, rivers and water resources in the *Third Schedule* of the National Environment Act, Cap 153.

#### ***2.7.1.4 The National Policy on Conservation and Management of Wetland Resources, 1995***

The National Policy on conservation and management of wetland resources aims at curtailing loss of wetland resources and ensuring that benefits from wetlands are equitably distributed to all people of Uganda. In general, the policy calls for; sustainable use, environmental sound management of wetlands, equitable distribution of benefits and application of EIA procedures on activities to be carried out in wetlands.

In order to operationalize the policy and to provide a legal framework for its implementation, wetland related issues have been adequately incorporated into the National Environmental Act, Cap 153. This policy is relevant since the Nile River is surrounded by wetlands of ecological importance especially in the area upstream of the proposed dam site.

#### ***2.7.1.5 The Uganda Wildlife Policy, 1999***

Uganda Wildlife Policy mainly aims to promote the long term conservation of the country's wildlife and biodiversity in a cost effective manner which maximises the benefits to the people of Uganda. By the end of 1960s, a number of additional wildlife protected and management areas were gazetted and presently, there are 10 Wildlife Reserves in Uganda. Under the conservation significance of Uganda's protected areas; Karuma Wildlife Reserve is listed to be of a supplementary importance with its most attributes common with Murchison Falls National Park (MFNP). KWR is legally gazetted and managed under the primary jurisdiction of the Uganda Wildlife Authority. This policy provides strategies for developments within Protected Areas; these strategies are to:

- i. Ensure that all developments and interventions within protected areas are subjected to appropriate environmental assessments;
- ii. Ensure that all physical developments (such as buildings and roads) in Wildlife Protected Areas follow general management plan guidelines;
- iii. Apply architectural design and construction practices that are of high quality and appropriate to protected areas to ensure conformity with the aesthetics of the area;
- iv. Exclude industrial and agricultural development activities within National Parks and centrally managed Wildlife Reserves, including mineral exploration or extraction, quarrying for stones, and crop production;
- v. Undertake or commission environmental impact assessments for all proposed developments and environmental audits of all existing facilities, and impose necessary restraints based on their findings.

This policy is relevant to KHPP since part of the Karuma Wildlife Reserve might have to be gazetted for KHPP to be implemented as some project components downstream falls within this Wildlife Reserve.

#### ***2.7.1.6 The Uganda Forestry Policy, 2001***

Under Policy Statements 3 and 4, social and environmental impact assessments are provided for when developing management plans and legal agreements. Policy Statement 7 provides for Uganda's forest biodiversity to be conserved and managed in support of local and national socio-economic development and international obligations while Policy Statement 8 provides that the government will promote the rehabilitation and conservation of forests that protect the soil and water in the country's key watersheds and river systems. Some vegetation will be cleared for the establishment of both temporary and permanent project infrastructure, which could impact on forest resources and biodiversity.

#### ***2.7.1.7 The Renewable Energy Policy for Uganda, 2007***

The Overall Policy Goal is to increase the use of modern renewable energy, from the current 4% to 61% of the total energy consumption by the year 2017. The overall effect of this Renewable Energy Policy will be to diversify the energy supply sources and mechanisms. This is of strategic importance because it promotes energy security and independence. The Policy Framework provides a basis for the formulation of planning, implementation and monitoring of renewable energy programmes, as well as projects that respond to the needs and priorities of the population at various levels of the economy. Karuma HPP development is also highlighted as one of the strategic interventions under the National Development Plan 2010/11-2014/15.

Under the policy actions, MEMD will support public and private sector investments in renewable energy generation and consists of two approaches; one for large hydropower schemes and one for small power schemes. Sites like Karuma have been tendered out according to the provisions of the Electricity Act, 1999 Sections 29 and 32. MEMD will also arrange an appropriate financing package and power tariffs will be determined through negotiations, on a case by case basis.

#### ***2.7.1.8 The Tourism Policy, 2002***

The aim of this policy is to ensure that tourism is a medium for poverty reduction. One of the identified strategies is wide distribution of revenue earnings with large-scale participation of the private sector, the communities and local governments. It is anticipated that through decentralization, local governments have the power to support sustainable use of natural and cultural

resources for tourism development. As far as local governments are concerned, tourism (and conservation of resources) must be seen to pay its way before it will be accepted as a priority. Part of the KHPP components falls within the Karuma Wildlife Reserve, hence management and monitoring plans have been put in place to mitigate advance impacts related to tourism activities but instead boast tourism (e.g. the established access roads will be utilized for wildlife reserves in collaboration with UWA).

#### ***2.7.1.9 The National Development Plan, 2010***

The National Development Plan (NDP) covers the fiscal period 2010/11 to 2014/15. It stipulates the countries medium term strategic direction, development priorities and implementation strategies. It recognizes electricity as a critical source of energy for Uganda and that electricity is generated from hydropower, cogeneration from biomass and thermal power by both public and private actors. Under the NDP Objective 1 for increasing power generation capacity, Strategy 1 provides for construction of large hydro power plants through private and public investments which also envisages the construction of Karuma hydro power plant to generate 600MW. Under its Objective 5, it provides for the strengthening policy, legal and institutional framework aimed at regulating and monitoring energy policies/plans. It also provides for Strategic Environmental Assessment for development projects like KHPP.

#### ***2.7.1.10 The National HIV/AIDS Policy, 2004***

It provides the overall policy framework for the national HIV/AIDS response. It also recognizes special groups which include migrant workers and acknowledges the existence of commercial sex workers. It also recommends the need to identify strategies to address migrant workers in view of the challenges posed by their mobility and vulnerability to HIV/AIDS. It anticipated that during the implementation of the different phases of the KHPP, there will be an influx of people into the project area that will result into a lot of interaction and may pose a danger of HIV/AIDS spread.

#### ***2.7.1.11 Vision 2025***

The goals set under the Vision 2025 range from political, social, economic, cultural and environmental. In regard to the environmental goals, Ugandans aspire to have a sustainable socio-economic development that ensures environmental quality and the resilience of the ecosystems. Hydropower development is one of the key ingredients in improving the quality of life as it facilitates socio-economic development and promotes industrialization.

### ***2.7.1.12 The Master Plan Study on Hydropower Development in Uganda, 2010***

Master Plan of hydropower envisage long term power and transmission development plan. The Study included the prioritization of potential hydropower sites based on consideration of technical, environmental, economical and financial aspects for the development in the period of 15 years as well as the optimal scale, basic layout and the framework of development so that the GOU can implement the projects. The Study also aimed at the implementation of necessary power supply plan that would support economic growth in the Republic of Uganda as well as the East African region.

### ***2.7.1.13 The East African Power Master Plan***

The overall objective of the study was to determine whether further interconnection of the power systems of Uganda, Kenya and Tanzania is technically feasible and economically viable as growth in demand occurs over the next 20 years. It presents details of the generation and transmission system expansion planning for the region, provides the results of the economic analysis indicating the possible benefits that could be obtained by increasing the interchanges of electricity amongst member states, outlines the investment necessary to implement the recommended system expansion plan and provides a plan justification. This report lists KHPP as one of the candidate hydropower developments in East Africa Community (EAC) that could be implemented with least environmental impacts.

## **2.7.2 The Legal Framework**

### ***2.7.2.1 The Constitution of the Republic of Uganda, 1995***

As the supreme law of the country, in its preamble it provides principles for the management of the environment. In its national objectives and directive principles particularly, Principle XXVII of the state policy stipulates that; the state shall promote sustainable development and public awareness of the need to manage land, air, water resources in a balanced and sustainable manner for the present and future generations. MEMD will take all possible measures to prevent or minimize damage and destruction of land, air and water resources due to pollution or other causes as a result of implementing KHPP.

The Constitution of the Republic of Uganda provides for, *inter alia*:

- i. Article 39 provides for the right of every Ugandan to a clean and healthy environment;
- ii. Article 237(2) provides for the responsibility of government to enact laws that protect and preserve the environment from degradation and to hold in trust for the people of Uganda such natural assets as lakes, rivers, wetlands, forest reserves, game reserves and national parks and;

- iii. The right of every Ugandan to fair and adequate compensation in instances of the compulsory acquisition of land.

#### ***2.7.2.2 The National Environment Act, Cap 153***

The National Environment Act (NEA) is contemplating as a coordinating Act. It establishes the National Environment Management Authority (NEMA) as the overall authority responsible for overseeing, coordinating and supervising environmental management in Uganda. NEA stipulates that an EIA be undertaken by the developer where the lead agency, in consultation with NEMA, is of the view that the project:

- i. May have an impact on the environment,
- ii. is likely to have a significant impact on the environment; or
- iii. "Will have a significant impact on the environment".

Section 20 (i) of NEA requires that projects likely to have significant environmental impacts should have an EIA conducted before their implementation. The proposed development is among those projects for which EIA is mandatory. According to the Third schedule of NEA, any development that involves major changes in land use is subjected to an EIA. This Environmental Impact Statement (EIS) has been prepared in accordance with the EIA Guidelines (1997) and the EIA Regulations (1998) for Uganda. In conformity with these guidelines, the assessment process followed the major steps provided in the EIA study. Thus, an EIA was required for KHPP.

Part. V (I) of the same Act further provides for environmental standards. They include standards for air quality, water quality, discharge of effluent into water, control of noise and soil quality. Sections 35 and 36 provides for establishment of criteria and procedures for the measurement of water quality, minimum water quality standards for different uses of water, and standards for the discharge of any effluent into any waters of Uganda. A number of supporting regulations have been developed under Section 108 of the NEA to operationalise the act and other support legislations. These are also discussed in this section.

#### ***2.7.2.3 The Public Health Act, Cap 281***

Section 103 of the act imposes a duty on every local authority to take all lawful, necessary and practicable measures for:

- a. Preventing any pollution dangerous to the health of any supply of water which the public within its district has a right to and uses for drinking of domestic purposes, wherever the supply is derived from sources within or beyond its districts and;
- b. For purifying any such supply, which has become so polluted, and to take measures including if necessary, proceeding at law against any person so polluting any such supply or polluting any street so as to be a nuisance or danger to health.

MEMD in collaboration with local authorities for Karuma will ensure proper waste management and safe guarding of water as provided for under this Act.

#### ***2.7.2.4 The Water Act Cap, 152***

According to Section 6 of the Act, no person acquires any rights to use water or to construct or operate any works unless authorized under Part II of this Act. Thus, unless a person is an occupier of land on which surface water exists, water may not be used for any purpose without the approval of an authority. The general rights to use surface water are limited to domestic use and fire fighting once again indicating the importance attached to water supply for domestic purposes. Section 18 makes it clear that a person is not allowed to construct or operate any works unless he has a permit granted for that purpose by the Director, Directorate of Water Development (DWD). Construction is defined to include alteration, improvement, maintenance and repair. MEMD will need to apply for such a permit in order to abstract water from Victoria Nile.

Section 31 (1) of the Water Act stipulates that it is an offence for a person to pollute water through discharge of waste into watercourses. In conformity with this law, the spillage of petroleum products, disposal of overburden, litter or construction waste should be avoided during construction and operation activities.

#### ***2.7.2.5 The Uganda Wildlife Act, Cap 200***

The Act establishes UWA as a body responsible for management of wildlife in Uganda, both inside and outside protected areas. The Act carries over all Schedules of the repealed Game (Preservation and control) Act and National Parks Act. The Act defines wildlife as any feral plant or animal of a species native to Uganda. It vests ownership of wild animals and plants in government for the benefit of all Ugandan people, a responsibility executed through Uganda Wildlife Authority. Contrary to popular belief, the Wildlife Act does not prohibit mining activities in conservation areas, rather it seeks to permit, control and monitor these operations in pursuit of sustainability and co-



existence with wildlife and this is evinced by Sections 5, 15, 19 and 21 of the Act. Section 15 provides for EIA as a decision making tool to the Authority (UWA).

The main objective of the Act is to ensure perpetual protection of wildlife resources and enable derivation of benefits. Need for sustainable management is recognised within the framework of effective planning and stakeholder participation. Although the current Wildlife Policy (1999) and the Wildlife Act (2000) provides the framework that enables the private sector, communities and NGOs to operate in protected areas (PAs), the review of this EIA will inform decision making as to whether the location of hydropower generation infrastructure in the KWR will not demand for adjusting the UWA mission statement of conserving and managing wildlife in and outside PAs in partnership with neighbouring communities and other stakeholders for the benefit of the people of Uganda and the global community.

In this regard, stringent measures have been proposed in this report and should be applied to ensure that the area is conserved. Uganda Wildlife Authority is an important stakeholder in this project and recommendations are made in this report on how they will be involved in the project implementation, monitoring and evaluation.

#### ***2.7.2.6 The Local Governments Act, Cap. 243***

The local governments are responsible for the protection of the environment at the district level. This therefore, implies that local governments shall be consulted on projects to be located within their jurisdiction and on matters that affect their environment. Consultations were made with Natural Resources Departments in Nwoya, Oyam and Kiryandongo in order to capture their issues and concerns.

#### ***2.7.2.7 The Land Act, Cap. 227***

It provides for the ownership and management of land and provides for the compulsory acquisition of land for public purposes which is taken to include use of land to provide water and sanitation facilities. It provides for four different types of land tenures (Customary, Leasehold, Mailo and Freehold) and the procedure for applying for grant of any of the tenures. The Act *inter alia* provides that the construction of electricity transmission and distribution lines, construction of dams and hydropower plants are public works and any person authorized to execute public works on any land may enter into mutual agreement with an occupier or owner of the land in accordance with the Act.

In conformity with this law, a Resettlement Action Plan (RAP) has been undertaken for this project and is presented as a separate volume with this main ESIA report. MEMD will seek to enter into mutual agreement with the occupier or owner of the land outside the one originally obtained under the NORPAK. Compensation and resettlement activities will be fulfilled by MEMD.

#### ***2.7.2.8 The Land Acquisition Act, Cap. 226***

This Act provides for the procedure and method of compulsory acquisition of land for public purposes whether for temporary or permanent use. The minister responsible for land may authorise any person(s) to enter upon the land and survey it, dig or bore the subsoil or any other thing necessary for ascertaining whether the land is suitable for a public purpose. The government is expected to compensate any person who suffers damage as a result of any action. Any dispute as to the compensation payable can be referred by the Attorney General to court for decision. For acquisition of land for development and other purposes, Article 237(1) of the Constitution vests all land in Uganda in her citizens. However, under Article 237(1) (a), the Government or Local Government may acquire land in the public interest. Such acquisition is subject to the provisions of Article 26 of the same Constitution, which gives every person in Uganda a right to own property. It provides procedures to follow during the acquisition of land for public interest and provides for the “prompt payment of fair and adequate compensation” prior to taking possession of land. The Constitution, however, does not make resettlement a right.

In development of the Resettlement Action Plan, adequate consultations has been undertaken on the compensation options and entitlements, appropriate grievance mechanisms proposed as well as monitoring and evaluation framework to assess the impact of the compensation packages on the livelihoods of affected persons.

#### ***2.7.2.9 The Rivers Act, Cap 357***

Section 4 of this Act provides for dredging in the river to be licensed. It states that it shall not be lawful to dredge in any river without a license from the Minister, which shall be in Form A of the Second Schedule to this Act. Section 6(1) stipulates that the regulations set forth in the Third Schedule to this Act shall be endorsed on every license to dredge. The First Schedule lists River Nile from Lake Victoria to Albert where Karuma falls hence MEMD will have to apply for a dredging license as provided for in this legislation.

#### ***2.7.2.10 The Employment Act, Cap. 219***

The Employment Act provides for matters governing individual employment relationships in terms of circumstances of provision of labour. It is quite explicit on matters of forced labour that, no one should be forced to work, there should be no discrimination with regard to recruitment process, and it prohibits sexual harassment in employment. It also empowers Labour Officer to enter and inspect premises where he/she believes there are labour related concerns. Also the Employment Act provides for matters of grievance settlement and issues of payment of wages and salaries. Under the KHPP, this Act is obliges employers to repatriate employees especially those from other countries as well as those coming from more than 150km from their home areas. Hence MEMD will take into consideration the relevant provisions contained in the Act at all stages of the proposed project implementation; this will include the coordination of the foreign work force that will come to work on the project.

#### ***2.7.2.11 The Occupational Safety and Health Act, 2006***

The Act requires every employer to provide and maintain safe working conditions, imposing a duty on employers to take measures to protect workers and the public from risks and dangers of their undertaking at his or her own cost (Section 13). It also requires employers to ensure the working environment is kept free from pollution by employing technical measures applied to new plants or processes and employing supplementary organizational measures (Section 13). Employers with at least 20 workers should prepare and often revise a written statement of policy with respect to safety and health of workers (Section 14). Every workplace must be kept in a clean state, free from effluent arising from any drains and sanitary facilities (Section 46). MEMD is obliged to provide employers with washing facilities, First Aid, facilities for meals, safe access to the workplaces and safe work practices which applies to this KHPP. The mitigation measures to handle any impacts related to occupational safety and health have been incorporated and are discussed in the mitigation chapter of this report.

#### ***2.7.2.12 The Workers Compensation Act, Cap. 225***

Section 28 of the Workers' Compensation Act of 2000 states that; where a medical practitioner grants a certificate that a worker is suffering from a scheduled disease causing disablement or that the death of a workman was caused by any scheduled disease; and the disease was due to the nature of the worker's employment and was contracted within the twenty-four months immediately previous to the date of such disablement or death, the worker or, if he or she is deceased, his or her dependants shall be entitled to claim and to receive compensation under this Act as if such disablement or death had been caused by an accident arising out of and in the course of his or her

employment. The provision of Personal Protective Equipment (PPE) to employees minimizes accidents and injuries. The employees that will carry out construction activities require PPE so that the various sections of the Workers' Compensation Act are complied with. Where such occurrence or death happens during the execution of the KHPP, the necessary compensation will be provided to the affected party to their heir or next of kin in case of death.

#### ***2.7.2.13 The Labour Disputes (Arbitration and Settlement) Act, 2006***

This is an Act to revise the law relating to industrial relations, to repeal and replace the Trade Disputes (Arbitration and Settlement) Act, Cap.224 and to provide for related matters. It provides for dispute and resolution settlement and establishes an industrial court with its functions. Section 28 provides for unlawful industrial action and Section 30 (1) stipulates that subject only to any limitation provided in this Act or any other law, it shall be lawful for an employee:

- i. To participate in an industrial action; or
- ii. To act in contemplation or furtherance of an industrial action in connection with a labour dispute.

Section 32 cites that acts of intimidation and annoyance as an offence and Section 34 (1) stipulates that nothing in this Act shall prohibit an individual employee from giving notice of termination of employment at any time under the Employment Act, 2006. Collective agreements are to be registered with the Labour Officer. Schedule 2 of this Act lists the essential services (like water, electricity, sanitary, health) as provided for under Sections 33, 36 and 43 (2). MEMD will uphold the provisions of this Act and ensure that the EPC Contractor provides these services to labour force for KHPP.

#### ***2.7.2.14 The Labour Unions Act, 2006***

The Act regulates the establishment, registration and management of labour unions and to provide for other related matters. It repeals the Trade Union Act, Cap. 223. It provides for the right of employees to organize themselves in a labour union and the employer not to interfere with the right of association. Section 4 stipulates that an employer shall not discriminate in regard to the hire, tenure or any terms or conditions of employment in order to discourage membership in a labour union, discourage an employee on account of his/her lawful involvement or proposed lawful involvement in the activities of a labour union, including his/her participation in industrial action arising in connection with a labour dispute and not in contravention of the Labour Disputes (Arbitration and Settlement) Act, 2006. An employer who contravenes Section 4 commits an offence. Section 6 provides for an employee or labour union to seek legal redress once satisfied that

an employer has violated Section 5 of the Act. MEMD together with an EPC Contractor will uphold the provisions of this Act.

#### ***2.7.2.15 The Explosives Act, Cap. 298***

This Act provisions relates to the manufacture, storage, sale, transportation, importation, exportation and use of explosives. During the construction phase of KHPP, some blasting materials will be used and thus MEMD will apply for the permit as provided for under Section 10 which prohibits the use of blasting materials without a permit. It states that under 10(i) (a); No person shall use or cause to be used blasting materials, unless he or she is in possession of a permit issued under the authority of an inspector. In addition, proper procedures and manuals for onsite safety and use of the explosives will have to be developed and implemented by the contractor.

#### ***2.7.2.16 The Mining Act, Cap. 148***

The Mining Act of 2003 describes the mineral and mining development including set-up of new quarries and/or sandpits. If new quarry sites and/or borrow pits will be necessary for any infrastructure projects, relevant license shall be obtained from the Commissioner of the Geological Survey and Mines Department. Relevant environmental studies required for this license application is described in Part XI. The extraction of stone/aggregate and murram materials will be undertaken in line with the provisions of this Act. Issues of restoration of the sites after murram extraction will be of key importance in the operationalization of KHPP.

#### ***2.7.2.17 The Historical and Monuments Act***

This is the existing law relating to archaeological and cultural sites in Uganda. The Act provides for the preservation and protection of historical monuments and objects of archaeological, palaeontological, ethnographical and traditional interest. Under the precincts of this act, the minister responsible may cause any of the aforesaid objects to be declared as preserved objects. The Act stipulates that: Subject to the provisions of the said Act, a declaration by the Minister of an object being protected would not affect the estate, right, title, or interest in such object of the owner or any person beneficially entitled to.

The Act prohibits any person from carrying out activities on or in relation to any object declared to be preserved or protected. Section 10 of this Act spells out the procedures and requirement to declare and inspect newly discovered sites that may have archaeological, palaeontological, ethnographical, historical and traditional significance for purposes of protection.

### ***2.7.2.18 The Petroleum Supply Act, 2003***

The Petroleum Supply Act of 2003 provides for the supervision and monitoring, importation, exportation, transportation, processing, supply, storage, distribution and marketing of petroleum products. Among other provisions, the act provides for the safety and protection of public health and the environment in petroleum supply operations and installations. During the implementation of KHPP, a lot petroleum products will be used, MEMD and the contractor will implement the mitigation measures that have been suggested in regard to the handling of petroleum products to avoid contamination of soil, air and water.

### ***2.7.2.19 The Factories Act, Cap. 220***

This Act provides for the health, safety and welfare of persons employed in factories and other places. Areas of concern under the Act include overcrowding, ventilation and lighting, housekeeping, and general safety aspects pertaining to work in confined spaces and fire safety. Workers will have adequate training for their specific jobs and also in the proper use of protective equipment.

### ***2.7.2.20 The Town and Country Planning Act, Cap. 246***

This act provides for the orderly and progressive development of land in towns and other rural areas of the Country. It defines building operations to include the making accessible of electrical installations and development in relation to any land. Any placing of new poles for transmission and distribution of electricity and construction of substations must comply with the provisions of this Act. Section 46 of the same Act provides that any use of land must comply *inter alia* with the requirements of the Town and Country Planning Act covering planned use of land, approval of buildings in urban areas among other things and these provisions must be adhered to by the developer once project is approved for implementation. The Act guides ideal development planning which should be crucial for avoiding induced unplanned development in the area. Karuma which is likely to be host to many people is likely to face resource challenges. Community development activities should also focus on building the capacity of this planning authority so that it can address the rising challenges as a result of the development.

### ***2.7.2.21 The Investment Code Act, Cap. 92***

Section 18(2) (d) of the Act requires an investor to take necessary steps to ensure that development and operation of an investment project does not cause adverse ecological and socio-economic impacts.

### ***2.7.2.22 The Electricity Act, Cap. 145***

An Act to provide for the establishment of the Electricity Regulatory Authority (REA); to provide for its functions, powers and administration; to provide for the generation, transmission, distribution, sale and use of electricity; to provide for the licensing and control of activities in the electricity sector; to provide for plant and equipment and for matters relating to safety; to liberalise and introduce competition in the electricity sector, to repeal the Electricity Act, Cap 135 and the Uganda Electricity Board (Special Provisions) Act, Cap. 136; to provide for a successor Company to the Uganda Electricity Board, and for connected purposes. Section 30 of the Electricity Act requires that before a license is issued; the developer shall provide NEMA the description of the impact of the project on electricity supply, socio-economics, cultural heritage, the environment, natural resources and wildlife.

MEMD will have to apply for a power generation, transmission and distribution license as per this Act. This environmental Impact statement will be a pre-requisite for the regulator to review with a view of issuing a generation licence. In addition, as mandated by this act, ERA will work with other stakeholders in coming up with the tariffing and other financial mechanisms during the operation phase of the KHPP.

### ***2.7.2.23 The Fish Act, Cap. 197***

The Fish Act makes provision for the control of fishing, the conservation of fish, the purchase, sale, marketing and processing of fish and other issues related to fish. MEMD will ensure that the provisions of this Act are complied with and no fishing activities will be carried out during construction and operation phases of KHPP.

### ***2.7.2.24 Relevant regulations***

A number of regulations have been put in place to operationalise the different legislative and policy provisions and requirements. The following regulations that apply to the implementation of the KHPP have been reviewed

National Environment (Noise Standards & Control) Regulations, 2003

- The Water Resources Regulations, 1998
- The National Environment (Wetlands, River Banks and Lake Shores Management) Regulations, 2001
- The National Environment (Waste Management) Regulations, 1999
- The Water (Waste Discharge) Regulations, 1998

- The National Environment (Standards for Discharge of Effluent into Water or on Land) Regulations, 1999
- The Environmental Impact Assessment Regulations, 1998
- The National Environment (Conduct and Certification of Environment Practitioners) Regulations 2003

### **2.7.3 Institutional Framework**

The institutional framework under which KHPP will be implemented will involve the following agencies. Their roles have also been clearly discussed below.

#### ***2.7.3.1 The National Environmental Management Authority***

Following the enactment of the National Environment Act (NEA) in 1995, the National Environment Management Authority (NEMA) was created and charged with the responsibility to oversee, coordinate and supervise environmental management in Uganda. NEMA's overall goal is to promote sound environmental management and prudent use of natural resources in Uganda. Since its formation, NEMA has put a strong emphasis on developing environmental policies, laws and guidelines as evidenced by the large number of environmental regulations that have been enacted over the last few years. A number of regulations and building, enforcement capabilities particularly as they pertain to the following issues, which are considered high priority include:

- i. Land degradation (from erosion, population pressures, deforestation);
- ii. Wetlands management (i.e. enforcement of requirements to have a permit to conduct activities in a wetland);
- iii. Industrial pollution (i.e. enforcement of requirements to have a wastewater discharge permit and to comply with permit conditions): and
- iv. Biodiversity loss.

NEMA's enforcement branch is the department of Monitoring and Compliance. They are responsible for ensuring that enterprises comply with the various environmental regulations and standards. NEMA has appointed environmental inspectors whose powers and duties are spelled Out in Section 81 of the National Environmental Act and can include closing any activity which pollutes or is likely to pollute the environment contrary to the National Environment Act for a period not more than three weeks. The environmental inspector may also issue an improvement notice requiring an operator of any activity to cease any activities deleterious to the environment which are contrary to the Act. NEMA has power; to prosecute environmental offenders and



offences committed under the National Environment Act may earn the offender fines and prison sentences.

### ***2.7.3.2 The Ministry of Energy and Mineral Development***

The mandate of the Ministry of Energy and Mineral Development (MEMD) is *"To establish, promote the development, strategically manage and safeguard the rational and sustainable exploitation and utilization of energy and mineral resources for social and economic development"*.

The roles and main functions of the Ministry are as follows: -

- i. To provide policy guidance in the development and exploitation of the energy and mineral resources.
- ii. To create an enabling environment in order to attract investment in the development, provision and utilisation of energy and mineral resources.
- iii. To acquire, process and interpret technical data in order to establish the energy and mineral resource potential of the country.
- iv. To inspect, regulate, monitor and evaluate activities of private companies in energy and mineral sectors so that the resources are developed, exploited and used on a rational and sustainable basis.

Through the various agencies and departments, the MEMD has the overall responsibility for the energy sector, dealing specifically with policy formulation, policy implementation, and licensing, monitoring and regulatory control. Uganda Electricity Generation Company Limited (UEGCL) provides technical advice related to hydro power development and production.

### ***2.7.3.3 Uganda Electricity Generation Company Limited***

Uganda Electricity Generation Company Limited (UEGCL) is a limited liability company incorporated in March 2001. The Government implemented a Power Sector Reform and Privatization Policy, which resulted in the separation of Uganda Electricity Board (UEB) into Generation, Transmission and Distribution successor companies. Currently, electricity is being generated at two power Stations i.e. Nalubaale and Kiira Power Stations. UEGCL's mission is to efficiently generate electricity, effectively monitor electricity generation concessions and trade in bulk quality, safe and reliable power at competitive rates in a sustainable manner for accelerating economic development.

Under the Hydro Power Development Unit, the Government of Uganda (GOU) is constructing a hydropower station at Bujagali and KHPP is being proposed in order to meet the fast growing

electricity demand in Uganda. UEGCL and MEMD are jointly proposing to develop and implement KHPP as a public enterprise.

#### ***2.7.3.4 Uganda Electricity Transmission Company Limited***

Uganda Electricity Transmission Company Limited (UETCL) is a Public Limited Company which was incorporated on 26<sup>th</sup> March 2001 as a result of the power sector reform and liberalization policy of the Government of Uganda that unbundled Uganda Electricity Board (UEB) into successor companies. The Company operates under policy guidance of the Ministry of Energy and Mineral Development.

UETCL's mission is to dispatch, transmit quality and reliable bulk power in a viable and efficient manner; be an efficient and commercially focused single buyer actor and; mitigate emergency power situations in Uganda. The mandate of UETCL is to develop and implement the strategic priorities given by the GoU to UETCL as the appointed Single Buyer Actor in the Ugandan Single Buyer market.

UETCL Operational Licenses include:

- i. UETCL operates its Operation of High Voltage Transmission Grid (HVTG) facilities in compliance with the Grid code that involves promoting and developing policies and programs to achieve high level quality and reliable HVTG services in accordance with the Electricity Act.
- ii. UETCL operates the Uganda power system with the objective of dispatching available electricity to meet load requirements at the lowest cost for customer service, maintaining system integrity and reliability.
- iii. Under the bulk power Supply, UETCL is empowered to purchase power to provide continuous and economic supply of electricity to meet the load requirement for customers served directly or indirectly from HVTG facilities at lowest reasonable cost.
- iv. UETCL will import and export electricity power to neighboring countries pursuant to the terms of the agreement(s) for such international power transactions.

It is the mandate of UETCL to transmit power to and from different substations in the National Grid and in this regard, UETCL will evacuate power from Karuma through three proposed transmission lines as outlined in chapter 1 under the project brief.

### ***2.7.3.5 Uganda Electricity Distribution Company Limited***

Uganda Electricity Distribution Company Limited (UEDCL) is a limited liability company incorporated in Uganda under the Companies Act and started operations on 1st April 2001. The Government implemented a Power Sector Reform and Privatization Policy, which resulted in the separation of Uganda Electricity Board (UEB) into Generation, Transmission and Distribution successor companies.

The UEDCL, one of the successors of the UEB is the owner of the electricity distribution network up to 33KV. The network was handed over to UMEME Limited on the 1st March 2005, under a concession arrangement. UMEME Ltd is wholly owned by CDC Globelec of UK. UEDCL was privatized by the Government of Uganda (GoU) through a 20 year concession by bringing on board UMEME Ltd a private investor in the electricity distribution and it is envisaged that upon completion, the power from Karuma will be under the distribution by UMEME. In relation to the KHPP, UEDCL's mandate will be to develop and maintain the electricity distribution assets and other related activities for KHPP in collaboration with UEGCL.

### ***2.7.3.6 Rural Electrification Agency***

Rural Electrification Agency (REA) was established as a semi- autonomous Agency by the Minister of Energy and Mineral Development through Statutory Instrument 2001 No. 75, to operationalise Government's rural electrification function under a public-private partnership (PPP). It functions as the secretariat of the Rural Electrification Board (REB) which carries out the Minister's rural electrification responsibilities, as defined in the Electricity Act of 1999.

REA is mandated to facilitate the Government's goal of achieving a rural electrification rate of at least 10% by the year 2012 from 1% at the beginning of the decade as this will facilitate the provision of electricity for socio-economic rural transformation in an equitable and sustainable manner.

### ***2.7.3.7 Electricity Regulatory Authority***

The Electricity Regulatory Authority (ERA) is a statutory body established in accordance with the Electricity Act of 1999 (CAP 145) as an agency of the Ministry of Energy and Mineral Development. The mandate of the ERA is "to provide for the generation, transmission, distribution, sale and use of electricity" in Uganda; to guide the liberalisation of the electricity industry; and to manage licensing, rates, safety and other matters concerning the electricity industry. The Electricity Act of 1999 empowers ERA to regulate the Generation, Transmission, and Distribution of electrical

energy in Uganda. ERA's mandate is outlined in the Electricity Act and further detailed out in their 3-year Business Plan and 10-year Strategic Plan.

#### ***2.7.3.8 Uganda Wildlife Authority***

Uganda Wildlife Authority (UWA) is a statutory body established by the Uganda Wildlife Act 2000. It became operational in August 1996 after the merger of the then Game Department with the Uganda National Parks. UWA is a key stakeholder in this KHPP as part of the project components are within the KWR and its mandate is to:

- i. Management and conservation of wildlife in Uganda, both in and outside the wildlife protected areas (PAs) i.e. National Parks, Wildlife Reserves and Wildlife Sanctuaries.
- ii. Promoting public participation in wildlife management using mechanism such as wildlife use rights, as a means of eradicating poverty, through community conservation programs, and promoting wildlife as a form of land use.
- iii. Ensuring the protection of rare, endangered and endemic species of wild plants and animals, through provision of appropriate wildlife policies, management plans and promotion of wildlife management best practices.
- iv. Ensuring timely and appropriate response to reported problem animals, in collaboration with the concerned communities and respective local authorities.
- v. Enhancing economic benefits from wildlife management through promotion of tourism.
- vi. Implementing relevant international treaties, conventions, agreements or other arrangements to which Uganda is a party.

In line with the mandate, UWA's mission is to conserve and sustainably manage the wildlife and the protected areas of Uganda in partnership with neighboring communities and other stakeholders, for the benefit of the people of Uganda and the global community". UWA is responsible for the management of 10 National Parks, 12 Wildlife Reserves (including KWR) and 7 Wildlife Sanctuaries and provides guidance over the management of 5 Community Wildlife Areas. Part of the KWR where KHPP falls will have to be de-gazeted before the project is implemented.

#### ***2.7.3.9 The Ministry of Water and Environment***

The Ministry of Water and Environment (MoWE) has the overall responsibility for initiating national policies and for setting national standards and priorities for water resources management and environmental regulation. A multi disciplinary team representing stakeholders and constituting the Water Policy (WPC) advises the Minister on the above functions and is mandated to initiate revisions to legislation and regulations. The key functions of the MoWE are to promote the rational

and sustainable utilization and/or development of the water resources while conserving relevant surrounding watershed environment in Uganda. They are several divisions within the MoWE and these are:

- i. The Directorate of Water Development (DWD) which is in charge of the promoting the rational management and use of water resources of Uganda by coordinating and regulating activities that may impact water quality and quantity.
- ii. Quality and quantity of water in watercourses is monitored and regulated by the Directorate of Water Resources Management (DWRM), which also issues permits for water abstraction and effluent disposal.
- iii. The Wetland Inspection Department (WID) is another technical unit in the Ministry which advises government on technical matters and policies related to sustainable wetland conservation and management.
- iv. The Department of Meteorology is responsible for providing climate and weather information to any stakeholders engaged in national development activities in Uganda.

The key concerns during the implementation of KHPP are water quality and quantity and water abstraction. KHPP should not lead to the interference with the natural and normal hydrology of the Nile River as well as the quality of water resources. This study took into consideration the baseline water parameters in the projects areas for purposes of serving in the monitoring process during KHPP implementation.

#### ***2.7.3.10 The Ministry of Gender, Labour & Social Development***

MGLSD is the leading and coordinating agency for the Social Development Sector. In collaboration with other stakeholders, MGLSD is responsible for community empowerment, protection and promotion of the rights and obligations of the specified vulnerable groups for social protection and gender responsive development. The KHPP has a lot of issues related to labour and social development, including the implementation of the RAP and as such, the MGLSD is a key stakeholder in this project.

MEMD in collaboration with the EPC Contractor and other stakeholders will work towards the implementation of the labour, employment and occupational safety and health provisions as provided for under the regulatory instruments within this Ministry.

### ***2.7.3.11 The Ministry of Tourism, Trade and Industry (MTTI)***

UWA and the Department of Museum and Monuments who are key stakeholders in the KHPP fall under the MTTI. The Department of Museum and Monuments is responsible for policy formulation, planning and coordination of conservation and development of museums and cultural heritage while the Wildlife Conservation Department is one of the three Departments that constitute the Directorate of Tourism, Wildlife and Museums and Monuments. Another department is the Tourism Development Department. The Wildlife Conservation sector draws its mandate from the Constitution of the Republic of Uganda, 1995 under the National objectives and directive principles of State policy XXIII and XXVII; Articles 39 and 189(1); and Uganda Wildlife Act (Cap. 200). MEMD in collaboration with MTTI will implement the recommendations provided in the monitoring and management plans for KHPP especially within the KWR area to ensure that appropriate technology is implemented for wildlife conservation and tourism development.

MTTI also serves as:

- i. The Uganda's management authority for the Convention on International Trade in endangered species of fauna and flora (CITES);
- ii. National focal point for the Convention on Migratory Species (CMS);
- iii. Uganda's focal point for the Lusaka Agreement on the Cooperative Enforcement Operations Directed against Illegal trade in fauna;
- iv. National focal point for African-Eurasian Waterbird Agreement (AEWA) and;
- v. Uganda's focal point for the International Gorilla Agreement yet to be acceded.

### ***2.7.3.12 The Ministry of Lands, Housing & Urban Development (MoLHUD)***

The mandate of the Ministry of Lands, Housing & Urban Development (MoLHUD) is to ensure rational and sustainable use, effective management of land and orderly development of urban and rural areas as well as safe, planned and adequate housing for socio-economic development. MoLHUD is responsible for providing policy direction, national standards and coordination of all matters concerning lands, housing and urban development. MoLHUD is also responsible for putting in place policies and initiating laws that ensure sustainable land management promote sustainable housing for all and foster orderly urban development in the country.

Land Administration and Management fall under the Directorate of Land Management. The general functions of Land administration and management include: land management, registration, mapping, surveying and valuation of properties, coordination and supervision. It is also responsible for the facilitation of policy, legal and regulatory framework development, land dispute resolution (with emphasis on alternative dispute resolution), provision of public information on land rights,

Geomatics and land information, promotion of good governance, effective and efficient delivery of land services, and planning for implementation of land sector reforms. The Town and Country Planning Board is responsible for ensuring orderly, progressive and sustainable urban and rural development through appropriate physical planning. The department of Survey and Mapping is responsible for the establishment of survey and geodetic controls, quality checks of cadastral jobs, survey of government land and international boundaries, production and printing of topographical maps. The Department is also responsible for producing a National Atlas.

A RAP has been prepared in line with the provisions of the MoLHUD and the RAP has been disclosed to the affected persons and approved by the Chief Government Valuer. In order to implement the RAP, MEMD will have to acquire a development order from the MoLHUD.

#### ***2.7.3.13 The Ministry of Works and Transport***

The Ministry of Works and Transport (MoWT) is responsible for construction and maintenance of trunk roads in Uganda. Wherever a road development would have effect on private property, Government of Uganda and development partners require equitable compensation to minimise social disruptions or negative effects on people's livelihoods arising from road construction. Compensations assist people who lose assets as a result of a road project to maintain their livelihood through income restoration. Access roads to be constructed and or maintained during the implementation of KHPP will be done in collaboration with the MoWT. MoWT should also ensure that MEMD upholds the road safety regulations within and around the project area especially along the Kampala—Gulu highway.

#### ***2.7.3.14 The Ministry of Agriculture, Animal Industry and Fisheries***

The Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) through the Fisheries Department is responsible for promoting sustainable management of fish and fisheries resources in Uganda. Given that water contamination may affect fish breeding grounds and fish stocks in the Nile River, MAAIF should come for inspection and enforcement of standards especially regarding illegal fishing as KHPP does not involve any fishing activities.

#### ***2.7.3.15 Local Administrative Structures***

The district land boards of Kiryandongo, Nwoya and Oyam are responsible for land allocation at local government level in regard to this project. The Constitution of the Republic of Uganda provides for the formation of the Town and Country Planning Board that should plan and oversee

orderly development of land. All sub-components of the proposed project fall within jurisdiction of Kiryandongo, Nwoya and Oyam Districts. Various district offices whose functions would be relevant to the project include offices of the Environmental Officer, Wetlands Officer, District Planner, Community Development Officer, District Director of Health Services, Forestry Officer, Agricultural Officer, District Water Officer and District Engineer. Equally important are village level local council administration (LC I) in Karuma. Leaders at these levels of local administration are closer to residents and therefore important in effective in community mobilization, sensitization and dispute resolution.

## **2. 8 MULTILATERAL ENVIRONMENTAL AGREEMENTS (MEAS) AND EIA**

MEAs require parties to apply EIA and Strategic Environmental Assessment (SEA) to proposals with potential negative impacts on the environment. They help meet their objectives, so that development proposals respect mechanisms for the conservation of the environment and its sustainable use. EIA is specified as a mechanism for implementing certain aspects of the agreements. The parties are required to comply with EIA provisions provided in the MEAs. There are several MEAs that require parties to comply with EIA requirements and these include the following:

### **2.8.1 Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context**

One of the objectives of the Protocol is to provide for public participation in strategic environmental assessment. The Protocol makes the following requirements:

- i. Ensure that a strategic environmental assessment is carried out for plans and programmes. (Article 4);
- ii. Screening (Article 5);
- iii. Scoping (Article 6);
- iv. Ensure preparation of an environmental report (Article 7);
- v. Ensure early, timely and effective opportunities for public participation, when all options are open, in the strategic environmental assessment of plans and programmes. (Article 8);
- vi. Ensure consultation with environmental and health authorities transboundary consultations (Article 9 and Article 10);
- vii. Implement decision in the SEA reports (Article 11) and;
- viii. Ensure monitoring the significant environmental effects (Article 12)



### **2.8.2 The 1991 Espoo Convention on Environmental Assessment in a Transboundary Context**

This Convention aims at preventing, reducing and controlling all adverse transboundary environmental impact from proposed activities, by the establishment of an EIA procedure that permits public participation. The Convention has the following requirements:

- i. Parties to individually or jointly, take all appropriate and effective measures to prevent, reduce and control significant adverse transboundary environmental impact from proposed activities.
- ii. Parties to apply the principles of environmental impact assessment to policies, plans and programmes. (Article 2).
- iii. Submission of the environmental impact assessment documentation to the competent authority of the Party of origin.
- iv. The Party of origin to furnish the affected Party, as appropriate through a joint body where one exists, with the environmental impact assessment documentation. (Article 4).
- v. The Party of origin to make consultation on the potential transboundary impact of the proposed activity and measures to reduce or eliminate its impact through an appropriate joint body, where one exists. (Article 6).
- vi. Parties to carry out a post-project analysis taking into account the likely significant adverse transboundary impact of the activity for which an environmental impact assessment.

### **2.8.3 Convention on the Protection and Use of Transboundary Watercourses and International Lakes (1992)**

The Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) is intended to strengthen national measures for the protection and ecologically sound management of transboundary surface waters and groundwater's. The Convention obliges Parties to prevent, control and reduce water pollution from point and non-point sources. The Convention also includes provisions for monitoring, research and development, consultations, warning and alarm systems, mutual assistance, institutional arrangements, and the exchange and protection of information, as well as public access to information. The Convention obliges Parties to prevent, control and reduce water pollution from point and non-point sources. The Convention also includes provisions for monitoring, research and development, consultations, warning and alarm systems, mutual assistance, institutional arrangements, and the exchange and protection of information, as well as public access to information. Article 3 calls for the application of EIA and other means of assessment for the prevention, control and reduction of transboundary watercourses and international lakes.

### **2.8.4 World Commission on Dams**

The World Commission on Dams (WCD) was set up in 1998 by the World Bank and the IUCN. The commission represented all stakeholders involved in the dam's debate, including industry, governments, water resource managers and dams affected people. The International Commission on Large Dams (ICOLD) defines a large dam as being over 15m high. The definition also includes dams between 5-15 m high with a reservoir exceeding 3 million cubic meters. The commission gives a clear guidelines and recommendations for decision makers aimed at safeguarding rights, reducing the risk of conflicts and lowering overall costs, including social and environmental ones. The report also proposed improved management of existing dams in order to minimise environmental and social impacts. MEMD will use some of the best practice and guidelines to guide in the implementation of KHPP (subprojects activities) in dam construction.

### **2.8.5 The Convention on Biological Diversity(1972)**

The Convention on Biological Diversity (CBD) has three main objectives all of which have implications for EIA, these are: to conserve biological diversity; the use biological diversity in a sustainable fashion and to share the benefits of biological diversity fairly and equitably (Art 1). The Convention makes the following requirements in relation to EIA:

- a) Parties are required to use EIA effectively to avoid or minimize significant adverse impacts on biodiversity; ( Article. 14)
- b) Parties are also required to promote consultation on activities that are likely to significantly affect adversely the biodiversity of areas beyond the limits of national jurisdiction, by encouraging the conclusion of bilateral, regional or multilateral arrangements, as appropriate.

The Convention introduces Strategic Environmental Assessment (SEA) to assess environmental implications of policies and programmes particularly for those which major implications for natural resource use for example, transport, hydropower.

### **2.8.6 The Convention on Wetlands of International Importance, Especially for Waterfowl Habitat (Ramsar Convention) of 1971**

The Convention seeks to ensure the wise use of all wetlands and provides for the more stringent conservation of those wetlands listed in the List of Wetlands of International Importance. It also seeks to promote the conservation of wetlands and waterfowl and compensate for any loss of wetland resources. The Ramsar Convention (and protocols there under) has provisions for EIA on activities to be conducted on wetlands. Article 3.1 requires contracting parties to formulate and

implement their planning so as to promote the conservation of the wetland included the list, and as far as possible the wise use of wetlands in their territory. Article 3.2 requires parties to arrange to be informed at the earliest possible time if the ecological character of any wetland in its territory and included in the list (or wetlands of international importance) has changed, is changing or is likely to change as the result of technological developments, pollution or other human interference.

Resolution VII.16 by adopted by the 7th Conference of the Contracting Parties, *San José, Costa Rica, 1999*) calls upon contracting parties to ensure that projects, plans, programmes and policies with the potential to alter the ecological character of wetlands (Ramsar list) or impact negatively on other wetlands within their territories are subject to rigorous impact assessment procedures including public involvement (of local communities likely to be affected).

The convention provides further that contracting parties with shared wetlands and rivers with shared wetlands and river basins encourage cooperation approaches to impact assessment with neighbouring countries. EIA should not be restricted merely to the site of the proposed development, or the defined wetland, but should address external other elements such as upstream/downstream influences, and should have regard to interactions between all components of water systems at the catchments level. This convention on wetlands of international importance especially as waterfowl habitat (or Ramsar Convention 1971) as amended in 1982 and 1987, was ratified by Uganda in 1988. The Murchison Falls wetland system at the northern tip of Lake Albert is an important bird habitat and spawning ground for Lake Albert fisheries. This wetland and the Victoria Nile stretch up to Murchison Falls are designated a Ramsar site (Site No. 1640. Date designated: 15/09/06). However, this site is far from the proposed dam site at Karuma for KHPP.

### **2.8.7 The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (1973)**

The objective of CITES, 1973 is to prevent international trade from threatening the survival of wild fauna and flora. To achieve the above objective, CITES has established an international network for the control of international trade in live and dead animals and plants and of parts and derivatives thereof. Control of international trade in endangered species is primarily done through government permits/certificates required for such trade. Monitoring international trade is based on Trade Records.

The Convention functions as the result of permit system for species listed in three categories. Appendix I species include those threatened by extinction, which are or may be affected by trade.

Appendix II species are those that may become threatened with extinction if trade is not strictly regulated. And Appendix III species include those species, which individual Parties to the Convention choose to make subject to regulations and which require the cooperation of the other Parties in controlling trade. This convention seeks to ensure that international trade in species of wild fauna and flora does not threaten their survival in the wilderness. Species on the CITES lists are considered of conservation concern.

#### **2.8.8 Protocol Agreement on Conservation of Common Natural Resources (1982)**

Uganda signed the Protocol Agreement on the Conservation of Common Natural Resources (1982). The relevancy of this agreement to the project is the fact that River Nile is a watercourse shared by nations lying between Uganda and Egypt. Straddling the border of Uganda and Democratic Republic of Congo (DRC) is a shared water body.

#### **2.8.9 Convention Concerning the Protection of the World Cultural and Natural Heritage (1972)**

The Convention requires each party to recognize that it has the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage (Article. 4). Parties are also required to ensure that effective and active measures are taken for the protection, conservation and presentation of the cultural and natural heritage situated on its territory, each State Party to this Convention shall endeavour, in so far as possible, and as appropriate for each country. (Article. 5) Effective measures to be taken include assessment of the feasible project alternatives to prevent or minimise or compensate for adverse impacts and assess the nature and extent of potential impacts on these resources, and designing and implementing mitigation plans.

#### **2.8.10 Convention on the Conservation of Migratory Species of Wild Animals (1979)**

The Convention aims to conserve terrestrial, marine and avian migratory species throughout their range. The Convention on conservation of migratory species of wild animals, (1979), in Article 3.4 requires parties to undertake appropriate measures to prevent the endangering of migratory species. In that regard, EIA and SEA serve as important tools for implementing Article 3.4 of the protection of migratory species specified in Appendix 1 of the convention.

#### **2.8.11 The United Nations Framework Convention on Climate Change (UNFCCC, 1992)**

The main objective of the Convention is to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate

system. The Convention requires parties to avoid adverse effects on the environment and adopt measures and policies to control of carbon dioxide emissions in technologies. All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances. They are required to take climate change considerations into account, to the extent feasible, in their relevant social, economic and environmental policies and actions, and employ appropriate methods, for example impact assessments, formulated and determined nationally, with a view to minimizing adverse effects on the economy, on public health and on the quality of the environment of projects or measures undertaken by them to mitigate or adapt to climate change (Article 4 f).

#### **2.8.12 The Kyoto Protocol to the United Nations Framework Convention (1992)**

The Kyoto Protocol has the same ultimate objective as the United Nations Framework Convention on Climate Change (UNFCCC), which is the stabilization of atmospheric concentrations of greenhouse gases at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner. All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities are required to cooperate in scientific and technical research and promote the maintenance and the development of systematic observation systems and development of data archives to reduce uncertainties related to the climate system, the adverse impacts of climate change. (Article 10 d)

#### **2.8.13 The Basel Convention (1989)**

The overall goal of the Basel Convention is to protect, by strictly controlling, human health and the environment against the adverse effects which may result from the generation, transboundary movement and management of hazardous and other wastes.

This Convention requires that the Parties exercising their right to prohibit the import of hazardous wastes or other wastes for disposal should inform the other. It also requires the parties to ensure that the transboundary movement of hazardous wastes and other wastes is reduced to the minimum consistent with the environmentally sound and efficient management of such wastes, and is conducted in a manner which will protect human health and the environment against the adverse effects which may result from such movement.

### **2.8.14 The Bamako Convention on the ban of the Import into Africa and the Control of Transboundary Movement of Hazardous Wastes within Africa (1991)**

The objectives of the Bamako Convention are to protect human health and the environment from dangers posed by hazardous wastes by reducing their generation to a minimum in terms of quantity and/or hazard potential. The Convention requires that each Party adopts and implements the preventive, precautionary approach to pollution problems which entails, inter alia, preventing the release into the environment of substances which may cause harm to humans or the environment without waiting for scientific proof regarding such harm. (Article 3 d).

## **2.9 EIA AND SOFT LAW INSTRUMENTS**

There are soft law principles that are relevant to EIA procedures. These include:

### **2.9.1 The Stockholm Declaration 1972**

The Declaration was the first international forum to consider environmental issues at the universal level. The Declaration states that in order to achieve a more rational management of resources and thus to improve the environment, States should adopt an integrated and coordinated approach to their development planning so as to ensure that development is compatible with the need to protect and improve environment for the benefit of their population (Principle 13). It further states that rational planning constitutes an essential tool for reconciling any conflict between the needs of development and the need to protect and improve the environment. (Principle 14) The Declaration calls for rational planning which is fundamental for EIA.

### **2.9.2 The Rio Declaration (1992) and Agenda 21**

The Rio Declaration was the product of the United Nations Conference on Environment and Development (UNCED). It formally recognized that the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations and emphasized that in order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it (Principles 3 and 4).

The Declaration recognises Environmental impact assessment, as a national instrument, and therefore should be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority (Principle 17). Chapter 8 of Agenda 21 requires for comprehensive analytical procedures for prior and simultaneous assessment of the impacts of decisions, including impacts within and among the economic, social

and environmental spheres,” which procedures should extend beyond the project level to policies and programmes.

### **2.9.3 The United Nations Environment Programme (UNEP) Principles on Shared Natural Resources (1978)**

These are principles regarding natural resources shared by two or more States. They are based on the principles of good faith and the spirit of good neighborliness. Principle 4 recommends that states undertake “environmental assessment before engaging in any activity with respect to shared natural resources which may create a risk of significantly affecting the environment of another state or states sharing that resource”.

## **2.10 THE REGIONAL EIA LEGAL AND REGULATORY FRAMEWORK**

### **2.10.1 The East African Treaty, 1999**

The East African Treaty establishes the East African Community (EAC). It requires the Partner States to cooperate in all issues of Environment and Natural Resource (ENR) Management (Article 11) The Treaty requires the Partner States to cooperate, preserve, protect and enhance the quality of the environment and to ensure sustainable utilization of shared natural resources. In so doing the Partner States are required to develop jointly common policies and strategies to ensure sustenance and preservation of ecosystems. In particular, the Partner States are to develop strategies, manage fragile ecosystems including both terrestrial and aquatic resources and mitigate negative trans-boundary impacts. The Partner States are also expected to integrate environmental management and conservation measures in all their national development plans and activities, institute measures to encourage public awareness and education, harmonize their policies and regulations, and adopt common environmental standards and exchange information. The Treaty therefore sets the premise for instituting regional environmental assessment guidelines for the management of transboundary ecosystems in East Africa.

### **2.10.2 The Environmental Assessment Guidelines for Shared Ecosystems in East Africa**

The environmental assessment guidelines are intended to rationalize the management, exploitation and use of natural resources in shared ecosystems amongst the EAC Partner States. They apply to all activities within the context of a trans-boundary area or cross-border area between any or all of the three East African countries, which is considered as the potential impact area for a specified activity. The guidelines set out the procedure for conducting transboundary environment assessment in shared ecosystems in East Africa. They also provide for seven levels which include:

*(a) Screening Phase*

Under this phase the developer is required to prepare and submit twenty copies of the project brief to the Head of the National Environment Management Agency of the country of origin of the proposal. The Head of the Environmental Agency of the country of origin distributes copies of the Project Brief within 7 days to the Lead Agency in the country of origin of the proposal, the EAC Secretariat and the Heads of Environmental Agency in the country of impact.

*(b) Scoping*

Under this phase the developer in consultation with the Environment Agencies of the country of origin and impact is required to publicize the intended project, its anticipated effects and benefits through the mass media in the country of origin and in the country of impact in languages understood by the affected communities and invite comments to be received within a period of not more than 30 working days. The developer is also required to prepare a scoping report which summarizes the results of scoping, and which constitutes part of the Terms of Reference for the Study.

*(c) Environmental Impact Study*

Based on the information from the scoping exercise, an Environmental Assessment Study is conducted by the developer who prepares an EIS. Based on the information from the scoping exercise, an Environmental Assessment Study is conducted by the developer who prepares an EIS. The developer then submits 15 copies of the EIS to the Head of the Environment Agency of the country of origin of the project. The latter is then supposed to distribute, within 7 days of receipt, copies of the EIS to the Lead Agencies in the country of origin; Environment Agency of impacted country; EAC Secretariat; affected trans-border districts, communities, libraries, civil society organizations, academic and other interested organizations like donors.

*(d) Review of the EIS*

The Lead Agency in the country of origin reviews the EIS and provides comments to the Head of the Environment Agency of the country of origin of the project within 14 days of receipt; secondly, the Lead Agency in the country of impact also reviews the EIS and provides comments to the Head of the Environment Agency of their country within 14 days of receipt; thirdly the Environment Agency in the country of impact submits comments on the EIS to the Head of the Environment Agency of the country of origin with copies to the EAC Secretariat within 30 working days of receipt of comments from the impacted country. The Head of the Environmental Agency of the country of origin is also required to aggregate and summarize the views of the Environment Agency of the country of impact and those from the Lead Agencies of his/her own country and submit a



report including his/her recommendation to approve or not to approve the proposed project to the Environment Agency in the country of impact with copies to the EAC Secretariat within 21 working days from receipt of comments. If the proposed project is controversial, then the Environment Agency of the country of origin of the project is required to call a public hearing within 14 working days after receiving the controversy and providing 30 working days notice before holding the public hearing. The public hearing involves stakeholders of the country of impact and the country of origin and the EAC Secretariat. If the Environment Agencies of the country of origin and the country of impact fail to resolve their position on whether the EIS of the proposed project should or should not be approved before and even after the public hearing, then the matter will be referred to the EAC Secretariat for resolution. The EAC Secretariat then processes the appeal given to it by the country of origin and or country of impact of the project in accordance with its appeal and conflict resolution procedures and informs the Environment Agencies of the countries of origin and the country of impact the outcome of the appeal within reasonable time using its own procedures.

*(e) Public Hearing*

The public hearing is called and organized by the Environment Agency of the country of origin in consultation with the Environment Agency of the country of impact.

*(f) Decision Making*

The decision to approve or not to approve is taken after the review process of the EIS by all concerned stakeholders in both the country of origin and the country of impact. The project can be rejected if the trans-boundary EIS review process involving all the key stakeholders establish that the EIS is not sufficient, or is incomplete or that it has far reaching and irreversible significant negative trans-boundary impacts.

*(g) Appeal Process*

The developer may make an appeal if the proposed project is good, has minimal negative impacts and that its EIS is sufficient but the Environment Agency of the country of impact is unwilling to approve the EIS. An appeal can also be made if the Environment Agencies of the country of origin and the country of impact fail to resolve their position on whether the EIS of the proposed project should or should not be approved before and even after the Public Hearing and if the EAC Secretariat fails to find a solution.

*(h) Meeting the Costs of a Trans-boundary EA*

The cost of undertaking the EIA in a trans-boundary context is in general terms the responsibility of the project proponent; secondly, the screening costs should be met by the Environment Agency of

the country of origin of the project and the country of impact, respectively. Third, where the project proponent is the private sector and if the country of origin benefits, or the investment is of national significance the costs of EIA should, upon mutual agreement, be shared between the private sector and the government of the country of origin of the project. In addition, if the Environment Agency in the country of origin of the project is convinced that the proposed project has no serious negative impacts and he/she is ready to approve but the country of impact is in serious doubt, then the project proponent must meet the cost of revisiting the EIA process in the country of impact.

In cases where the governments of the EAC Partner States initiate a project with trans-boundary impacts, then that government has an obligation to meet all the EIA related costs and where any two or three of the EAC Partner States mount joint projects as developers or proponents, then the respective governments can bear the EIA related costs. In all cases, the cost of distribution of reports is met by the Environment Agencies in the countries of origin and impact. Since the Environment and Lead Agencies in the EAC Partner States are currently involved in auditing and monitoring activities as part of their obligations, they all contribute towards the cost of monitoring, auditing and mitigation of trans-boundary activities in their respective countries. Lastly, where the country of impact is not satisfied with decisions taken jointly between them, then the project proponent, meets all the costs arising from appeals and reviews for approval of the EIS.

### **2.10.3 The Lake Victoria Protocol, 2003**

The Protocol governs the Partner States Cooperation in the Sustainable Development of Lake Victoria Basin. (Article 2) The scope of cooperation covers environmental protection and management of the Basin (Article 3). It requires the Partner states to carry out the following in relation to EIA:

- a) Develop national laws and regulations requiring developers of projects to undertake environmental impact assessment of planned activities, which are likely to have a significant impact on the resources of the Basin.
- b) Through EIA, a Partner State to determine that a project is likely to have a significant transboundary effect on the resources of the Basin and such a State is required to avail to other Partner States and the Secretariat, the environmental impact statement for comments.
- c) In determining whether to approve an environmental impact statement for a project with transboundary effects, the Partner State in whose jurisdiction the project is proposed, shall take into account the comments of the other Partner States.

- d) A Partner State, whose views on the environmental impact statement or report are not taken into account, may invoke the dispute settlement procedure under Article 46 of this Protocol by notifying the Partner State and the Secretariat of its intention. (Article 12)

#### **2.10.4 Protocol on Environment and Natural Resources Management, 2006**

The objectives of the Protocol are to promote sustainable development and sustainable utilization of the Partner States' environment and natural resources through prevention of activities.

Partner States are required to observe the principles the principle of the fundamental right of the people to live in a clean and healthy environment; the principle of co-operation in the management of environment and natural resources including those of transboundary in nature; the principle of environmental impact assessment; the principle of environmental audit and monitoring. Partner states commit to conducting of environmental impact assessments and environmental audits (Article 6).

Partner states are required to harmonize and adopt common policies, laws and programmes requiring the conduct of environmental impact assessments for planned activities and projects which are likely to have significant adverse impacts in the Community. They also required at an early stage to plan for transboundary activities and projects that may have significant adverse environmental impacts and at an early stage, undertake a comprehensive assessment of the impacts with regard to their own territories and the territories of other Partner States.

The Partner States are required to adopt common guidelines on environmental impact assessment in shared ecosystems including the criteria and procedures for conducting environmental assessments for planned activities and projects which are likely to have significant adverse environmental impacts.

Partner States are required to develop and adopt common guidelines and procedures for periodic environmental audits of the environmental soundness of activities or projects being implemented in the Community Article 31.

#### **2.10.5 The Nile Basin Initiative and its Investment Programs**

The Nile Basin Initiative (NBI) is a partnership initiated and led by the riparian states of the Nile River through the Council of Ministers of Water Affairs of the Nile Basin states (Nile Council of Ministers, or Nile-COM). The NBI seeks to develop the river in a cooperative manner, share

substantial socioeconomic benefits, and promote regional peace and security. Cooperative water resources management is complex in any international river basin. In the Nile Basin, which is characterized by water scarcity, poverty, a long history of dispute and insecurity, and rapidly growing populations and demand for water, it is particularly difficult. The NBI started with a participatory process of dialogue among the riparians that resulted in their agreeing on a shared vision—to achieve sustainable socioeconomic development through the equitable utilization of, and benefit from, the common Nile Basin water resources.

Recognizing that cooperative development holds the greatest prospects for bringing benefits to the entire region, and aware of the challenges, the Nile riparians took an historic step in establishing the Nile Basin Initiative. Formally launched in February 1999, the initiative provides an institutional mechanism, a shared vision, and a set of agreed policy guidelines to provide a basin wide framework for cooperative action.

The Strategic Action Program represents the Nile riparians' strategic approach to achieving sustainable socio-economic development in the basin through “equitable utilization of, and benefit from, the common Nile Basin water resources.” The Strategic Action Program provides the means for translating this shared vision into concrete activities through a two-fold, complementary approach:

- I. Lay the groundwork for cooperative action through a regional program to build confidence and capacity throughout the basin (the Shared Vision Program)
- II. Pursue, simultaneously, cooperative development opportunities to realize physical investments and tangible results through sub-basin activities (Subsidiary action programs) in the Eastern Nile and the Nile Equatorial Lakes regions.

#### **(a) The Nile Equatorial Lakes Subsidiary Action Program**

The Nile Equatorial Lakes region includes the six countries in the upstream portion of the Nile Basin;—Burundi, Democratic Republic of Congo, Kenya, Rwanda, Tanzania and Uganda—as well as the downstream riparians Egypt and Sudan. The objectives of NELSAP as defined by the Nile Equatorial Lakes Council of Ministers are to contribute to the eradication of poverty, promote economic growth, and reverse environmental degradation. NELSAP is expected to be a long-term program, with multiplier effects in broader economic integration as the program shows results on the ground.

Continued coordination between NELSAP riparian countries and their project steering mechanisms is important to create synergies between different regional development efforts in the Nile

Equatorial Lakes Region. This includes programs such as the Lake Victoria Development Program (LVDP) and the Lake Victoria Visioning Exercise of the East African Community (EAC), the Lake Victoria Environment Management Program (LVEMP), and the Lake Victoria Fisheries Development Program (LVFDP). Projects have been identified by the Nile Equatorial Lakes riparians in a highly consultative manner, targeting investments in Water Resources Management of shared sub-basins, Hydropower Development and Transmission Interconnection, Fisheries Development and Lakes Management, Water Resources Management, Agriculture Development, and Water Hyacinth Control. Depending on the scale and scope of the project, preparation takes between one and three years. Projects will be prepared and implemented by the countries involved and will be guided by regional project steering committees or any other suitable regional steering mechanism agreed upon by the participating riparian countries. A Coordination Unit (NEL-CU) based in Kigali, Rwanda has been established to facilitate project preparation and implementation.

#### **(b) The Eastern Nile Subsidiary Action Program**

The Eastern Nile Subsidiary Action Program (ENSAP) is an investment program by the Governments of Egypt, Ethiopia and the Sudan under the umbrella of the Nile Basin Initiative (NBI). It is led by the Eastern Nile Council of Ministers (ENCOM), comprised of the Water Ministers in the three Eastern Nile countries, and an ENSAP Team (ENSAPT) formed of three technical country teams. The objective of ENSAP is to achieve joint action on the ground to promote poverty alleviation, economic growth and reversal of environmental degradation. The Eastern Nile Technical Regional Office (ENTRO) was established by an ENCOM decision in 2001, started operation in June 2002 in Addis Ababa, Ethiopia, and was restructured in 2004/2005. ENTRO manages and coordinates the preparation of ENSAP projects, capacitate and strengthen institutions and provides secretariat support to ENCOM/ENSAPT. ENTRO has a Social development Office (SDO) that supports all ENSAP projects through: capacity building in social development, input to project design, formulation of guidelines, initiation of pilot and background studies and analysis; and networking

#### **2.10.6 EAC Protocol on Environment**

The protocol was signed by the Partner States of the East African Community on 29th November 2003. It has relevant provisions for environmental and social management for the project; Article 5: Paragraph 4 provides that Partners States should promote sustainable utilization of water resources while taking into consideration factors such as ecology, geographic, climatic, hydrologic factors among others; the social and economic needs of each Partner States; the population dependent on the water resources; existing & potential uses of the water resources.

Article 6: Paragraph 1 identifies the protection and conservation of the basin and its ecosystem with emphasis on improving water quality and quantity; preventing the introduction of invasive species; conservation of biological diversity and forest resources; protection and conservation of wetlands and fisheries resources conservation. Part 2 of the article provides for the harmonization of laws and policies for stakeholder participation in protection, conservation and rehabilitation. Sustainable agriculture and land use practices to achieve food security and rational agricultural production is provided for in Article 9. Article 12 of the Protocol urges Partner States to develop national laws and regulations requiring project proponents to undertake EIA and review of EIA reports to be done by all the Partner States if the potential impacts are likely to be trans-boundary and the same to apply for Environmental Audits in Article 13.

Partner states should ensure control of pollution from non-point sources through legal, economic and social measures. This is provided for in Article 20 which further states that pollution control measures should promote sustainable forestry practices, appropriate agricultural land use methods, sanitation and hygiene within the basin. Public participation is provided for in Article 22 which should be enhanced to influence government decisions on project formulation and implementation. Article 23 of the Protocol provides that Partner States should promote Community involvement and mainstreaming gender concerns at all levels of socio-economic development especially in decision making, policy formulation and implementation of projects and programmes.

## **2.11 EIA REQUIREMENTS OF INTERNATIONAL FINANCIAL INSTITUTIONS**

The World Bank (WB) and the regional development banks, such as the African Development Bank (AfDB), Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD), and Inter-American Development Bank (IADB), have well-established EIA procedures, which apply to their lending activities and projects undertaken by borrowing countries. Although their operational policies and requirements vary in certain respects, the development banks follow a relatively standard procedure for the preparation and approval of an EIA report. The EIA policies and arrangements of the development banks are important, especially in countries that require financial assistance from these international financial institutions and have weak or non-existent domestic arrangements. The next Section reviews the EIA policies of the International Financial Institutions (IFIs). The following provides a summary of the environmental and social requirements of the key IFIs who might be involved in this project and are expected to include: African Development Bank (AfDB); World Bank (WB); International Finance Corporation (IFC); Multilateral Investment Guarantee Agency (MIGA); European Investment Bank (EIB).

### 2.11.1 World Bank Safeguard Policies

The World Bank Group (WBG) includes two development institutions owned by 184 member countries – the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA). The IBRD focuses on middle income and creditworthy poor countries, while IDA focuses on the poorest countries in the world. In addition to the IBRD and IDA, three other institutions are members of the WBG: the International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency (MIGA) and the International Centre for Settlement of Investment Disputes (ICSID). The following discussion applies to IBRD and IDA.

The operations of IDA and IBRD members are guided by a comprehensive set of environmental and social policies and procedures dealing with the Bank’s development objectives and goals, the instruments for pursuing them, and the project sponsor requirements for Bank-financed operations. These policies and guidelines, known as Operation Policies (OPs), are set out in the Bank’s Operational Manual. The OPs are focused statements that follow from the Bank’s Articles of Agreement, general conditions, and Bank policies specifically approved by the Board. The Manual also addresses procedures, good practice and advice on implementation of policies.

Within the overall set of OPs, the Bank has identified ten key policies critical to ensuring that potentially adverse environmental and social impacts are identified, minimized and mitigated. The Bank undertakes screening of each proposed project to determine the appropriate extent and type of Environmental Assessment (EA) to be undertaken. Depending on the type, location, sensitivity, and scale of the project and the nature and magnitude of its potential environmental impacts, the Bank will classify the proposed project into one of the categories (A, B, C). In implementing the proposed KHPP, seven WB environment Safeguard Policies discussed below are important:

#### (a) *Environmental Assessment (OP 4.01)*

This policy requires Environmental Assessment (EA) of projects proposed for World Bank financing to help ensure that they are environmentally sound and sustainable, and thus improve decision making. The EA is a process whose breadth, depth, and type of analysis depend on the nature, scale, and potential environmental impact of the proposed project. The EA process has thus taken into account the natural environment (air, water, and land); human health and safety; social

aspects (involuntary resettlement, indigenous peoples, and cultural property) and transboundary and global environmental aspects.

We have assessed and determined future potential environmental and social impacts during implementation of this project, and we have also clearly elaborated various mitigation, monitoring and institutional actions to be taken during the implementation of the project activities. This is geared towards eliminating, reducing the adverse environmental and social impacts to acceptable standards. This EIA report is therefore subject to disclosure to the general public and IDA.

The World Bank system assigns a project to one of three project categories, as defined below:

- (a) *Category “A” Projects:* An EIA is always required for projects that are in this category. Impacts are expected to be ‘adverse, sensitive, irreversible and diverse with attributes such as pollutant discharges large enough to cause degradation of air, water, or soil; large-scale physical disturbance of the site or surroundings; extraction, consumption or conversion of substantial amounts of forests and other natural resources; measurable modification of hydrological cycles; use of hazardous materials in more than incidental quantities; and involuntary displacement of people and other significant social disturbances;
- (b) *Category “B” Projects:* Although an EIA is not always required, some environmental analysis is necessary. Category B projects have impacts that are ‘less significant, not as sensitive, numerous, major or diverse. Few, if any, impacts are irreversible, and remedial measures can be more easily designed.’ Typical projects include rehabilitation, maintenance, or upgrades, rather than new construction and;
- (c) *Category “C” Projects:* No EIA or other analysis is required. Category C projects result in negligible or minimal direct disturbance of the physical environment. Typical projects include education, family planning, health, and human resource development.

In professional opinion of the ESIA study team and in consultation with key stakeholders, the KHPP was classified as a Category A project, and after carrying out baseline studies during the EA exercise, we concur that this project falls under Category A.

**(ii) Natural Habitats (OP 4.04)**

The conservation of natural habitats, like other measures that protect and enhance the environment, is essential for long term sustainable development. World Bank therefore supports the protection, maintenance, and rehabilitation of natural habitats. Natural habitats are land and water areas where (i) the ecosystems biological communities are formed largely by native plant and animal species, and



(ii) human activity has not essentially modified the areas primary ecological functions. All natural habitats have important biological, social, economic, and existence value. Important habitats may occur in tropical humid, dry, and cloud forest; temperate and boreal forest; Mediterranean-type shrub lands; natural arid and semi-arid lands, mangrove swamps, coastal marshes, and other wetlands; estuaries, sea grass beds, coral reefs, freshwater lakes and rivers; alpine and sub alpine Environments, including herb fields, grasslands, and paramos; and tropical and temperate grasslands.

Therefore, the natural habitats policy may be triggered in certain cases because the proposed KHPP may have potential impacts on the Nile River, MFNP, wetlands and their catchment area. These ecosystems do support varying degrees of natural complexities of flora and fauna. Therefore, in regard to the above policy, we have proposed various mitigation measures to eliminate and or reduce the likely impacts as a result of implementing the projects.

***(iii) Involuntary Resettlement (OP 4.12)***

The objective of this policy to avoid, where feasible, or minimize, exploring all viable alternative project designs, to avoid resettlement. This policy is active in situations involving involuntary taking of land and involuntary restrictions of access to legally designated parks and protected areas (like MFNP). The policy aims to avoid involuntary resettlement to the extent feasible, or to minimize and mitigate its adverse social and economic impacts.

This policy covers direct economic and social impacts that both result from Bank assisted investment projects, and are caused by (a) the involuntary taking of land resulting in (i) relocation or loss of shelter; (ii) loss of assets or access to assets, or (iii) loss of income sources or means of livelihood, whether or not the affected persons must move to another location; or (b) the involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons. The policy prescribes compensation and other resettlement measures to achieve its objectives and requires that borrowers prepare adequate resettlement planning instruments prior to project appraisal of proposed projects. The objective of this policy to avoid where feasible, or minimize, exploring all viable alternative project designs, to avoid resettlement. The policy requires the displaced persons and their communities, and any host communities receiving them, are provided timely and relevant information, consulted on resettlement options, and offered opportunities to participate in planning, implementing, and monitoring resettlement. Appropriate and accessible grievance mechanisms are established for these groups. In new resettlement sites or host communities, infrastructure and public services are

provided as necessary to improve, restore, or maintain accessibility and levels of service for the displaced persons and host communities.

In the context of Karuma HPP the affected communities will be resettled in an already established location and property evaluation for the affected parties has been done and completed in consultation with the affected communities, as discussed in the RAP.

***(iv) Forests (OP 4.36)***

This operational policy aims to reduce deforestation, enhance the environmental contribution of forested areas, promote afforestation, reduce poverty, and encourage economic development. The policy recognizes the role forests play in poverty alleviation, economic development, and for providing local as well as global environmental services. Success in establishing sustainable forest conservation and management practices depends not only on changing the behavior of all critical stakeholders, but also on a wide range of partnerships to accomplish what no country, government agency, donor, or interest group can do alone. The forest strategy suggests three equally important and interdependent pillars to guide future Bank involvement with forests including harnessing the potential of forests to reduce poverty, integrating forests in sustainable economic development, and protecting vital local and global environmental services and forest values. This policy applies to the World Bank-financed investment projects that have or may have impacts on the health and quality of forests, projects that affect the rights and welfare of people and their level of dependence upon or interaction with forests and projects that aim to bring about changes in the management, protection, or utilization of natural forests or plantations, whether they are publicly, privately, or communally owned. There is a possibility of RSSP triggering this policy through interventions on catchment areas of some of these sites through reforestation, terracing among other soil and water conservation measures and promotion of agro forestry farm practices in selected hillsides.

***(v) International Waterways (OP 7.50)***

This policy recognizes the importance of cooperation and good will of riparians as essential for the efficient utilization and protection of international waterways and attaches great importance to riparian's making appropriate agreements or arrangement for the entire waterway or any part thereof. Projects that trigger this policy include hydroelectric, irrigation, flood control, navigation, drainage, water and sewerage, industrial, and similar projects that involve the use or potential pollution of international waterways. This policy relates to the relations between the riparian states. In the absence of such agreements or arrangements, the Bank requires, as a general rule, that the prospective borrower notifies the other riparian of the project. The policy lays down detailed procedures for the notification requirement, including the role of the Bank in affecting the

notification, period of reply and the procedures in case there is an objection by one of the riparian to the project. The policy applies to any river, canal, lake, or similar body of water that forms a boundary between, or any river or body of surface water that flows through, two or more states, whether World Bank members or not. It also includes any tributary or other body of surface water any bay, gulf, strait, or channel bounded by two or more states or, if within one state, recognized as a necessary channel of communication between the open sea and other states and any river flowing into such waters. The policy recognizes prior riparian states agreements/arrangements such as the Nile Basin which the project falls under. The policy also calls for notification of riparian states by parties that proposes to undertake project that affects international waters. In the context of Karuma HPP these issues are duly taken care in view of the various legal and regulatory frameworks as discussed under section 2.10.

***(vi) Dam Safety (OP 4.37)***

Operational Policy dam safety requires that experienced and competent professionals design and supervise construction, and that the borrower adopts and implements dam safety measures through the project cycle. The policy also applies to existing dams where they influence the performance of a project. In this case, dam safety assessment should be carried out and necessary additional dam safety measures implemented. The policy distinguishes between small and large dams by defining small dams as those normally less than 15 meters in height. This category includes, for example, farm ponds, local silt retention dams, and low embankment tanks. Large dams are 15 meters or more in height. Dams that are between 10 and 15 meters in height are treated as large dams if they present special design complexities. Dams under 10 meters in height are treated as large dams if they are expected to become large dams during the operation of the facility. According to the policy, large dams, the Bank requires;

- I. reviews by an independent panel of experts (the Panel) of the investigation
- II. design, and construction of the dam and the start of operations,
- III. preparation and implementation of detailed plans: a plan for construction,
- IV. supervision and quality assurance, an instrumentation plan, an operation and maintenance plan, and an emergency preparedness plan,
- V. prequalification of bidders during procurement and bid tendering, and
- VI. periodic safety inspections of the dam after completion.
- VII. In the context of Karuma HPP, all these have been duly considered in Detail Engineering report and subsequent report for EPC contract.

***(vii) Cultural Property (OP 4.11)***

The bank operational policy on safeguarding cultural properties aims protecting cultural assets and knowledge of communities in bank financed project areas. Safeguarding cultural property policy requires the determination of what is known about the cultural aspects of the proposed project site. The policy calls for consultation involving all parties including scientific institutions and NGOs as part of this process. The policy defines cultural property as sites having archaeological, palaeontological, historical, religious and unique natural value. KHPP involves excavation of ground for dam and tunnel construction. As such from the ESIA, it is understood that the project area does not involve any such cultural property.

### **2.11.2 The African Development Bank (AfDB)**

AfDB policy on environmentally sustainable development in Africa is described in the 2004 Bank Group Policy on the Environment. The policy acknowledges the need to preserve and enhance ecological capital to sustain and enrich economic growth in Africa. Two procedural guidelines central to the new Policy on the Environment were completed in 2004, namely;

- I. The Strategic Impact Assessment Guidelines (SIA) and
- II. The Integrated Environmental and Social Assessment Guidelines (IESA).

The SIA is a systematic process of evaluating the environmental consequences of any proposed policy or programme, as well as a tool for assessing social and environmental sustainability or policy-based lending, structural adjustment, and sector investment lending. The IESA Guidelines are designed to ensure the inclusion of environmental and social issues in Bank projects throughout the project cycle. These provide guidelines for sector-specific issues and impacts that should be taken into account during the preparation and assessment phases of a project.

The companion documents to the IESA Guidelines are the Environmental and Social Assessment Procedures for African Development Bank's Public Sector Operations (2001) of the African Development Bank and the AfDB's Policies on Environment and Involuntary Resettlement (2003). These documents provide the procedural process by which public sector sponsored projects are categorized and assessed. More information on the AfDB's environmental and social requirements can be viewed at [www.afdb.org](http://www.afdb.org).

### **2.11.3 The European Bank of Reconstruction and Development Environmental Policy**

The European Bank of Reconstruction and Development (EBRD) Environmental Policy (2003 & 2004) requires all proposals to undergo environmental screening to identify potential environmental

risks and liabilities. The policy also calls for the categorization of all projects for environmental screening or environmental auditing.

#### **2.11.4 The European Investment Bank and its Relevant Policies**

The European Investment Bank (EIB) is the financing institution of the European Union (EU). The task of the EIB is to contribute towards the integration, balanced development and economic and social cohesion of the Member Countries. Outside the Union, the EIB implements the financial components of agreements concluded under European development aid and cooperation policies. The EIB is based in Luxembourg. The EIB grants loans mainly from the proceeds of its borrowings. Outside the EU, EIB financing operations are conducted principally from the Bank's own resources but also, under mandate, from Union or Member States' budgetary resources. Following the conclusions of the Lisbon European Council in March 2000, the Board of Governors decided to set up the "EIB Group," consisting of the EIB and the European Investment Fund.

As the EU's policy-driven bank, all projects selected by the EIB have to be acceptable to, and consistent with, EU environmental policies and law. The EIB environmental policies and procedures are set out in the EIB Environmental Procedures document. The EIB internal environmental oversight is provided by:

- I. Technical experts from the EIB Project Directorate;
- II. An Environmental Unit (ENVU) that develops and monitors the application of the EIB environmental policy and procedures;
- III. The Environmental Assessment Group (ENVAG) that assures quality and consistency of EA throughout the project cycle; and,
- IV. The Environmental Steering Committee (ENVSC) that is responsible for addressing strategic environmental issues and risk assessment.

A "Preliminary Opinion for Appraisal Authorisation" on a proposed project is conducted based on classifications and criteria outlined in the EU Environmental Impact Assessment (EIA) Directive, 85/337/EEC, as amended by 97/11/EC. Following completion of the appropriate level of assessment by the project sponsor, the EIB Projects Directorate will issue an "Appraisal Report" summarising the assessment team's findings and recommendations. All EIB projects are subject to a general environmental loan covenant to ensure appropriate compliance. It is EIB practice to publish the SEA for a project alike the Bujagali HPP on the EIB website at least 60 days before Board presentation. In June 2006, EIB signed the "European Principles for the Environment" with four other of the main European-based multilateral financial institutions. A dedicated website ([www.eib.org/epe](http://www.eib.org/epe)) provides

complete details. Other public documents describing the general approach of the Bank to social and environmental safeguards include its “Environmental Statement” (2004); “The EIB and its Contribution to Sustainable Development” (2002); and, “The EIB Project Cycle” (2001). More information on the EIB’s environmental and social requirements can be viewed at [www.eib.org](http://www.eib.org).

### **2.11.5 The Equator Principles**

The Equator Principles (EP) are a set of environmental and social benchmarks for managing environmental and social issues in development project finance globally. The principles require that for all medium or high risk projects (Category A and B projects), sponsors complete an Environmental Assessment, the preparation of which must meet certain requirements and satisfactorily address key environmental and social issues. (Principle 2)

The principles require that the Environmental Assessment report addresses baseline environmental and social conditions, requirements under host country laws and regulations, applicable international treaties and agreements, sustainable development and use of renewable natural resources, protection of human health, cultural properties, and biodiversity, including endangered species and sensitive ecosystems, use of dangerous substances, major hazards, occupational health and safety, fire prevention and life safety, socio-economic impacts, land acquisition and land use, involuntary resettlement, impacts on indigenous peoples and communities, cumulative impacts of existing projects, the proposed project, and anticipated future projects, participation of affected parties in the design, review and implementation of the project, consideration of feasible environmentally and socially preferable alternatives, efficient production, delivery and use of energy, pollution prevention and waste minimization, pollution controls (liquid effluents and air emissions) and solid and chemical waste management. The principles require for risky projects, the borrower has to consult with stakeholders (NGOs and project affected groups) and provides them with information on the risks of the project (Principle 3).

### **2.11.6 IFC and its Performance Standards**

The IFC is a member of the World Bank Group (WBG), headquartered in Washington, D.C., and is the private sector financing arm of the WBG. IFC’s Environment and Social Development Department is tasked with evaluating, appraising and monitoring the environmental and social impacts of proposed and existing IFC projects. Compliance with IFC’s social and environmental framework is a requirement for project sponsors. The IFC recently completed an integrated review process to update its former Safeguard Policies into a new policy framework that came into effect on April 30, 2006. It includes:

- (a) Policy and Performance Standards on Social and Environmental Sustainability;
- (b) Policy on Disclosure of Information; and,
- (c) Environmental, Health and Safety (EHS) Guidelines (in process).

The IFC Sustainability Policy identifies IFC's roles and responsibilities in ensuring project performance in partnership with project sponsors. The Performance Standards clarify what is expected of project sponsors, and detail requirements that project sponsors will be required to fulfill in order to receive and retain IFC support. There are eight performance standards, as follows:

- I. Performance Standard 1 - Social and Environmental Assessment and Management System;
- II. Performance Standard 2 - Labour and Working Conditions;
- III. Performance Standard 3 - Pollution Prevention and Abatement;
- IV. Performance Standard 4 - Community Health and Safety;
- V. Performance Standard 5 - Land Acquisition and Involuntary Resettlement;
- VI. Performance Standard 6 - Conservation of Biodiversity and Sustainable Natural Resource Management;
- VII. Performance Standard 7 - Indigenous Peoples; and,
- VIII. Performance Standard 8 - Cultural Heritage.

The IFC's Disclosure Policy outlines IFC's commitments and responsibility to disclose information about itself as an institution. Public disclosure requirements for clients are found in the proposed Performance Standards (IFC, 2006) to encourage project sponsors to initiate early and ongoing engagement with the community/communities that are affected by a project. In relation to environmental, health and safety, IFC currently uses two sets of guidelines for its projects:

- I. The environmental, health and safety guidelines contained in the *Pollution, Prevention and Abatement Handbook (PPAH)* (World Bank, 1998); and,
- II. Additional environmental, health and safety guidelines that IFC has prepared since 1993 and for which there are no parallel guidelines in the PPAH.

These guidelines are specific to particular industries, sectors, or types of project. There are, at present, none available for the construction of dams. Where no sector specific guideline exists for a particular project, the World Bank *General Environmental Guidelines* and the IFC's *Occupational Health and Safety Guideline* are applied, with modifications as necessary to suit the project.

Additional information on IFC's social and environmental requirements can be found on [www.ifc.org](http://www.ifc.org).

### 2.11.7 MIGA Safeguard Policies

MIGA, a member of the World Bank Group, addresses concerns about investment environments and perceptions of political risk in developing countries by providing three key services:

- (a) Political risk insurance for foreign investments;
- (b) Technical assistance to improve investment climates and promote investment opportunities; and,
- (c) Dispute mediation services, to remove possible obstacles to future investment.

MIGA's environmental and disclosure policies are derived from WB policies. They are a tool for identifying risks, reducing development costs, and improving project sustainability. Their application benefits affected communities and helps preserve the environment. MIGA's Issue-Specific Safeguard Policies include:

- Natural Habitats;
- Forestry;
- Pest Management;
- Dam Safety;
- Projects on International Waterways;
- Involuntary Resettlement;
- Indigenous Peoples; and,
- Physical Cultural Resources.

During the underwriting of a project, MIGA identifies the policies and guidelines that are applicable to a project. Projects are expected to comply with the applicable policies and guidelines, as well as applicable local, national, and international laws. Considerations include:

- Environmental Assessment Policy;
- Disclosure Policy;
- Environmental and Social Review Procedures;
- Stakeholder Comments – 1999;
- Environmental Guidelines;
- Interim Issue-specific Safeguard Policies;
- Available Category A Environmental Impact Assessments;
- World Bank Note on Alcoholic Beverages; and,
- IFC/MIGA Office of Compliance and Ombudsman.

Further information is available on MIGA's website: [www.miga.org](http://www.miga.org)



### **2.11.8 DEG and its Relevant Policies**

DEG promotes private enterprise in developing and transition countries providing long-term capital for private enterprises investing in those countries. DEG requires project enterprises to achieve the relevant national and international standards, using the Environmental and Social Policies and Guidelines of the World Bank Group as a benchmark. From time to time the Conventions of the International Labour Organisation (ILO) and the Guideline on the Social Compatibility of DEG Business Operations will be adopted. More information on DEG's environmental and social requirements can be viewed at [www.deginvest.de](http://www.deginvest.de).

### **2.11.9 JICA Guidelines for Environmental and Social Considerations**

JICA developed its first Environmental Guidelines in 1990 and has since undertaken their revision which resulted in production of the 2004 version of guidelines which cover development and preliminary studies of grant aid projects and technical cooperation projects. The key objective for the JICA Guidelines for Environmental and Social Considerations is to encourage the recipient governments to take appropriate considerations of environmental and social factors as well as to ensure that JICA's support for and examination of environmental and social considerations are conducted accordingly and in accordance to the national frameworks and acceptable standards. They further outline JICA's responsibility and procedures and requirements for the recipient governments to facilitate achievement of the objectives.