NILE BASIN INITIATIVE
NILE EQUATORIAL LAKES SUBSIDIARY ACTION PROGRAM

NILE COOPERATION FOR RESULTS PROJECT
(NCORE)

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK
(ESMF)

Funded UnderGrants from the Nile Basin Trust Fund and the Cooperation in International Waters in Africa Trust Funds – World Bank

March2014

EXECUTIVE SUMMARY

The Nile Basin Initiative (NBI) is an intergovernmental partnership established in 1999 for cooperative management and development of the common Nile Water Resources. The Nile Basin covers an areas of 3.1 million km^2 spanning the territory of 11 countries and includes critical natural habitats and environmental assets of global significance such as large freshwater lakes, wetlands, tropical forests and conservation areas with rich wildlife.

The Nile Basin Initiative (NBI) has received funds from the World Bank to implement the Nile Cooperation for Results (NCORE) Project. The project implementation is shared by the three NBI centres, the Nile-Secretariat based in Entebbe, Uganda, the Eastern Nile Technical Regional Office (ENTRO) based in Addis-Ababa, Ethiopia, and the Nile Equatorial Lakes Subsidiary Action Program (NELSAP) managed by its Coordination Unit (NELSAP-CU) located in Kigali, Rwanda. The development objective of the NCORE Project is "***to facilitate cooperative water resource management and development in the Nile Basin.***"The NBI has prepared the Nile Cooperation for Results (NCORE) Project as in line with its Strategic Plan 2012-2016. The Project will allow the NBI to achieve and expand upon results in three key areas: (i) enhancing its platform for cooperation in the Nile basin; (ii) providing its stakeholders with tools and knowledge resources for climate resilient water resources management; and (iii) advancing climate resilient and regionally significant water resources development. This objective will be achieved through aligning transboundary work with national priorities and/or ongoing or planned projects, and by conducting targeted regional analyses. Program outputs include: (a) portfolio of climate resilient catalytic transformative sub-projects identified; (b) investments in hydro-power generation as well irrigation and watershed management advanced and program facilitated and coordinated; (c) integration of transboundary water issues in each member state strengthened; (d) evidence of benefits of cooperation and risk of non-cooperation generated and disseminated; (e) Nile Basin decision support system operationalized; and (f) knowledge products on various aspects of the Nile Basin generated and disseminated.

It is anticipated that the planned sub-projects of which exact impacts are not yet known, mainly under Category A projects, will trigger the Environmental Assessment Policy (OP.4.01), thus justifying the development of an Environmental and Social Management Framework as one of the most appropriate management instrument.

The Environment and Social Management Framework (ESMF) of this project has been prepared to: (i) integrate environmental and social aspects into the pre-feasibility and feasibility analysis of potential future sub-projects at the preparation and planning stages; (ii) promote transparency through the use of extensive stakeholder consultations and disclosure procedures; (iii) take into account possible uses of innovative and strategic environmental and social analyses; (iv) encourage consideration of technical alternatives based on possible environmental and social impacts; and (v) strengthen environmental and social management capacities within the NBI institutions. While carrying out planned preparation studies, this ESMF will assist project management in identifying and mitigating the potential negative environmental and social impacts of potential future sub-projects. Among other proposed activities, this ESMF proposes to strengthen the capacity of existing NBI/NELSAP staff and other relevant key stakeholders with aim to deliver the required environmental and social support during the project implementation.

The present ESMF is organized into 9Sections. The first two Sections describe the project's scope and coverage, and objectives of the ESMF in relation to the planned pre-feasibility and feasibility studies to be carried out under the NCORE project. Section 2 specifically discusses the environmental and socio-economic context of the project area and especially the Nile Equatorial Lakes (NEL) region within which the future sub-projects will be developed.Section 3 takes cognizance of national policies and legislation as well as international best practices and safeguard policies in relation to environmental and social management, which define the broad policy and legislative framework under which NBI projects are implemented. A summary of the relevant policies and laws are annexed. Section 4 provides a brief description of potential environmental and social impacts and related mitigation measures. Starting from Section 5, the ESMF defines the due diligence procedures to ensure consistent handling of social and environmental issues. It builds on identification of potential impacts, and includes procedures for screening of potential negative impacts and identification of mitigation measures. Taking into consideration that preliminary studies of the planned sub-projects have identified major environmental and social impacts, the overall NCORE project is classified under Category A. The three NBI centers and in particular NELSAP which is developing these sub-projects, plan to carry out a complete environmental and social impact assessment for each identified sub-project as described in Sections 5. Activities linked to the sub-projects include basin planning as well as irrigation and watershed management of an estimated 55,000 ha of agriculturalland, nearly 50 MW of hydropower energy generation from different dams associated withwater supply, sanitation and flood management facilities. Other activities of the NCORE Project will mainly focus on developing and strengthening knowledge-based tools and monitoring procedures as well as identifying and preparing potential activities that harness the potential of the Nile Basin in the areas of hydropower generation, transmission and distribution systems; agricultural development through irrigation, water supply and sanitation, flood management and watershed management. Section6 describes the institutional framework in place for environmental and social management in the NBI region. At regional level, this includes the Nile Council of Water Ministers (Nile-COM), Nile Technical Advisory Committee (Nile-TAC), Eastern Nile and Nile Equatorial Lakes sub-regional Council of Ministers and Technical Advisory Committees, Project Steering Committees, the three NBI centres (Nile-SEC, ENTRO and NELSAP-CU), and Project Management Units. At national level it includes national environmental management authorities, water development lead agencies and development partners. The roles and responsibilities of the different agencies in relation to environment and social management have been described in the ESMF.Section7 highlights the existence of capacity gaps in environmental and social management, especially at national levels and the NCORE project includes some provisions for capacity building to address those gaps. In Section8, procedures for consultation and participation of key stakeholders in the ESMF are discussed, and lastly, the ESMF implementation cost estimates arepresented in Section9.

ACRONYMS AND ABBREVIATIONS

AMCOW	African Ministers' Council on Water
CIWA	Cooperation in International Waters
CSOs	Civil Society Organizations
EA	Environmental Assessment
EAC	East African Community
EIA	Environmental Impact Assessment
ENSAP	Eastern Nile Subsidiary Action Program
ENTRO	Eastern Nile Technical Regional Office
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESSF	Environmental Social Screening Form
IGAD	Intergovernmental Authority on Development
MSIOA	Multi-Sector Investment Opportunity Analysis
NBI	Nile Basin Initiative
NCORE	Nile Cooperation for Results
NEL	Nile Equatorial Lakes
NELCOM	Nile Equatorial Lakes – Council of Ministers
NELSAP	Nile Equatorial Lakes Subsidiary Action Program
NELSAP-CU	Nile Equatorial Lakes Subsidiary Action Program – Coordination Unit
NEL-TAC	Nile Equatorial Lakes – Technical Advisory Committee
NEPAD	New Partnership for Africa's Development
NGOs	Non-Governmental Organizations
NILE-COM	Nile Council of Ministers
NILE-SEC	Nile Basin Initiative Secretariat
NBTF	Nile Basin Trust Fund
OP	Operational Policy
RAP	Resettlement Action Plan
RBM	River basin Management
RPF	Resettlement Plan Framework
SAPs	Subsidiary Action Programs

TABLE OF CONTENTS

List of Tables

1 Introduction

1.1 Project Overview

The Nile Basin Initiative (NBI) within which the Nile Cooperation for Results (NCORE) Project is prepared is a regional partnership established in 1999 between countries of the Nile Basin[1] that aims to develop the Basin resources in a cooperative manner, share the socioeconomic benefits and promote regional peace and stability. The World Bank, at the request of the Nile Council of Ministers (NILECOM), has supported and facilitated the development of the NBI and coordinates international support to the NBI projects. NBI countries have set the foundation for the sustainable management and development of the common Nile water resources and related natural resources. A key feature of the foundation established by NBI is the capacity and necessary mechanisms for countries to take a regional approach to minimize climate change threats to socio-economic growth and development through, *inter alia*,: (i) ensuring harmonized integration of climate change adaptation in national water resource management and development planning, with application of social and environmental assessment and adaptation measures in a trans-boundary perspective; and (ii) coordinated and optimized climate proofed planning of water resource use, thus expanding country's horizons and opportunities for rapid climate resilient growth and development.

The NCORE Project is part of the of the Nile Basin Cooperation for Resilience Growth Program funded through the CIWA Program, which will allow the NBI to achieve and expand upon results in three key areas: (i) ***enhancing its platform for cooperation in the Nile basin; (ii) providing its stakeholders with tools and knowledge resources for climate resilient water resources management; and (iii) advancing climate resilient and regionally significant water resources development.***This Program contributes therefore towards the longer-term Shared Vision of the NBI, which is "*to achieve sustainable socio-economic development through the equitable utilization of, and benefit from, the common Nile Basin water resources*."

1.2 ESMF objective and rationale

The NCOREProject is being implemented across 10 riparian countries and includes preparation of eleven[2]infrastructure development sub-projects on shared water resources in 7countries. Taking into consideration the type of sub-projects planned (irrigation development, water supply, watershed management and/or hydropower development); significant environmental and social impacts arepossible locally, regionally and/or cumulatively.

All the Nile basin countries except South Sudan, have defined ESIA Guidelines under their national policies which prescribe the conducting of Environmental and Social Impact Assessments for such projects. However, taking into consideration the multi-purpose nature of the sub-projects, the regional dimension of theNCOREproject and the application of the World Bank's Environmental & Social safeguards policies (OP/BP 4.01, OP/BP 4.10, OP/BP 4.12 an Environmental and Social Management Framework (ESMF) has been prepared..

[1](Burundi, Democratic Republic of Congo, Egypt, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, and Uganda)

[2] Seven multipurpose infrastructure projects are expected to be prepared through the feasibility/design stage. In addition, four new watershed management programs are expected to be prepared through the "framework" stage.

The ESMF spells out the Environmental and Social safeguards, institutional arrangements and capacity required for its implementation. This ensures that sub-projects under the NCOREproject meets the national and local Environmental and Social requirements, and is also consistent with OP 4.01, OP 4.12 and OP 4.10 of the World Bank. The ESMF sets out principles and processes agreeable to all parties. The other objectives of the ESMF include:

- Assessment of potential adverse environmental and social impacts commonly associated with the sub-projects and ways to avoid, minimize or mitigate them;
- Establishment of clear procedures and methodologies for environmentalandsocialplanning, review, approval and implementation of sub-projects;
- Development of an EA and social screening/initial assessment system to be used for the sub-projects; and
- Specification of roles and responsibilities and the necessary reporting procedures for managing and monitoring implementation of sub-project environmental and social concerns.

With regards to the multipurpose sub-projects to be prepared under the Component 2, this ESMF is complimented by three other safeguards instruments: (i) the preliminary Environmental and Social Impact Assessments (ESIA) and Environmental and Social Management Plan (ESMP) reports for each sub-project; (ii) a Resettlement Policy Framework (RPF) for each involved country, providing standards and procedures for compensation for any land acquisition or restriction of access to resources that sub-projects may require; and, (iii) where applicable, an Indigenous Peoples Planning Framework (IPPF) in the event that ESIAs identify the presence of Indigenous Peoples in any areas where sub-project activities are planned.

1.3 ESMF preparation approach

The ESMF has been prepared in accordance with applicable World Bank safeguard policies and is based on literature reviews and data gathering and analysis from previous studies.

Reviewed documents include:

- NBI Transboundary Diagnostic Analysis,
- NBI Regional Power Project Review of Environmental Assessments,
- State of the River Nile Basin, 2012,
- NELSAP preliminary ESMF, 2009,
- NELSAP Strategic/Sectoral Social and Environmental Assessment of Power Development Options,
- NELSAP Multi-sector Strategic Social and Environmental Assessment (MSIOA, 2012),
- NELSAP Country Assessment on Environmental and Social Policies and Institutions,
- NELSAP Gender Audit on RBM Projects,
- NELSAP Projects Preliminary ESIA reports,
- ENTRO Cooperative Regional Assessments on Watershed, Flood and Irrigation,
- ENTRO Environment Management Guidance (EMG) and Social Assessment Manual (SAM),
- World Bank Safeguards Policies, and,
- Interim Guidance for using Safeguards Frameworks in the World Bank.

1.4 Potential users of the ESMF

The ESMF will assist the project staff, in-country counterparts, and other stakeholders in identifying and mitigating the potential negative environmental and social impacts of sub-projects during the pre-

feasibility, feasibility and design studies. It also includes provisions for training existing staff with the aim to strengthen the environmental management capacity of the benefiting countries.

This ESMF has been prepared as a reference manual for use by key stakeholders to be involved in the implementation of the NCORE project, including those involved with the implementation, of the proposed feasibility and design studies under the NCOREproject. As a reference material, the ESMF will be useful to the following NCOREkey stakeholders: the NBI project staff, funding and donor agencies; line Ministries; power and water supply utilities; Non-Governmental Organizations; decentralized entities and Community Based Organizations. It also includes provisions for building capacity of relevant staff from benefiting countries to strengthen their environmental and social managerial skills.

2 Project description

2.1 Project Rationale

Cooperative development of transboundary waters is one of the greatest challenges of the global international water agenda. Focusing on investments of transboundary significance provides the riparian countries with an opportunity to make significant progress towards their economic development goals in ways that have proved difficult to achieve independently. The NCORE project will promote optimal development of shared resources and facilitate interdependent sub-regional growth by: (1) fostering economic growth (2) enhancing regional integration and contributing towards peace and development (3) coordinating different interests in the region for mutual benefits and (4) creating an investment environment that serves as a firm foundation for sustainable development and contributes to poverty alleviation.

2.2 Project development objective and key components

The NCORE project development objective is: "to facilitate cooperative water resources management and development in the Nile Basin." The project will allow the NBI to continue to achieve and expand upon results in three key areas: enhancing its platform for cooperation in the Nile basin; providing its stakeholders with tools and knowledge resources for climate resilient water resources management; and advancing regionally significant investments. The project will support key aspects of NBI's 5-year strategic plan objectives (2012-2016), which are built along two major attributes of increasing country and regional impact and achieving operational efficiency, through resilience and low carbon development growth. It will be implemented through the following components*:*

Component 1: Advancing Nile-Wide Cooperation and Analysis- NILE SECRETARIAT (NILE-SEC).
This component proposes targeted services aimed at increasing basin cooperation, and provision of tools, knowledge products and analysis to increase shared understanding of the Nile River system. Mission discussions emphasized the outward, client -oriented focus of the new project, which is a shift from the thenInstitutional Strengthening Project.

Sub-component 1.a: Strengthening the platform for basin-wide cooperation for sustainable water resources management and development. This sub-component focuses on strengthening cooperation, through basin-wide events, communications, and support to targeted country- based counterparts, including Nile Basin Focal Points, Permanent Secretaries of water-related ministries and others.
Sub-component 1.b: Capacity and understanding for cooperative management and development of water resources in the Nile Basin enhanced. This sub-component focuses on increasing the application of Nile-Sec analytical resources such as modelling tools, specifically at the application of the Decision

Support System DSS for national and regional level projects, and in stakeholder demonstrations to illustrate opportunities for win-win development and management of the Nile and help to build a common understanding of the Nile water resources.

Component 2: Promotion of Sustainable Development and Planning in the NEL Region - NELSAP-CU (Nile Equatorial Lakes Subsidiary Action Program Co-ordination Unit)

This component focuses on activities providing opportunities to advance responsible and sustainable development, through identifying and fostering agreement on potential new projects, as well as preparing a new round of investments of regional significance (through feasibility and design studies of sub-projects).

- ***Sub-component 2.a.*** *Promoting climate resilient catalytic and transformative investment opportunities.* The activities under this component focus on using the knowledge developed by NELSAP through earlier projects and analytical work, to propose and mobilize resources to prepare possible investments of regional significance, and to increase regional understanding of NEL sub-basin issues. Based on the studies conducted to date, NELSAP will develop profiles of an array of potentially new projects, which will be proposed to facilitate agreement between countries. It is also designed to proceed with pre-feasibility project preparation, and to the extent feasible, mobilize resources for preparatory activities. Further, NELSAP will also develop technical briefing notes to highlight analysis emerging from earlier studies and analysis conducted under this component, to increase awareness of hydrological issues in the NEL region. NELSAP will also provide training and just-in-time services to its member countries, to build capacity in planning and management of the Nile resource.
- ***Sub-component 2.b.*** *Promoting regionally significant water resources development investments.* NELSAP is preparingpriority investments identified in earlier projects, by advancing project preparation through feasibility and design studies. This sub-component is divided into two sets of activities:
    - *2.b.1. Promoting irrigation development and watershed management investments with regional significance (Burundi, Rwanda, Uganda, Tanzania and Kenya)*- The project will improve regional investment planning through a Multi sector approach. The project will also support preparation of investments in hydraulic infrastructure that improves resilience to climate related shocks, enhances food security, and enables the NEL countries to follow a lower carbon growth path. This will be done through preparation of: (i) feasibility studies and design documents for sites prioritized by the riparian countries and (ii) appropriate social and environmental safeguards assessments.

    - *2.b.2. Promoting investment in regionally significant hydropower generation capacity.* NELSAP isconducting a study on the Power Development Plan of South Sudan with the overall objective ofdevelopinga Hydropower Expansion and Regional Integration Plan for South Sudan into the Regional Electricity Grid. The study will assess the power generation options located in South Sudan and cross-border transmission interconnections required for the optimal integration of South Sudan into the Regional Electricity Grid.

Component 3: Promotion of Sustainable Development and Planning in the Eastern Nile Region - Eastern Nile Technical Regional Office (ENTRO)

ENTRO's focus, through this component, on widening its stakeholder base to those working in water related fields beyond the Ministries of Water (including power, agriculture, utilities, universities, etc.), to

ensure that they have the capacity and tools needed to manage and develop the sub-basin responsibly, and to provide information thatillustrates the possibilities for enhanced cooperation.

- ***Sub-Component 3.a*** *Knowledge base and analytical framework for Eastern Nile climate-resilient water resources planning and management strengthened.* This component focuses on activities related to water resources analysis and planning, including climate change and climate variability factors within the Eastern Nile. These include the production of forecasting knowledge products for floods and droughts and for climate change, as well as making such analytical tools accessible to the public. This component will also include a Multi-Sectoral Investment Opportunity Analysis, Technical Briefs describing possible EN investment opportunities already identified by the governments, to demonstrate possibilities for future cooperative development; as well as to include Technical Briefs for governance, and part of transparency, for a wider public audience.

- ***Sub-Component 3.b****. Sustainable development and growth in the Eastern Nile promoted.* This component includes the building and strengthening of stakeholder networks throughout the Eastern Nile countries, to promote sustainable development and growth in the EN sub-basin. Thecomponent proposes intensive training of specialists in the EN region, to ensure that they are aware of regional water resource management issues, and to increase their capacities and tools to advance responsible development projects in their countries. Special attention will be given to increasing capacity in dam safety issues. Further, this component is supporting countries inthe preparation of a new round of possible watershed management projects in Sudan and in Ethiopia. This preparation will include the development of a menu of possible watershed management activities, an Environment and a Social Assessment, the development of an ESMF for the proposed watershed management program, as well as a Resettlement Policy Framework.

2.3 Institutional and Implementation arrangements

The project is designed to be implemented in a segmented but coordinated manner, witheach of the three components implemented by each of the three distinct NBI Centers. In order toavoid the creation of duplicate institutional structures, through the establishment of aProject Implementation Unit or other parallel structure at each of the NBI centers,leadership and management of the project will occur using the pre-existing managementstructures. For example, at NELSAP-CU, the water resources management activities willbe overseen by the head of the water resource management unit. Staffing plans have been designed to ensure thatadequate staff is available to undertake required project activities. Each center willappoint a coordinator to consolidate reporting for the project.

The proposed project activities have been designed in recognition of the mandates,strengths and comparative advantages of each of the centers, and to consolidate andenhance the work of the three NBI Centers – Nile-SEC, NELSAP-CU, and ENTRO.

2.4 Environmental and social context and Baseline

The State of the River Nile Basin produced in 2012 as well as NBI Regional Transboundary Environmental Diagnostic Analysis produced in 2001 give a clear indication of the regional context of the project and highlight the key environmental challenges of each riparian country which are similar throughout the Basin. One will note that the annual renewable Nile flow is just over 80 cubic kilometers(16 time less than the Congo river) while draining an area only 30 per cent larger. Large parts of the Nile Basin are situated in semi-arid and arid zones that do not generate runoff. Internal water losses are large, caused

by evapotranspiration in the extensive wetland areas, by in-streamlosses in the desert zone, and by evaporation in the large, constructed reservoirs, such as Lake Nasser/Nubia and Jebel el Aulia.

The quality of the Nile waters has generally deteriorated in recent decades because of increases in population, intensification of agricultural activities, industrial development, and acceleratingsoil erosion. Nevertheless, water quality in large parts of the Nilesystem – in particular in the sparsely populated areas – is still within the standards of the riparian countries and of the World HealthOrganization. Localized high pollution is experienced around the main urban areas, mainly as a result of untreated industrial and municipal waste. The Equatorial Lakes are subject to eutrophication as excessiveamounts of nutrients reach the water bodies and create frequent algae blooms. High sediment yield is a major issue in the river reaches originating in the Ethiopian Highlands, where watersheds suffer severe land degradation due to the extended dry season followed by torrentialrains, the nature of their geology, and current land-use practices.

With respect to the seven planned multipurpose sub-projects to be prepared under Component 2located in 3 sub-basins, namely the Kagera River Basin (Muvumba, Ruvyironza, Kabuyanda and Ngono projects), the Mara River Basin (Mara Project) and the Sio-Malaba-Malakisi River Basin (Sio-Sango and Nyabanja projects); the NELSAP Multi-sector Strategic Environmental and Social Assessment produced in 2012 has identified the major social and environmental issues and hotspots in the NEL region which are summarized here below:

- Alteration, fragmentation, and destruction of natural habitats
- Over-exploitation and unsustainable utilization of natural resources
- Land degradation
- Pollution
- Poverty
- Invasive species
- Climate change
- Natural disasters
- Population pressure
- Oil and mineral exploration

Several biodiversity hotspots were identified in the sub-project areas and include critical transboundary wetlands, national parks and natural forests, and all are part of the Eastern Afromontane region, one of the global biodiversity hotspots. The indicative list of the biodiversity hotspots as well as physical cultural sites is reported in following the table and a map in the Appendix 3.

Table 2-1: Indicative list of biodiversity hotspots and physical cultural sites within the Nile Equatorial Lakes countries

	Name	Location	Challenges
	Biodiversity hotspots		
1	**Yala, Sio, Dunga and Nzoia swamps**	**Kenya** riverine wetlands that buffer Lake Victoria High Biodiversity area especially papyrus birds e.g.*Chloropeta gracilirostris and fish species*	-Transboundary management required. -Poor catchment management practices -Poor understanding of the hydrological services -Development pressure
2	**Maasai-Mara, Serengeti and Amboseli National parks**	**Tanzania-Kenya** border, along the Mara river High Biodiversity area	-Transboundary management required -The Mara-Serengeti reserve is a reknown migratory route for the wildebeests and other animals from Serengeti to Amboseli.

			-Human-wildlife conflicts -development pressure
3	**Lake Mburo, Sango bay/Mizingiro swamps, Kagera National Park**	**Rwanda-Uganda-Tanzania** border wetlands systems that buffer Lake Victoria. High Biodiversity area Many Ciclids notably *Oreochromis esculentus* and other haplochromines that used to live and are in Lake Victoria are indigenous to these sites	-Transboundary management required -Encroachment on Protected areas -Human-wildlife conflicts -development pressure
4	**Mgahinga, Bwindi, Volcanoes and Virunga & Volcanoes National Parks**	**DR Congo-Uganda-Rwanda** Home to the Mountain Gorilla and are world heritage sites	-Human-wildlife conflicts -development pressure
	Physical cultural sites		
1.	**Kasubi Tombs**	**Uganda, Kampala city**	• The Kasubi Tombs is the site of the burial grounds for four Kabakas (kings of Buganda), and a UNESCO World Heritage Site. The royal enclosure at Kasubi Hill, also known as the Ssekabaka's Tombs, was first built in 1881.
2.	**Namugongo Martyrs Shrine**	**Uganda, Namugongo parish**	Catholic church constructed in the shape of a traditional Baganda hut (akasiisiira) in memory of the 22 20 catholic and Anglican martyrs were burnt alive on the orders of Kabaka Mwanga in June 1886.
3.	**Songhor Archeological site**	**Kenya, Kisumu County**	• This 78 acre site is situated in Kenya's Nyanza province and dates back over 19 million years. Since being gazetted in 1982, a number of animal fossils have been discovered, approximately 8 species of hominoids most interestingly Proconsul.
4.	**Thimlich Ohinga Archeological site**	**Kenya Kisumu County**	Built in the 14th century on a hill, Thimlich Ohinga is a complex architectural stone structure surrounded by stone walls now partially covered under Savannah bush land. The site consists of six enclosures and is a rare example of the first settlements in the region.
5.	**Muguruk Archeological site**	**Kenya Kisumu County**	
6.	**Kanam Prehistoric site**	**Kenya Homa Bay County**	Site was originally discovered by the famous archaeologist Louis Leakey, in 1932 , fossils discovered were of Homo Australopithecus.
7.	**Fort Ikoma Site**	**Tanzania, Tarime district**	German fort that was set up beginning of the last century to administer the Northern area of Tanzania as hunters began to stream into the area.
8.	**Kageye Kingdom site**	**Tanzania, Mwanza district**	Found by Stanley in 1800s. Part of the Sukuma Kingdom,one of the oldest historical sites in Tanzania and includes a monument of the memory of those unfortunate and innocent victims of slave trade.
9.	**Murambi Genocide Memorial Site**	**Rwanda, Nyamagabe District**	Technical school where near 65,000 Tutsis were massacred during the 1994 Rwandan genocide by HutuInterahamwe militiamen.
10.	**Nyanza Kingdom site**	**Rwanda, Nyanza District**	The residence of the last kings of Rwanda is located on this Nyanza Hill which used to be the capital of the Monarchy.
11.	**Sources du Nil site**	**Burundi, Rutovu commune**	Monument (Pyramid) established in 1939 to

			acknowledge the stream of Gasumo to be the south most source of the white Nil.
12.	**Nyakajoga Catholic Shrine**	**Tanzania, Bukoba district**	Catholic shrine established in 1958 done by Groto and caves on the Nakijoga stream.

With regard to the on-going preparation of a new round of watershed management investments in Ethiopia and Sudan, the examination of possible biodiversity hotspots and physical and cultural resources will be undertaken in the course of project preparation, through social and environmental assessments. Any identified issues will be addressed through the Environmental and Social Management Framework and the Resettlement Policy Frameworks for the proposed watershed management investments, which are to be developed under the NCORE project. Additional safeguards tools will be developed if it is determined that they are needed (i.e. an IPPF, and a pest management framework).

3 Relevant national and international policies and regulatory frameworks for environmental and social management

3.1 National and regulatory frameworks

ThisESMF is intended to benefit projects initiated by the NBI, through pre-feasibility, feasibility and design studies, within Member States of the Nile Basin. It will therefore largely be guided by the Member States' environmental and social legal frameworks. Member States' legal frameworks include: Constitutions, National Environmental Action Plans, National Environmental Policies, National Environment Management Acts, EIA Guidelines, Decentralization Policies, Forest Policies, National Wildlife Policies, National Land Policies, National Water Policies, Water Resources Acts, Forest Acts, Fisheries Conservation and Management Acts, and Urban/Town and Country Planning laws. They also include gender policies, HIV/AIDs policies, involuntary resettlement policies, cultural heritage laws and policies, and marginalized peoples' rights laws and policies. A summary of the NEL region Environmental and Social Regulatory Framework is outlined in *Appendix 1*.

3.2 Regional and regulatory frameworks

In addition to the Member States' frameworks for environmental and social assessments, the ESMF draws from the already established regional climate change policies. The regional climate change policies are largely within the framework of the African Union to which all the Nile Basin Countries are Party. The referred to African Union frameworks include: NEPAD, the African Ministerial Conference on Water (AMCOW), and those under the auspices of sub-regional organizations to which at least some of the Nile Basin Countries are members such as IGAD and EAC.

3.3 Applicable WB Safeguards Policies triggered by the project

A list of international legal instruments and policies providing for safeguards to the environment and social issues that may be referred to for guiding the activities of the NBI ESMF is provided in **Appendix 2.**

The World Bank Environmental and Social Safeguards Policies include key Operational policies (OP) designed to ensure that potentially adverse environmental and social consequences are identified, minimized, and mitigated. For the multipurpose projects to be prepared under component 2b, NELSAP

has conducted preliminary ESIA studies for the NCOREsub-projects aimedatidentifying the scope of the investment projects and the potential type of impacts associated with the projects. Referring to the World Bank Safeguards policies, the studies have identified the following Operational Policies to be triggered:

Table 3-1: Summary of operational policies and their implication to the investment projects

OP N°.	Summary of Safeguard and other operationalpolicies	Triggered (Y/N) and how	Implication
OP 4.01	**Environmental Assessment:** OP 4.01 covers impacts on the natural environment (air, water and land); human health and safety; physical cultural resources; and transboundary and global environment concerns. Social aspects (involuntary resettlement, indigenous peoples) as well as natural habitats, pest management, forestry, and safety of dams are covered by separate policies with their own requirements and procedures.	**Y** For the preparation of feasibility and design studies for multipurpose infrastructure under component 2b, the planned works on the proposed sub-projects are likely to have significant environmental and social direct, indirect or cumulative impacts locally and at the regional level. This OP will thus be triggered. ,	i) The overall project qualifies to be Category A type. For the preparation of feasibility and design studies under component 2b, ii) A preliminary ESIA was done for each Sub-project and a full independent ESIA shall be conducted as part of the feasibility studies which will include required Management plans (ESMP, RAP, DSMP, and PMP). iii) ESIA report shall be publicly available to the PAPs and local NGOs. iv) An independent Panel of Experts will be established For the on-going preparation of the watershed management investments under component 3b v) ESMFs for the follow-on investments are being developed.
OP 4.04	**Natural Habitat:** The Bank supports the protection, maintenance, and rehabilitation of natural habitats and their functions. The conservation of natural habitats is essential for long term sustainable development. *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 area's primary ecological functions.	**Y** For the preparation of feasibility and design studies under component 2b, the works in the proposed sub-projects could have significant impacts on nearby critical habitats on the wildlife corridors (Serengeti/Maasai-Mara National Parks, Lake Victoria, Kakamega Forest reserve, Rwoho Central Forest Reserve) and marshlands. This OP will thus be triggered.	For the preparation of feasibility and design studies under component 2b: i) Each Sub-project will conduct a full and independent ESIA which will include recommendations on suitable mitigation measures to prevent, minimize, mitigate, or compensate for such adverse impacts and improve environmental performance. For the on-going preparation of the watershed management investments under component 3b and the preparation of any other investments to pre-feasibility level: ii) An environmental assessment and an ESMF will be prepared.
OP 4.09	**Pest Management:** For health or agricultural projects that will involve pest management, the Bank assesses the capacity of the country's regulatory framework and institutions to promote and support safe, effective, and environmentally sound pest management strategies that promote use of biological or environmental control methods and reduce reliance to synthetic chemical pesticides.	**Y** This project includes the preparation of irrigation and drainage investments for approximately 55,000 Ha of land located in different sub-basins. During the operation phase (after this project), agro-chemicals are expected to be utilised. This OP will thus be triggered.	i) An Integrated Pest Management Framework was prepared as part of this ESMF ii) Pest Management issues will be assessed through the ESIA study and a Pest Management Plan will be prepared for each irrigation sub-project.
OP 4.10	**Indigenous peoples:** These are defined to be a distinct, vulnerable, social and cultural group possessing a number of characteristics including collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories.	**Y** The presence of Indigenous Peoples is not anticipated in any of the project areas, except possibly inKenya. In view of this, the OP is triggered.	An Indigenous Peoples Planning Framework (IPPF) – also referred to as Vulnerable and Marginalized Groups Framework (VGMF) -is being prepared for Kenya, where the presence of Indigenous Peoples (vulnerable and marginalized groups) is a possibility.

OP N°.	Summary of Safeguard and other operationalpolicies	Triggered (Y/N) and how	Implication
			The presence of Indigenous Peoples will be assessed through the ESIA for all project areas, although other than the possibility of Kenya it is not anticipated that Indigenous Peoples are in any of the project areas.A Vulnerable and Marginalized Group Framework (VGMF), in accordance with the requirements of OP 4.10,is being prepared as part of this ESMF applicable to Kenya. If required a Vulnerable and Marginalized Group Plan (VMGP) will be prepared for sub-projects in Kenya, where indigenous populations are present, consistent with the VGMF.
OP 4.11	**Physical Cultural Properties:** This policy addresses physical cultural resources, which are defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance.	**Y** No Physical cultural sites have been identified in the Projects areas during the prefeasibility studies. However, there is a possibility that physical cultural resources could be found during eventual construction of infrastructure that is to be studied and designed through this project. This OP will thus be triggered.	A chance finds procedure is included as an Annex to this report.
OP 4.12	**Involuntary Resettlement:** This policy aims to address and mitigate risks of physical relocation, loss of land and other assets, sources of incomes and means of livelihood by local people due to proposed projects. The policy also applies to the involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons.	**Y** For the preparation of feasibility and design studies for multipurpose infrastructure under component 2b: the sub-projects when implemented will induce land take for the construction of the dams, set up of water reservoirs, access roads, irrigation canals and other works. A Resettlement Policyt Framework has been prepared for each country where a sub-project is prepared. This OP will thus be triggered.	For the preparation of feasibility and design studies for multipurpose infrastructure under component 2b i) A Resettlement Policy Framework for each country with a multipurpose infrastructure investment being prepared in the NCORE Project was prepared as part of this ESMF and includes Grievance Redress Mechanism for specific projects. ii) Each sub-project will prepare a Resettlement Action Plan (RAP) to address all the issues related to relocation and compensation of communities affected by the project. iii) A Grievance Redress Mechanism will be defined as part of the RAP for each site, taking into consideration the local context. iv) The RAP report of each project will be disclosed locally, at the national level as well as in the NELSAP website and the World Bank infoshop. For the watershed management projects currently under preparation in component 3b, a resettlement policy framework for each project will be designed.
OP 4.36	**Forests:** The objective of this policy is to assist borrowers to harness the potential of forests to reduce poverty in a sustainable manner, integrate forests effectively into sustainable economic development, and protect the vital local and global environmental services and values of forests.	**Y** If implemented after the conclusion of this project, the Kabuyanda project's reservoir would inundate part of the Central Forest Reserve, which is a community climate change CDM project under	For the preparation of feasibility and design studies for multipurpose infrastructure under component 2b: forest degradation issues will be assessed by the ESIA studies and mitigation measures proposed including specific reforestation actions to restore the Central Forest Reserve in Kabuyanda.

OP N°.	Summary of Safeguard and other operationalpolicies	Triggered (Y/N) and how	Implication
		NFA. This OP will thus be triggered.	
OP 4.37	**Safety of Dams:** When the Bank finances a project that includes the construction of a new dam, it requires that the dam be designed and its construction supervised by experienced and competent professionals. It also requires that the borrower adopt and implement certain dam safety measures for the design, bid tendering, construction, operation, and maintenance of the dam and associated works.	**Y** The sub-projects include the preparationof 7 large dams on the Ruvyironza, Kabuyanda, Muvumba, Ngono, Nyabanja, Sio-Sango and Amagoro sites. This OP will thus be triggered.	i) Dam safety analysis will be conducted with the ESIA study for projects including the construction of a dam. ii) Dam Safety Management Plan including emergency preparedness plan will be prepared iii) An independent Panel of Experts will be established for the review of Dam Safety report.
OP 7.50	**Projects on International Waterways:** This policy applies to the following types of international waterways: (a) 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 Bank members or not; and (b) Any tributary or other body of surface water that is a component of any waterway described in (a) above.	**Y** The proposed sub-projects are developed on streams and rivers of the Kagera, Muvumba, Mara and Sio-Malaba-Malakisi sub-basins, all being tributaries of the Nile River shared by 11 countries.	Because this project involves only the study of infrastructure on international waterways, this project is exempt from the notification requirement, as stated in section 7b of O.P. 7.50. In compliance with this O.P., the technical studies of the projects under preparation will include an analysis of any potential transboundary impacts from the projects, as well as the identification of potential mitigation measures.
OP 7.60	**Projects in Disputed Areas**: Projects in disputed areas may raise a number of delicate problems affecting relations not only between the Bank and its member countries, but also between the country in which the project is carried out and one or more neighboring countries.	**N** The project area is not disputed, and therefore, this policy will not be triggered.	
BP.17.50	**Consultations and Disclosure requirements BP 17.50:** Whenever the Bank requires an environmental assessment (EA) and/or a Resettlement Instrument (RI), the proposed borrower prepares an EA report and/or a RI report as a separate, free-standing document, publicly available to project-affected groups and local NGOs.	**Y** The NCORE project being a category A project, an ESIA and a RAP studies are required for any project prepared through feasibility stage (at this time, the 7 projects to be studied under component 2b). This policy will be triggered.	For the preparation of feasibility and design studies for multipurpose infrastructure under component 2b: i) One of the key activities under the NCORE project is to prepare a Communication Strategy for the sub-projects which will include Grievance Redress disclosure Mechanisms. ii) Consultations will be conducted during the ESIA and RAP studies and views of the PAPs and stakeholders will be reported in the reports. iii) ESIA and RAP final reports will be accessible to, and in a form, manner and language understandable to PAPs and local NGOs.

As mentioned above, the OP 4.01 is triggered by the sub-projects. In this case, the World Bank system classifies proposed projects into one of four categories, depending on the type, location, sensitivity, and scale of the project and the nature and magnitude of its potential environmental impacts.

- **Category A:** A proposed project is classified as Category A if it is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works. **Based on the nature, the scale and the location of the sub-projects under the component 2 of the NCORE Project, the project had been screened and classified under Category A.**
    - **The safeguards instruments applicable are**: an independent and full Environmental and Social Impact Assessment (ESIA) report. Based on the nature of the proposed projects, several management plans will be associated with the ESIA report: an Environmental and Social Management Plan (ESMP), a Resettlement Action Plan (RAP), a Dam Safety Management Plan (DSMP) and an Integrated Pest Management Plan (IPMP) if required.
- **Category B:** A proposed project is classified as Category B if the potential adverse environmental impacts on human populations or environmentally important areas—including wetlands, forests, grasslands, and other natural habitats—are less adverse than those of Category A projects. These impacts are site-specific; few if any of them are irreversible; and in most cases mitigation measures can be designed more readily than for Category A projects. **=> The safeguards instruments applicable are**: an independent and full Environmental Assessment report but with a narrower scope than that of Category A.
- **Category C:** A proposed project is classified as Category C if it is likely to have minimal or no adverse environmental impacts. **=> The safeguards instrument applicable is**: none, only time to time site environmental screening.
- **Category FI:** A proposed project is classified as Category FI if it involves investment of Bank funds through a financial intermediary, in subprojects that may result in adverse environmental impacts. **=> The safeguards instrument applicable: Environmental and Management Framework (ESMF).**

The ESMF will be applicable throughout the duration of the NCORE Project. Special attention will be given to the sub-projects to be prepared under Component 2 for which appropriate safeguards instruments will be prepared as part of the feasibility and design studies, taking into consideration the type of the projects and their potential impacts, and shall include costs for stakeholder's consultations and disclosure of documents. Costs for training of local actors and project implementation team, as well as for the ESMF implementation, monitoring and auditing are included in this ESMF.

4 Potential environmental and social Impacts and Mitigation measures

4.1 Methodology used for identification of potential impacts

The potential environmental and social impacts likely to arise as a result of the NCORE project were identified by matching the project components with the surrounding environmental and socio-cultural resources. This section presents both the likely positive and negative impacts that can arise from the project. Information regarding the social, cultural, natural resources, was sourced from related literature and preliminary studies conducted on specific investment projects and consultation with relevant stakeholders. Key stakeholders were identified during the preliminary preparation of the investment projects and include in each country the following central or decentralized governments' entities:

- The Ministry in charge of Water and Irrigation;
- TheMinistry in charge of Agriculture and animal resources including fishery;

- The Ministry in charge of Water Supply;
- The Ministry in charge of Energy ;
- TheMinistry in charge of Lands and Settlement;
- TheEnvironmental Agency;
- Lands Commission;
- Forest Commission;
- Local authorities;
- Communities affected by the project, and;
- Local NGOs.

4.2 Expected positive impacts

The NCORE project is associated with many positive impacts such as:

a) Improved National and Regional Planning for Water Development

National capacities in optimized planning for water resources will be enhanced by the project, and countries as well as project staff will be able to apply the developed modeling tools on the identified investment sites. Moreover, a multi-sectoral planning approach involving all government agencies working in water development sector (water supply, agriculture and energy and environment) will be used for the preparation of the sub-projects, this being an innovative approach in the region that shall lead to optimization of natural, human and financial resources while addressing the significant increase on demand for energy, safe water and food observed in the region. This integrated approach shall benefit environment and social management as it may reduce the number of water infrastructures needed in the region, and hence reduce water depletion, logging and pollution.At regional level, the integrated planning and data sharing activities will increase trust and cooperation between countries through the shared sub-basins, and will increase awareness for sustainable management of shared water resources for the benefit of all.

b) Improved local and regional economies

It is expected that the sub-projects being prepared under component 2b, once implemented, would accelerate the pace of regional development and integration. If implemented, these projects are expected to increase the market of local goods and services during the construction phase. Over 130,000 farmers will be empowered through the up to 55,000 Ha of land reclaimed for irrigated agriculture and new business opportunities associated with these structures will also be created at the local and national level which will contribute to poverty eradication in the region.

c) Enhanced Food security

Given that expansion of irrigated lands has become a priority in almost all NEL countries and is highly dependent on availability of water, all the countries involved in this NCOREProject have expressed interest in increasing their capacities on water storage. The direct benefit of the investment projects is the increase incash and food crop yields in the region namely rice, maize, vegetables and livestock and shall enhance their trade at the regional level.

d) Degraded ecosystems restored

All the investment projects being prepared under 2b have activities related to watershed management, which will lead ultimately to restoration of degraded ecosystems included but not limited to critical wetlands, catchment areas and forests. One important reason for those activities is to ensure the sustainability of the water infrastructures to be constructed, as key environmental challenges in the region (soil erosion, flooding and deforestation) can heavily hinder the operational capacities and durability of such infrastructures.

e) Gender empowerment improved

The nature of the sub-projects under preparation – irrigation, fisheries, watershed and water supply – have gender implications associated with gender roles and responsibilities as well as gender based access, control and ownership of resources. These may inadvertently impact on the projected benefits accruing from such interventions for both men and women. Focus will be placed to enhance the involvement of men and women through active consultation and participation,enabling women, as well as men, is to significantly influence the entire agenda and basic priorities of the project y to reduce inequalities based on gender and to empower women in fully participating in socio-economic development activities associated with the project.

4.3 Expected negative impacts and mitigation measures

The NCORE project is classified under Category A projects due to the sub-projects under the Component 2. Certainly, those investment projects can accentuate the existing environmental and social challenges of the Nile Region if impacts are not well identified and managed or mitigated throughout the project cycle.

While the ultimate goal of the NCORE is poverty alleviation and socio-economic development, a combination of the social challenges especially in the NEL region and the development of large water infrastructures may aggravate existing social complexities which may undermine the goals of the NCOREProject if inclusive consultations are not conducted during the project cycle and appropriate mitigation measures defined and implemented.

As mentioned in Section3, the NCORE project had been screened and classified under Category A due to those sub-projects and conducted Preliminary ESIAs. .

Table 4-1: summary of the potential impacts of the NCORE project

Components	Sub-components	Key activities	Location	Potential impacts
Component 1: Advancing Nile-Wide Cooperation and Analysis	*Strengthening the Platform for basin-wide cooperation for sustainable water resources management and development*.	Basin-wide events, communications, and support to targeted country- based counterparts	Basin wide	-Increased institutional capacity for analytical and coordinated basin wide planning -Improved water resources data and information systems
	Capacity and understanding for cooperative management and development of water resources in the Nile Basin enhanced	Application of analytical resources: DSS, modelling tools, training, communications products	Basin wide	-Planning processes that integrate stakeholder and gender concerns and inputs -Reduced probability for natural resource conflicts
Component 2: Promotion of Sustainable Development and Planning in the NEL Region	*2.a. Promoting climate resilient catalytic and transformative investment opportunities*	-Regional and national initiatives identified and involved during project consultation meetings -MoU/partnership framework with relevant Regional and national initiatives prepared and signed - Coordination meetings with key Regional and national initiatives - Project specific gender interventions devised - Targeted information education and communication products prepared and disseminated	NEL region	-Increased institutional capacity for analytical and coordinated sub basin planning -Improved water resources data and information systems -Planning processes that take into account stakeholder and gender concerns and inputs -Reduced probability for natural resource conflicts -Broader base for transboundary river basin knowledge and analysis - Optimized basin development

Components	Sub-components	Key activities	Location	Potential impacts
	2.b. Promoting regionally significant water resources development investments	Conduct a feasibility and design study on irrigation and watershed management, multipurpose dams and associated facilities on the Muvumba, Ruvyironza, Ngono, Mara, Kabuyanda, Sio-Sango and Nyabanja rivers, including technical studies, independent ESIA and RAP	Rwanda, Burundi, Kenya, Uganda, Tanzania	-Sites for potential multipurpose dam construction, irrigation schemes and other associated infrastructures identified, feasibility studies and detailed designs conducted - independent ESIA and RAP studies compliant with national and international standards to be conducted - Planning processes that integrate stakeholder concerns and inputs - Management plans for specific mitigation measures included in the ESIA report Appropriate Mitigation measures shall be included in the ESIA study for each site including indication for the need to prepare the following safeguard instruments: - Resettlement Action Plans (RAPs) to address impacts from physical and economic displacement. -Indigenous Peoples Plans (IPPs) in areas where these populations are identified (Kenya) Pest Management Plans to address risks of agro-chemicals pollutions and threats - Communication strategy which includes Grievance Redresses Mechanism to address compensations malfunctions and clarify compensations processes.
		Conduct a study on the Power Development Plan of South Sudan	South-Sudan	Identification of potential power generation options and cross-border transmission interconnections required for the optimal integration of South Sudan into the Regional Electricity Grid. Planning processes which take into account environmental, stakeholder and gender concerns and inputs
Component 3: Promotion of Sustainable Development and Planning in the Eastern Nile Region	*Knowledge base and analytical framework for Eastern Nile climate-resilient water resources planning and management strengthened*	production of forecasting knowledge products for floods and droughts, climate change. Multi-sectoral Investment Opportunity Analysis. Knowledge products and analysis.	Eastern Nile sub basin	-Increased institutional capacity for analytical and coordinated basin wide planning -Improved water resources data and information systems -Identification of potential development projects sites and a range of possible interventions
	Sustainable development and growth in the Eastern Nile promoted	-Capacity building in dam safety and in transboundary water management and development,. -Assistance to Sudan and Ethiopiain the preparation a new round of watershed management projects in the EN countries (4 sites)	Eastern Nile sub basin	-comprehensive environmental and socialassessments meeting national and international standards conducted, and ESMF and RPFs developed for potential watershed management investments -Planning processes that take into account stakeholder and gender concerns and inputs

4.4 Direct and Indirect impacts

The potential interactions between various project activities and environmental and social receptors will be identified for analysis. At the project preparation phase, they will be evaluated against site-specific conditions using information gathered from existing baseline conditions and site observations. The interactions/project phase activities will be 'screened out' if the potential for impact does not exist or is negligible.

The **component 2b**sub-projects focus on the study and design of infrastructuraldevelopment and associated activities,and are summarized in the table below. The study and design of this infrastructure development will include assessment of their potential impacts on the physical and social environment and the development of guidance on possible mitigation measures.

Table 4-2: sub-projects characteristics and associated activities

	Investment Project location	Characteristics	Associated activities
1	**Ruvyironza Multipurpose Project: Gitega Province, Burundi**	- Water storage: dam height 50m, 350MCM - Irrigated agriculture 15,000Ha in valley, - Hydropower Plant 22 MW , - water supply for domestic and livestock use	Diversion of river Water abstraction Construction of irrigation canals Construction of access roads Development of agriculture fields Construction of water supply canals Construction of Power Generation Plant Set up of power distribution structures
2	**Kabuyanda Multipurpose Project: Isingiro District, Uganda**	- Water storage: dam height 10m, - Irrigated agriculture 4,203Ha in valley, - Hydropower Plant 0,1 MW , - water supply for domestic and livestock use	Diversion of river Water abstraction Construction of irrigation canals Construction of water supply canals Construction of Power Generation Plant Set up of power distribution structures
3	**Ngono irrigation and watershed management project: Bukoba and Musenyi Districts Tanzania**	- Water storage: dam height 26 m, - Irrigated agriculture 13,255Ha within 10 villages - Hydropower Plant 10 MW , - water supply for domestic and livestock use	Diversion of river Water abstraction Construction of irrigation canals Construction of water supply canals Construction of Power Generation Plant Set up of power distribution structures
4	**Mara Valley Irrigation& watershed management project: Serengeti District Tanzania**	- Irrigated agriculture 8,340 Ha within 10 villages and valley	Diversion of river Water abstraction Construction of irrigation canals Construction of water supply canals Construction of Power Generation Plant Set up of power distribution structures
5	**Muvumba irrigation and watershed management project: Nyagatare district Rwanda**	- Water storage: dam height 12 m, 109 MCM - Irrigated agriculture 13,000 Ha - Hydropower plant 2.9 MW - water supply for domestic and livestock use	Diversion of river Water abstraction Construction of irrigation canals Construction of water supply canals Construction of Power Generation Plant Set up of power distribution structures
6	**Nyabanja Dam Project: Uganda**	- Water storage: dam height 15m, 1,7 MCM, - Irrigated agriculture 5,500 ha - water supply for domestic and livestock use	Diversion of river Water abstraction Construction of irrigation canals Construction of water supply canals
7	**Sio-Sango Dam Project: Bamula District, Kenya**	- Water storage: dam height 18 m, 6,2 MCM, - Irrigated agriculture - water supply for domestic and livestock use	Diversion of river Water abstraction Construction of irrigation canals Construction of water supply canals

Table 4-3: potential environmental and social impacts of the associated activities

No	Projects associated Activities	Potential Major Environmental and Social Impact Issues	Expected significance
1.	Dams construction	Water pollution Soil erosion Flooding Alteration of hydrological regime Destruction of flora and fauna habitat Involuntary Resettlement	Moderate Moderate Major Major Major Major

		Land take Spread of diseases Altered downstream water uses Dam failure	Major Moderate Moderate Major
2	Diversion of rivers	Water pollution Flooding Alteration of hydrological regime Destruction of flora and fauna habitat Involuntary Resettlement Land take	Moderate Moderate Major Major Moderate Moderate
3	Irrigation canals	Water pollution Flooding Alteration of hydrological regime Destruction of flora and fauna habitat Involuntary Resettlement Water related diseases Land take	Moderate Moderate Moderate Moderate Moderate Major Moderate
4	Access roads	Dust and noise pollution Water pollution Solid waste disposal Waste oil/ fuel disposal Public health and safety Land take	Major Moderate Moderate Moderate Major Minor
5	Power supply	Land take Involuntary Resettlement Air quality deterioration Noise/ vibration Public safety	Major Major Minor Moderate Minor
6	Agriculture development	Water pollution Flooding Alteration of hydrological regime Destruction of flora and fauna habitat Involuntary Resettlement Soil and land degradation (Salinization) Agro chemical usage Pest management Groundwater pollution	Major Moderate Moderate Major Major Moderate Major Major Moderate
8	Specific social issues	Livelihood loss Community disruption Cultural heritage site destruction Increased marginalization of landless people Loss of access to biodiversity resources (for food, economic activities or medicine) Marginalization of local communities to the benefit of large investors Increased spreading of waterborne diseases Increased HIV/AIDS infection rate due to increased and itinerant working population	Major Moderate Moderate Moderate Major Major Major Major
9	Specific gender issues	Increased work burdens for women and children Low access to natural resources including land for women	Major Major

In consequence, as the sub-projects considered are associated with one or more activities described above, an independent Environmental and Social Impact Assessment will have to be conducted, suitable mitigation measures identified with the support of the key stakeholders, budgeted and included in the

Environmental and Social Management Plan, the Resettlement Action Plan, and where relevant the Indigenous Peoples Plan.

The **component 3b activities** include assistance to the governments of Ethiopia and Sudan for the preparation of new watershed management projects. In Ethiopia, the new investments to be prepared through this project are to be located on the Blue Nile, in the Fincha'a watershed (which includes the Fincha'a, Nedi and Mita sub-watersheds), and the Chemoga watershed (which includes the Chemoga, Tesher and Yeda tributaries). In Sudan, ENTRO will be working with the government to design and prepare new watershed management interventions in Kassala State in the Northern part of the Telkuk locality; and in the Karib lands in Gedaref State, along the upper Atbara River. While the targeted regions for these investments have been identified and a menu of possible investment interventions will be developed through the NCORE project, the specific communities to be served and the specific interventions to be implemented will not be identified through the NCORE project. TThese community specific activities would take place through the actual investment project, outside of the NCORE work. Given this model, the NCORE project will include environmental and social assessments, as well as the development of specific ESMFs and RPFs for the follow-on watershed management projects.

4.5 Cumulative impacts

Cumulative impacts are those that result from the incremental impact of the project when added to other past, present, and reasonably foreseeable future actions. Effects should be assessed in terms of the capacity of the water resource, ecosystem, and/or affected communities to accommodate such impacts. In the NEL region environmental, social and economic contexts, large and medium infrastructures projects such as cascade of hydropower dams and series of irrigation schemes can have significant cumulative impacts. However from the two Strategic Environmental and Social studies conducted in the NEL region for the Power development and the Water Resources development, there are clear indications that the cumulative impacts resulting from the increased number of water infrastructures shall be negligible based on the current regional water balance (33 km^3/year outflow to the Nile from the Lake Victoria Basin and less than 3% of water abstraction for socio-economic activities in the region) while the negative socio-economic impacts of not conducting any investment on the water resources shall be considerable taking into consideration the current region's economies characterized by rain-fed agriculture, subsistence farming, low industrialization, and poor infrastructure development. However these impacts have to be assessed taking into consideration realistic boundaries like sub-basin's and basin's delimitations. Such assessment still constitutes a challenge in the current context where limited data exist or where the data sharing mechanisms still need strengthening.

5 Environmental and Social Management Framework

5.1 Introduction

The ESMF aims to manage the environmental and social impacts through appropriate mitigation measures that may arise with the implementation of the NCORE Project, in order to inform the design and engineering feasibility options. The successful implementation of the ESMF will depend on the commitment of the NBI centres and countryinstitutions, the capacity within these institutions and appropriate institutional arrangements in these entities.

The ESMF provides specific guidance on policies and procedures to be followed in implementing the NCORE project consistent with the policies of each participating country and and the policies of theWorld Bank. Roles and responsibilities are clearly defined as well as monitoring and evaluation

protocols. In addition, budgetary estimates are provided to support the effective implementation of the environmental and social management plans.

5.2 Environmental and Social Assessment procedures

*Environmental Assessment:*Environmental Assessment (EA) is carried out for water resources development projects to identify and predict impacts of proposals, policies, projects and operational procedures on the biophysical and social environment. For investment projects, the EA process is carried out in five steps, which include: 1) impact screening, 2) scoping, 3) prediction and mitigation, 4) management and monitoring and finally 5) auditing (monitoring and evaluation). A scheme showing the detailed EA procedure as part of this ESMF is presented in *Appendix 4.*

Social Assessment: The social assessment identifies both positive and adverse impacts and measures as well as costs formitigating adverseimpacts. It also defines the degree to which the benefits of the potential future sub-projects will be distributed in an equitable manner across the affected population. The social assessments will examine opportunities to enhance social inclusion, social accountability,strengthen social cohesion increase social capital, and build ownership. The social assessment shall be conducted in conjunction with the EIA during the feasibility studies and be used to inform future project design and the overall appraisal of the project.

Step 1: Environmental and social screening:

a) *Environmental screening procedure.* The purpose of the screening process is to determine whether projects are likely to have potential negative environmental and social impacts; to determine appropriate mitigation measures for activities with adverse impacts; to incorporate mitigation measures into the project design; to review and approve projects proposals and to monitor environmental parameters during implementation. All the sub-projects will be requested to fill an Environmental and Social Screening Form (ESSF) *(Appendix 5)* designed to avail information to the decision-makers and reviewers so that impacts and their mitigation measures, if any, can be identified and/or that requirements for further environmental analysis can be known and implemented. In determining whether a proposal requires further EA, should be rejected, or exempted, screening will consider the alignment of the proposal with existing policies and plans, scale of the proposed development, intensity and the significance of potential impacts. Other aspects include presence of natural habitats, cultural properties, environmentally sensitive areas, involuntary land acquisition, etc. Checklist *(Appendix 6),* together with information on typical project impacts and mitigation measures will beused to categorize the projects as well as screen them. The checklist will beused to identify potential impacts, and describe mitigation measures. The Initial Environmental Examination (IEE) report[3] is the principle output from the screening process.
b) *Social screening procedure:* A screening of the project characteristics, its beneficiaries categorized by gender, age and other applicable variables, the socioeconomic dimensions of the area, its potential impacts and risks determine whether or not an individual proposal requires the preparation of a detailed Social Impact Assessment (SIA). Projects with little or no social issues will not require the preparation of an SIA. Screening will also consider the alignment of the proposal with existing policies and strategies, scale of the proposed development, intensity and significance of potential

[3] The World Bank recommends that screening results should be recorded and explained in a Project Concept Document and Environmental Data Sheet including the appropriate screening decision. Results are reviewed with specific regard to the type of EA instruments required, the general scope, public disclosure and consultation requirements, schedule, and implementation arrangements. After screening, ToR for the proposed EIA type are prepared by the project proponent or financier.

impacts including the need for involuntary land acquisition, presence of vulnerable and marginalized groups and Indigenous Peoples, gender differentiated impacts, impacts on cultural resources and appropriate mitigation measures for addressing these aspects. Checklists (appendices 6 and 7), will be used to identify potential impacts, and describe mitigation measures. An initial Social Screening report will identify social and gender dimensions and associated processes that may be important in the project; select key elements for further social and gender analysis; identify potential social issues and impacts, particularly with regards to potential involuntary resettlement and compensation or impacts on vulnerable and marginalized groups or Indigenous Peoples.

c) *Project categorization:* Projects are categorized according to the screening procedure (World Bank Operational Policy (OP 4.01). The procedure classifies projects into one of three environmental assessment categories A, B and C, depending on the type, location, sensitivity and scale of the project and the nature and the magnitude of its potential environmental and social impact. (i) Category "A" projects potentially cause significant and irremediable impacts; the projects require a full Social Impact Assessment (SIA) and as required a detailed Resettlement Action Plan (RAP) or an Indigenous Peoples Plan with full and extensive stakeholder consultation; (ii) Category "B" projects typically result in lesser impacts, which are often remediable or can be mitigated; the projects require the implementation of Social Management Plan (SMP) to address the specific social impacts. However, in the event of land acquisition or the presence of Indigenous Peoples in the project area (IPP), a detailed Resettlement Action Plan (RAP) or an Indigenous Peoples Plan will be required; (iii) Category "C" projects have little or no adverse impact; the projects do not require a Social Impact Assessment (SIA),and IPP but ensure that social and gender concerns are addressed.

Step 2: Conduct environmental and social assessment studies

NCORE sub-projects are likely to be registered under category A or B after screening. NELSAP will prepare the required Safeguards documents and will conduct independent Environmental and Social Impact Assessment and a standalone Resettlement Action Plan.

The preparation of the ESIA and RAP studies will be done in consultation with stakeholders, including people who may be affected. Public consultations are critical in preparing a proposal for the activities of the projects likely to have impacts on the environment and population. The public consultations shallidentify key issues and determine how the concerns of all parties will be addressed in the ESIA. When an ESIA is necessary, the administrative process enacted by the EPA will be followed and executed.
NELSAP Project managers will prepare Terms of Reference for the ESIA and RAP, and follow procurement rules for the recruitment of consultants for the ESIA. The ToRs are prepared using issues identified during the pre-screening stage and a model is reported in *Appendix 8*.

Step 3: ESIA and Safeguards documents appraisal and approval.

As earlier mentioned, the NCORE Project is recognized as a Category A project due to the possible significant impacts which could be generated by the sub-projects under the Component 2. The Safeguards documents required for such type of project shall include but not be limited to:

- ***EnvironmentalManagement Plan (EMP)***: The EMP is a key output of the ESIA and will be the backbone for the implementation of safeguards during projectimplementation, operation and decommissioning and its implementation costs have to be well defined and included in the overall

project implementation cost. It shall include the following components: (i) mitigation plans, (ii) monitoring plans, (iii) institutional arrangements, (iv) capacity building, and (v) associated costs.

- ***Social Management Plan (SMP):*** The Social Management Plan (SMP) is designed to ensure that potential adverse social impacts, risks and susceptibility are adequately identified and plans for mitigation developed during the pre-feasibility phase. The Social Management Plan (SMP) also provides an opportunity to maximize positive social and gender impacts and benefits. A Monitoring and Evaluation framework is a core part of the Social Management Plan (SMP), which may be developed as needed. Monitoring will be carried out on a continuous basis by the project proponent and evaluation will be undertaken atintervals in order to assess the immediate, medium and long term effects of the Social Management Plan (SMP). The Social Management Plan (SMP) is project and site specific. It will entail: (i) Listing the potential social and gender impacts; (ii) Identifying adequate mitigation or enhancement measures for each impact (direct or indirect; permanent or temporary; physical or economic, residual and cumulative); (iii) Assigning responsibility for the implementation of mitigation and enhancement measures; (iv) Assigning time and cost estimates for implementation of mitigation and enhancement measures (v) Defining indicators with gender disaggregated data for Monitoring and Evaluation of implementation of mitigation and enhancement measures.

- ***Resettlement Action Plan: A RAP will be prepared consistent with the country specific Resettlement Policy Frameworks for those***NCORE sub-projects which require the acquisition of land leading to the physical or economic displacement of people. The RAP is designed to ensure that impacts arising from land acquisition, displacement and relocation are avoided, minimized or mitigated at least to restore the standards of living of affected people to pre-project levels. In addition, the pre-feasibility studies may identify areas where there may be restriction of access to natural resources and livelihoods. In this case, a consistent with the World Bank's OP/BP 4.12, a Process Framework (PF) willbe developed. While the SMP addresses all social impacts, the RAP and PF focuses on people affected by land acquisition, relocation and restriction of access, and defines a strategy for formalizing arrangements and responsibilities for mitigating negative impacts caused by land acquisition (*Appendix 7)*.

IndigenousPeoples Plan: AnIPP will be prepared consistent with a relevant IPPF for those NCORE sub-project areas where Indigenous Peoples are present. The only sub-project areas where there is a possibility of indigenous groups is in Kenya where indigenous groups are referred to as vulnerable and marginalized groups. Accordingly consistent with the terminology in Kenya, an Vulnerable and Marginalized Group Plan (VGMP) in accordance to the Vulnerable and Marginalized Group Framework (VMGF) will be prepared if necessary.

- **Communication strategy and management plans**: This will be prepared for Component 2 of the NCORE Project which will define the disclosure mechanisms to be undertaken by each sub-project. All the sub-projects during the feasibility studies will also develop a communication management plan including a grievance redressing mechanism to be set in place for further project implementation.

- **Dam Safety Management Plan**: Most of sub-projects will involve "large dams" construction as per the World Bank classification. A Panel of Experts will be put in place from the beginning of the feasibility studies, to be able to accompany and guide the studies. Dam safety management

plansshall also be prepared for those sub-projects and training be conducted to ensure effective implementation.

- **Integrated Pest Management Plan**: Most of sub-projects include a component on development of irrigated agriculture. Therefore,for each sub-project, an Integrated Pest Management Plan will be prepared and necessary training be conducted to ensure effective implementation.

- **Project Appraisal and Approval:**The first step in an appraisal process is to determine if all the relevant information has been provided, and if adequate. If the appraisal indicates that the proposed project may have environmental concerns that are not adequately addressed in the proposal, the reviewing authority may conduct a field appraisal before the application can be considered further. Based on the appraisal and, if needed, the field appraisal, the reviewing authority will approve the projects with recommended conditions and implementation supervision. The procedure in the table below shall be used for appraisal and approval of projects.

NELSAP will submit the preliminary and draft final Environmental and Social Assessment reports to a cross-sectoral Technical Review Committee and to the World Bank. These reports will be reviewed by theset-up team for each sub-project or for a group of sub-projects which is expected to:
- Assist NELSAP in screening/reviewing all Environmental Assessment Applications and Reports;
- Provide technical advice on how the assessments shall be conducted, and
- Make recommendations on the adequacy of the assessment and any observed gaps;

Step 4: ***Information disclosure and stakeholder involvement.***

Public consultation is a core element and regulatory requirement that must be adhered to in social impact assessments. The proponent will ensure that consultation and communication takes place and coincides with significant decision making activities in the entire project cycle and that the process and issues are clearly documented and tracked. Consultation methods shall be participatory and take into account gender differences in time and work allocation. Consultation and communication will becarried out at all appropriate levels from the local to the national and regional levels and stakeholder inputs will be documented and used to inform project preparation and improve project design. For all the sub-projects, it shall be imperative to undertake or solicit public participation/consultation during the implementation of the NCORE activities at all levels. Consultations for the ESIA, RAP and IPP shall be detailed andl and include the following:

- Identifying specific stakeholders, disclose relevant project information and determine stakeholder concerns to include them in the TOR (Scoping and agreement on TOR and schedule);
- Disclosing information on study methods and findings, agree on mitigation measures with stakeholders and let stakeholders determine if their concerns are adequately addressed (environmental analysis and production of draft EA);
- Finalizing mitigation plan and disclose to stakeholders (production of final EA reports);
- Informing the public about scheduling of potentially disruptive events, disclose results on environmental monitoring, and maintain effective complaints procedure (EMP implementation and monitoring phase);
- Assessing effectiveness of consultation process and consult stakeholders for their assessment (final evaluation).The major tool to plan and implement consultation is the Consultation Plan which should propose a variety of consultation techniques as a function of the audience to reach.

- **Disclosure of the ESMF:**The ESMF and subsequent projects safeguards documents (final ESIA and management plans reports) are disclosed on the NBI website, riparian government websites (where applicable). A brief of the reports for each project shall be displaced on public places accessible to the local people and NGOs in English and/or in French, and if possible in local languages. The ESMF shall also be forwarded to the Bank/development partners'websites for disclosure at the Public Information Centre/info shop of the country offices within the countries.

5.3 ESMF Monitoring and Evaluation

Monitoring is and will be a key component of the ESMF during NCORE project implementation. Periodic monitoring shallbe undertaken based on the activities conducted, in order to:

- Improve environmental and social management practices;
- Check the efficiency and quality of the Environmental & Social Assessment processes;
- Establish the scientific reliability and credibility of the Environmental & Social Assessment for the project; and
- Provide the opportunity to report the results on safeguards and impacts and proposed mitigation measures implementation.

With regards to the NCORE sub-projects implementation, NELSAP will conduct monitoring activities during the feasibility studies and ESIAs, aiming to appreciate the extent to which mitigation measures are successfully implemented. Monitoring willfocus on three key areas: (i)Compliance monitoring; (ii) Impact monitoring; and (iii) Cumulative impact monitoring.

a) Compliance Monitoring

This is to verify that the required mitigation measures are considered and implemented. During the Project preparation phase, compliance monitoring activities will focus on ensuring effective ESMF implementation and respect of procedures. The NELSAP Environmental and Social Officers will ensure that NCORE sub-Projects studies are properly and timely conducted in compliance with Countries and donors regulations.

The feasibility studies will also include an assessment of the conditions for implementation of a RAP or PF, as appropriate. These will include the following:

a) Timely information onthe potential future sub-project about all resettlement and compensation issues arising as a result of RAP or IPP related activities or in cases when a PF would be needed, as determined by the pre-feasibility assessments;
b) Grievances, especially those that have not yet been resolved at the local level and which may require resolution at the higher levels as initially determined in the pre-feasibility studies;
c) Document completion of project resettlement and compensation if these are applicable, including for all permanent and temporary losses;
d) Evaluation of the quality of compensation or other relevant mitigation measures that would be applied in accordance with the requirements of the potential future investment projects that have been initially identified, including impacts on livelihoods; and

e) Mitigation measures, as a necessity, when there are significant changes in the indicators that may require strategic interventions;e.g. vulnerable groups are not receiving sufficient support from the identified potential future sub-project, as determined in the pre-feasibility analyses

During the implementation phase, compliance monitoring would include inspections during construction of the project's components such as the multipurpose dam plants and pipelines as well as the right of way to verify the extent to which conditions based on which licenses are issued and adhered to. The effective project construction, operational and decommissioning phase will be the full responsibility of the benefiting country and compliance monitoring ensured by the National Environmental Agency. The role of NELSAP in the process shall be clarified at an advanced stage.

b) Impacts Monitoring

Once under implementation, monitoring of sub-projects impacts mitigation measures should be the duty of the Government's Implementing Agency. It is expected that the Environmental and Social safeguards documents will be given to the contractor and the Implementing Agency will be monitored to ensure that works are preceding in accordance with the laid down mitigation measures.

The monitoring and evaluation of the social impacts measure the following: (i) impacts on affected individuals, households, and communities to be maintained at their pre-project standard of living, and better; (ii) gender differentiated impacts to be avoided, minimized or addressed; (iii) improvement of communities affected by the project; and (iv) management of disputes or conflicts. In order to measure these impacts, the pre-feasibility studies will identify the specific indicators to be monitored with gender disaggregated data ; define how they will be measured on a regular basis; and identify key monitoring milestones (e.g. at mid-point of the RAP implementation process, if applicable).

c) Cumulative Impacts Monitoring

The impacts of the NCORE sub-projects on the environmental and social resources within the NEL region and broadly in the Nile region will also be monitored with consideration ofother developments which might be established. This will be done through the NELSAP MSIOA modeling tool which will analysis the cumulative impacts of the water infrastructures to the NEL basin. The other NBI centers through different tools including the Nile Decision Support System (Nile-DSS) modeling tool will have also the opportunity to monitor the cumulative impacts of these infrastructures to the whole Nile Basin.

6 Institutional arrangements for implementation of the ESMF

6.1 Basin-wide level Institutional arrangements

At the basin-wide level, the relevant bodies that have important roles in implementation of the ESMF are the Nile Council of Ministers (Nile-COM), the Nile Technical Advisory Committee (Nile-TAC) and the Nile Basin Initiative Secretariat (Nile-SEC).

a) ***Nile Council of Ministers (Nile-COM)*** this is the supreme policy and decision-making organ of the Nile Basin Initiative. It is comprised of the Ministers responsible for water resources management in the member countries. The Nile-COM approves basin-wide policies, guidelines and regulations of the NBI, including these relating to environmental and social management. Nile-COM also approves annual budgets of Nile-SEC, which include financial provisions to support activities related to

implementation of the ESMF. Nile-COM also considers evaluation reports on performance of environmental and social management policy and guidelines, and may make amendments as necessary.

b) ***The Nile Technical Advisory Committee (Nile-TAC)*** comprises of senior government officials, mainly drawn from the Ministries responsible for water resources management. The Nile-TAC is an advisory body to the Council of Ministers on technical matters concerning the sustainable management and development of the common Nile Water Resources. The Nile-TAC advises on basin-wide polices, guidelines and regulations that are needed for management of the Nile water resources, including those related to environmental and social management. Nile-TAC also carries out oversight and supervision of the Nile-Secretariat and basin-wide projects and programs. Nile-TAC members serve as the technical and operational link between the NBI and the countries, and in this respect, are responsible for ensuring that this ESMF and other NBI basin-wide polices and guidelines are complied with at national level (i.e. in activities of the country related to NBI projects). This latter role, among other things, calls for coordination and collaboration with other national agencies responsible for social and environmental management, such as National Environment Management Authorities, and ministries responsible for resettlement.

c) ***The NBI Secretariat (Nile-SEC)*** based in Entebbe –plays a supportive and facilitative role to the NBI governance bodies (i.e. the Nile-COM and Nile-TAC). Nile-SEC is responsible for basin-wide coordination of NBI activities, including oversight and backup to the SAPs in their application of the ESMF. Nile-SEC is also responsible for seeking approval from NBI governance (Nile-TAC and Nile-COM) for the ESMF and any revisions to it, for providing reports on the implementation of the ESMF and coordinating the participation of regional-level stakeholders in the NCORE Project.

6.2 NEL sub-regional Institutional Arrangements

The important institutional structures involved in implementation of the ESMF within the Nile Equatorial Lakes sub-region include the Nile Equatorial Lakes Council of Water Ministers (NELCOM), the Nile Equatorial Lakes Technical Advisory Committee (NELTAC), the Nile Equatorial Lakes Subsidiary Action Program Coordination Unit (NELSAP-CU), Project Management Units (PMUs), National Liaison Officers (NLO), and National Agencies responsible for environmental and social management.

a) ***NELCOM and NELTAC***: Perform a similar role at the sub-basin level to that played by the governance bodies at basin-wide level i.e. approval, following technical appraisal, of sub-basin policies, guidelines and standards including the NEL Environmental and Social Management Guidelines (ESMG) that are derived from, or consistent with, basin-wide policies; approval of work plans and budgets; and oversight and supervision of NELSAP-CU.

b) ***NELSAP CU***: This is the institution with primary responsibility for implementation of NEL policies, guidelines and regulations including those on environmental and social management such as the ESMF and RPF. Two officers at the NELSAP-CU – the Environmental Management Specialist and Social Development Officer – are directly responsible for mainstreaming environmental and social management in all aspects of the NBI project conception, identification, preparation and implementation within the NEL sub-region. The two officers work in collaboration with staff of NELSAP projects, and with relevant stakeholders at national level to ensure compliance with the ESMF. They directly oversee the implementation of activities related to environment and social management and are assisted from time to time in their work by short-term consultants contracted to perform specific tasks such as preparing mitigation plans, project-specific environmental

management plans, resettlement action plans, and review of ESIA reports. NELSAP-CU is responsible for preparation of guidelines, manuals codes of practice and other tools such as forms and checklists used by the NELSAP projects for environmental and social management.

c) ***Project Management Units (PMUs)***. Day to day activities of the NELSAP projects are carried out by a Project Management Unit (PMU) comprising technical personnel in disciplines relevant to the projects. Each of the PMUs, with guidance from the Environmental Management Specialist and Social Development Officer, is responsible for (i) determining the appropriate level of input by the two officers on environment and social issues, and (ii) implementing the ESMF for the projects.

d) ***National agencies***. The role of the National agencies in the implementation of the ESMF is critical as some shall implement the project while others ensure that the investments projects are undertaken with due regard for the integrity of the resources. The roles of the major country agencies involved in national environmental and social assessment process including institutions which have jurisdiction in the areas of licensing, permitting, assessment, monitoring, etc. have been assessed. The existing gaps and weaknesses in regards to the implementation of this ESMF are also reported taking into consideration findings from the assessments conducted by NELSAP in 2012[4]. The specific roles of these agencies are indicated in the Appendix 8.

e) ***Development partners*****:** Project financiers or their representatives participate in regular Program/Project steering Committee meetings. In additional, they conduct regular appraisal and supervision missions, through which they evaluate, among other things, the implementation of the ESMF and may suggest additional measures for strengthening the management framework or remedying observed weaknesses. The reporting framework, screening procedures and preparation of management and mitigation plans are discussed and agreed between the Development Partners and Project implementation teams during the early stages of project preparation.

6.3 Eastern Nile sub-Region

In the Eastern Nile sub-region, the parties directly and indirectly involved in the use of the ESMF can be grouped into two (a) primary stakeholders – environmental and social practitioners at ENTRO; i.e. those taking part in environmental and social assessments or other management activities as part of ENSAP projects, including staff of ENTRO, project units, consultants, and reviewers; this category also includes government institutions (departments/ministries) who are proponents or implementers of ENSAP projects (b) Secondary stakeholders who comprise of government institutions involved in the approval of ENSAP activities and enforcement of environmental and social standards.

6.4 Experience of the NBI centers related to ESMF

The NBI centres where most of the activities related to sub-project preparation and implementation, and mainstreaming of environmental and social management in the project cycle occur are the secretariats of the two sub-basin Subsidiary Action Programs – NELSAP-CU and ENTRO – and the Project Management Units under the two secretariats.

Some environmental and social management tasks at the two centres are undertaken by Secretariat staff while others are outsourced to local and international consultants who work under the supervision of NBI staff. NELSAP-CU and ENTRO staff are well experienced in management of environmental and social impacts related to water sector sub-projects. The staff of the two centres have been involved in all

[4] Country Assessments Report on Environmental and Social Policies in the NEL region, 2012.

aspects of environmental and social management including preparing for, carrying out or supervising project screening, categorization and scoping; execution/preparation of ESIAs, social and gender assessments, baseline social economic assessments, stakeholder mapping and analysis, resettlement action plans, environmental and social management plans and public hearings. The centre staffs also haveexperience in preparing environmental and social management guidelines, coordinating and working with various national agencies, carrying out awareness raising and training of local communities and national staff in different aspects of environmental and social management.

More specific experiences at NELSAP include development of a Strategic Social and Environmental Assessment (SSEAs) for power development optionsand a multi-sectoral investment opportunity analysis for growth in the NEL region. NELSAP has developed its own preliminary ESMF which was used as a processing tool for sub-projects preparation for the last three years. In addition, NELSAP has developed Environmental and Social Management Guidelines as a source document for the assessment of potential environmental and social impacts of sub-projects and mitigation of identified impacts.

By its scope and nature of project preparation and implementation supervision, ENTRO has consistently ensured environmental and social good practice and accumulated experience in employing and conducting a variety of environmental and social management instruments such as the Cooperative Regional Assessments (CRA), Strategic Social and Environmental Assessments (SSEA), Environmental and Social Impact Assessments (ESIA), Resettlement and Compensation Plans (RCP), and Environmental and Social Monitoring and Audit.

ENTRO developed its own Environment Management Guidance (EMG) and a Social Assessment Manual (SAM). These two documents are the basis for addressing the World Bank safeguards and other international requirement.

The Nile Secretariat (Nile-SEC) is not involved in the day-to-day activities related to sub-project preparation and implementation but periodically conducts strategic basin-wide studies that may lead to identification of sub-projects. Consistent with its role as a support body to the supreme policy organ of the NBI, and its role in developing a basin-wide perspective on the management and development of the basin, the secretariat has been involved with overseeing the process for putting in place the policy and regulatory framework for environmental and social management in the NBI. In this respect, Nile-SEC has been championing the ongoing process for formulation of the NBI Environment and Social Policy (ESP), providing technical back-up to the SAPs in reviewing their Environment and Social Management Guidelines (ESMG), and development of NBI strategies for Gender Mainstreaming, Stakeholder Participation, Communication, and Wetlands Management. Nile-SEC has also been responsible for coordinating the participation of regional-level stakeholders (such as Nile Basin Discourse - NBD) and mainstreaming environmental and social issues in water resources planning at basin-wide levels, such as in the Comprehensive Basin Wide Study on Hydropower Development Options, and in development of the Nile Decision Support System (Nile-DSS).

7 Capacity Building, Training and Technical Assistance

The environmental sustainability of the proposed projects to be prepared is highly dependent on the capacity of the implementing agencies to coordinate the planning and supervision of service providers. NELSAP has one Environmental Management Specialist and one Social Development Officer, and they are the key staff responsible for environmental and social management at the SAPs. They both have

required qualifications and adequate experience in their respective areas of expertise, and are supported in their day-to-day work by the management and other professional staff at the NELSAP CU.

At the level of the Member States, existing capacities to monitor and audit environmental and social management varies from one country to another. Capacity building needs assessments of government staffs were undertaken through the Shared Vision Projects as well as the two SAPs and different training and awareness programs on projects environmental and social management were conducted in the Basin.

However, through the country assessments on environmental and social policies and institutional framework conducted in the two sub-basins by the SAPs, it is clear that there are still some gaps in thecountries with regard to the national and International Policies and in particular the capacity to assess the impacts related to social components including the involuntary resettlement and environmental audits. Though NELSAP has the required human resources required to manage the environmental and social issues related to sub-projects, it also has an option to outsource external technical assistance to support environmental and social management if warranted by the complexity and magnitude of work.

For the effective implementation of this ESMF for the NCORE project, countries will have to play a key role and there is a need forconducting at least three sets of training to the benefit of the following national agencies:

a) **Ministriesof agriculture as the lead agency in the implementation of Projects management plans**: Training on mainstreaming of Environmental and Social Safeguards within the Ministry, improved collaboration with National Environmental Agency for successful implementation of the RAP, the Dam safety and the Pest Management Plans.
b) **National Environmental Agencies**: Training on monitoring and auditing of projects RAP and other Management Plans (ESMP, DSMP and IPMP) implementation In addition, training on strengthening social assessment components of the ESIA studies and integrating national social policies and strategies into EIA guidelines (gender, HIV, stakeholder involvement).

NELSAP project management units will also benefit from the above mentioned trainings.

8 Consultation and Participation

Public consultations in relation to the ESMF occur at all stages, starting with inception and planning of the feasibility studies and ESIA and RAP studies. Public participation and consultations take place through individual, group, or community meetings. Additionally, radio programs and other media forms may be used to further disseminate information. PAPs are consulted in the survey process; public notices where explanations of the potential future investment project are made a part of the process of completing the feasibility studies. This also covers plans for consultation and participation during the implementation of potential future investment project activities identified, and during the monitoring and evaluation process. Selection of ways to consult, and expand participation of stakeholders, will take into consideration literacy levels prevalent in affected communities; gender; ethnicity and cultural aspects; and practical conditions (like distance).

For the multipurpose infrastructure projects being prepared under component 2b:

Project identification phase: Preliminary consultations were conducted during project identification stage and have involved primarily the local authorities and key technicians of key Government agencies in order to ensure that the project aligns with national Policies, sectoral and local plans and strategies. Such consultations were conducted by each investment project during the identification stage and lists of stakeholders as well as their opinions are included in the preliminary ESIA reports.

Project preparation phase: Consultations during preparation of the feasibility studies aim at: (i) collecting background information, (ii) conducting environment and social surveys and (iii) informing as well as collecting opinions of key stakeholders on potential environment and social impacts. A dynamic participatory approach involving a broad base of stakeholders will be established throughout the studies period. Environmentalmanagement, resettlement and livelihood restoration and other social issued will be put in place during this phase. The levels of consultation will vary from households to community groups, based on the particular context of the potential future investment project(s). Focus group meetings with women, farmers' associations, individuals who own farms, fishing boats, etc., as well as primary and/or secondary schools, health centers, and agricultural cooperative unions are usually good sources for establishing the community baseline situation, and are part of the proposed procedures for the ESMF.

Project Implementation phase. For projects under category A that might be nationally controversial for one reason or another, a Communication Plan including grievance redress mechanisms will be developed for suchinvestment projects and will be put in place before commencement of the implementation phase (outside the scope of this project). Participation of local leaders in disseminating information and resolving disputes will be important.

Monitoring and evaluation phase. Stakeholders will participate in the potential future investment project workshops at mid-term and at the end of project implementation. The participation mechanisms will be assessed during the feasibility study phase.

9 ESMF implementation budget

The ESMF implementation costs will be limited to monitoring activities aimed at ensuring that NCORE sub-projects activities align with this ESMF recommended procedures, and to support a capacity building program for key actors. The total cost is estimated at 214,400 USD as detailed in the following table:

Table 9-1: ESMF Implementation costs

	Activity	Description	Unit Cost USD	Number	Total cost USD
	ESMF Capacity building				
1	**Ministry of agriculture/lead agency** Awareness creation and Capacity building for Government Professionals	Training workshop on mainstreaming ESIA and RAP procedures into the Institution functions Effective implementation safeguards management plans	60,000 (5 days)	1	60,000

2	**Environmental Agency** Training on monitoring and auditing of projects RAP and Management Plans (ESMP, DSMP and IPMP)safeguards management plans	ESIA and RAP procedures Planning and Conducting monitoring and auditing process for safeguards management plans	60,000 (5 days)	1	60,000
3	Selectedsocial and environmental champions	Study tour for selected social and environmental champions to a specific dam site and/or irrigation schemes project	36,000 (3 days)	1	36,000
4	**National Environmental agency** Training on strengthening social components of the ESIA studies for National Environmental Agency officers (4 countries) and Project staff	Integration of national social policies and strategies into EIA guidelines, Social Impact assessments and critical mitigation measures	28,400 (3 days0	1	28,400
	ESMF monitoring				
5	Monitoring and evaluation of ESMF implementation	Compliance Monitoring of ESMF procedures Independent evaluation	Staff time 30,000	 1	 30,000
	TOTAL				**214,400**

References

1) Agricultural Water In The Nile Basin –Final Report, Ian Anderson (April 2008)
2) Detailed identification studies for 10 potential multipurpose WRD projects (2012)
3) East Afromontane Biodiversity Hotspot Ecosystem Profile (Critical Ecosystem Partnership Fund &Bird Life International) 2002.
4) Feasibility study of a Kagera Integrated Watershed Management (2012)
5) Kagera basin development plan (BDP, 2012)
6) Kagera basin monograph and database (2008)
7) Large Scale Irrigation Practices in the Nile Basin, Best practices, weaknesses and opportunities, Final report January 2009 by Wim Bastiaansen, 2008
8) Mara basin monograph and database (2008)
9) NBI Strategic Action Program, 2002
10) NEL Multi Sector Analysis report, 2012
11) NEL Multi Sector Strategic Environmental and Social Assessment, 2012
12) NEL multi-sector investment opportunity analysis (2012)
13) NEL Water Resources Development Project, Mara Valley Irrigation Scheme Final Pre-Feasibility Report (2012)
14) NEL Water Resources Development Project, Ngono Valley Irrigation Scheme Final Pre-Feasibility Report (2012)
15) NELSAP Environmental and Social Management Guidelines (2012)
16) NELSAP Gender Mainstreaming strategy (2008)
17) NELSAP irrigation potential assessment study (2012)
18) SMM basin monograph and database (2008)
19) SMM Multipurpose Projects pre-feasibility study (2012)
20) World Bank Environmental Assessment Sourcebook (5th edition 1998)
21) World Bank Policy on Disclosure of Information (2002)
22) World Bank's Safeguards Policies (2007)

Appendices

List of Appendixes:

Appendix 1: Summary of NEL region Environmental and Social Regulatory Framework

Appendix 2: Summary analysis of relevant national environmental and social policies in the NEL region

Appendix 3: Biodiversity and Physical cultural hotspots in the NEL region

Appendix 4: Environmental and Social Screening Form (ESSF)

Appendix 5: Sector Checklist – Water Resources Development

Appendix 6: Public Participation and Assessment Checklist

Appendix 7: Environmental and Social Impact Assessment Report Format

Appendix 8: Resettlement Action Plan Report format

Appendix 9: Sample of Terms of References for ESIA and RAP studies

Appendix 10: Guidelines for Dam Safety Assessment

Appendix 11: Chance Finds Procedure

Appendix 12: Stakeholder Consultations

Additional safeguards documents:

1) NELSAP Sub-Projects data sheets
2) NELSAP sub-projects Preliminary Environmental and Social Impact Assessment reports
3) Resettlement Management Framework for Burundi, Kenya, Uganda, Rwanda and Tanzania
4) NELSAP Integrated Pest Management Framework

Appendix 1: Summary of NEL region Environmental and Social Regulatory Framework

Kenya	Uganda	Tanzania	Burundi	Rwanda
Environmental management laws				
Section 589 0f Environmental Management & Coordination Act (1999) provides for mandatory EIA and SEA for sub-projects	National Environment Act, Cap. 153, Section 20 provides for sub-projects to undergo EIA	Environment Management Act, 2004 stipulates sub-project types to undergo mandatory EIA	Environment Code (2000) & presidential decree (2010) defines EIA procedures for sub-projects	Organic Law No. 4 of 2005 defines projects to undergo mandatory EIA
Water management laws				
The Water Act 2002 requires EIA for water related investment projects specifies rights to water use	The Water Act insists on protection and integrated sustainable development, management and use of the national water resources with the full participation of the stakeholders. The National Environment Wetlands, Riverbanks & Lakeshores Management) regulations provides for EIA in water related projects.	Water Resources Management Act, 2009 provides principles for management and protection of water resources	The Water Policy 2009 calls for integrated management of water resources. A Water Bill, 2011 has been developed. The framework for environment management provides for EIA and has a water resources management component.	Water Law No. 62/2008, embraces modern principles of sustainable water resources.
Wetlands management laws				
Environmental Management and Coordination Act 1999 covers wetland protection. The Water Act 2002 addresses wetland management issues. Others include; Agriculture Act, Physical Planning Act, Wildlife Conservation and Management Act Cap 376, Forest Act 2005, Fisheries Protection Act Cap 379.	The National Wetlands Policy 1995 National Environment Act Cap 1531995 Wildlife Act1996, Land Act1998 National Environment (Wetlands, Lakeshores and Riverbanks Management) Regulations 2000 National Environment (Hilly and Mountainous Areas Management) Regulations 2000 National Forestry and Tree Planting Act 2003	National environment management Act (2004) National Forest Act (2004) National Water Resources Management Act (2002) The Land Act (1999) The Wetlands and Wildlife Policy 2010	Land Act, 1986; Forest Act, 1985. Environmental Act (2000) Mining Act (1978) National policy of Water (2001) Master Plan of swamps management (1999) National Environmental Strategy (SNEB) (1997) National Action plan of Adaptation to the Climatic Changes (NAPA) (2006)	Organic law on environmental protection and management –2005, ORTPN – 1972 amended 2003 Wetland protection, Land law – 2005 and Wildlife Act
Forest management laws				
Environmental Management and Coordination Act 1999 adopts ESIA as a tool for sustainable utilization of forest resources; Forest Act 2005 provides for establishment, development and sustainable management, including conservation and rational utilization of forest for socioeconomic development	National Forestry & Tree Planting Act, 2003 provides for the establishment, development and sustainable management, including conservation and utilization of forest The Water statute 1995	Forest Act (2002) Tanzania	Law n°1-02 of 25 March 1985 defines the forest domain, and contains all provisions concerning forest reserves, protection of forests.	National Forest Law 2010 provides for establishment, development and sustainable management, including conservation and rational utilization of forest for socioeconomic development

Wildlife management laws				
Wildlife Conservation and Management Act provide for wildlife management and protection	Wildlife Act1996	The wildlife conservation act provides for the protection, conservation, management, development, regulations, control and sustainable utilization of wildlife and wildlife products as well as for the game reserves creation, protection and use of resources.	The Law on Protected Areas establishment and management 2011	The Wildlife Policy still under review by the parliament
Land management and Involuntary Resettlement laws				
The Land Act, 2012 provides for the sustainable administration and management of land and land based resources, and for connected purposes. The Act applies to public land, private land, and community land. Provision is made under the Act for compulsory acquisition of land which is defined as the power of the State to deprive or acquire any title or other interest in land for a public purpose subject to prompt payment of compensation.	This Land Act 1965 & 1998 makes provision for the procedures and methods of compulsory acquisition of land for public purposes whether for temporary or permanent use. The Act requires that adequate, fair and prompt compensation is paid before taking possession of land and property. These are all meant to ensure that the process of land acquisition is in compliance with existing laws and that the affected persons receive fair, timely, adequate compensation. The tenure systems are customary, freehold, and leasehold. Section 43 of the Act empowers the government to acquire land compulsorily in accordance with Article 26 (92) and Article 237 of the Constitution.	The Land Act 1999 provides for land holdings in accordance with the tenure systems in place. The law provides for customary rights and statutory rights of occupancy. Tenure rights to land can be held by individuals and communities. Compensation is made for acquisition of land. According to the *Land (Assessment of Value of Land for Compensation) Regulations, 2001* one must be compensated for the value of property and land. In addition, accommodation allowance for a period of 36 months is awarded; loss of profit, disturbance allowance and transport allowance are paid to enable the resettlement of a person whose land has been acquired.	The 2011 Land Act (*Nouveau code foncier*) recognizes private rights to land, permits usufruct rights, leasehold and concessions. The article 407 provides the rules for the expropriation of land. The Ministry decree n°720/304 stated on March, 20th 2008 provides guidelines for compensation based on the market value and on land for land replacement.	The organic law determines the use and management of land in Rwanda. It also institutes the principles that are respected on land legal rights accepted on any land in the country as well as all other appendages whether natural or artificial. *The Law Relating to Expropriation in the Public Interest, Law No. 18/2007 of 19/04/2007.* The Law determines the procedures relating to expropriation in the public interest. Expropriation is the taking of private property in the public interest aimed at development, social welfare, security and/or territorial integrity.
Gender Legal framework related to access to natural resources				
The National Constitution 2010 The Matrimonial Property Bill 2013 provides for the rights and responsibilities of spouses in relation to matrimonial property and for connected purposes	National Policy on Gender Marriage and Divorce Bill Draft Water Sector Gender Policy	The Land Act states as one of its fundamental principles that: the right of every woman to acquire, hold, use, and deal with, land shall to the same extent and subject to the same restrictions be treated as a right of any man. The same principle is explicitly laid down in the village land Act to cover customary rights of land. Gender and Development Policy	The Constitution of Rwanda 2003 law on matrimonial regime 1999	The Constitution of Burundi 2005 National Policy on Gender Family code
International Conventions				

Convention of Biological Diversity				
Ratified	Ratified	Ratified	Ratified	Ratified
Wetlands Convention				
Ratified	Ratified	Ratified	Ratified	Ratified
UN Framework on Climate Change				
Ratified	Ratified	Ratified	Ratified	Ratified
Convention to combat Desertification				
Ratified	Ratified	Ratified	Ratified	Ratified
Convention on Migratory species				
Ratified	Ratified	Ratified		Ratified
World Heritage Convention				
Ratified	Ratified	Ratified	Ratified	Ratified

Appendix 2: summary analysis of relevant national environmental and social policies in the NEL region

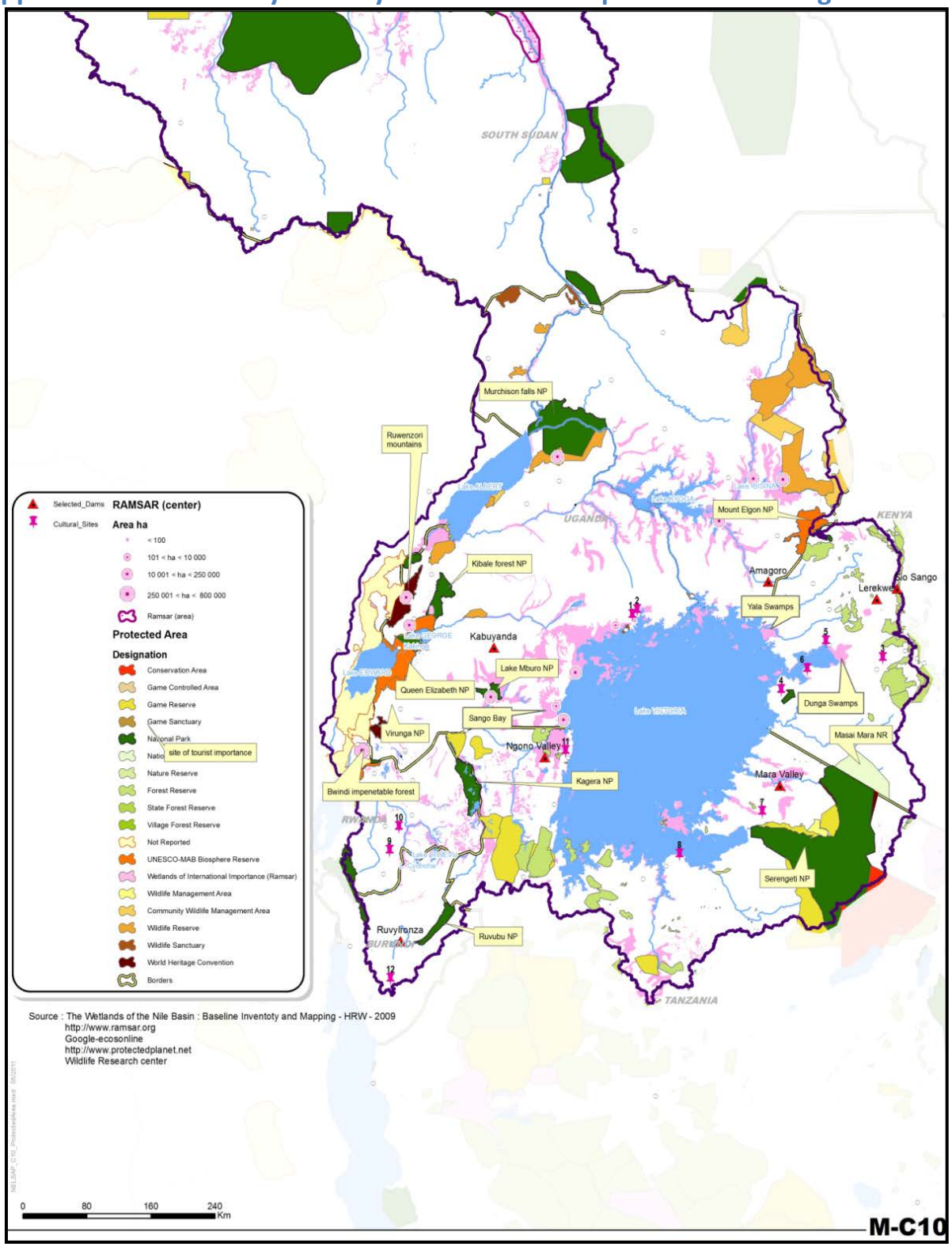
COUNTRY	Policies and regulations	Relevance
BURUNDI	***The Constitution of the Republic of Burundi, 2005****:* the State is enjoined to ensure the proper management and rational exploitation of natural resources, while preserving the environment and conservation of these resources for future generations.	The proposed project is meant to address food self-sufficiency and food security.
	The Burundi's 2009 National Water Policy –covers the aspects of access to domestic water supplies, rural hydropower development, increasing the use of water to provide for productive sectors, sustainable development of water resources, better mechanisms for coordination and capacity building.	Since the proposed Ruvyironza multipurpose project is a water resources project, the project will have to comply with the guidelines and requirements of this policy.
	The Environment Code of the Republic of Burundi, Law No.1/10 of 30/06/2000– provides for the protection and management of the environment and creates the requirement for environment impact assessment (EIA) for projects. ***The Environment Impact Assessment (EIA) Procedures, 2010 (Presidential Decree No.100/22 of 07/10/2010)*** – provide more detail on the EIA process and list the projects that must have an EIA undertaken. The EIA procedures provide that public consultation must take place during the EIA study process.	The proposed Ruvyironza multipurpose WRD project as per the regulations will require an EIA.
	The Revised Land Code of Burundi, Law No. 1/13 of 09/08/2011– The Code ensures land tenure security and formalizes the unwritten rights and the protection and regulation of property rights. The revision also clarifies the different types of land holding and defines the various laws that apply.	The Ruvyironza multipurpose WRD project will impact on land access. Resettlement process and compensations will have to comply with the regulations.
	HIV Mitigation: ***Law No. 18/018 of 12/05/2005***provides Legal Protection for people infected with the human immunodeficiency virus and persons with acquired immunodeficiency syndrome.	The Ruvyironza project will increase risks for HIV contamination. The project ESMP will have to define relevant mitigation measures
KENYA	***The Constitution of Kenya, 2010*** –specifies the right by all Kenyans to have a clean and healthy environment including the right to have the environment protected for the benefit of present and future generations through legislative and other measures; and to have the obligations relating to the environment fulfilled. It specifies also that all land in Kenya belongs to the people of Kenya collectively as a nation, as communities and as individuals.	The proposed Sio-Sango Multipurpose project is meant to address food self-sufficiency and food security.
	The Environment Management and Co-ordination Act, 1999: –provides for the establishment of appropriate legal and institutional framework for the management of the environment and related matters. ***The Environmental (Impact Assessment and Audit) Regulations, 2003:*** –provides guidelines that have been established to govern the conduct of environmental assessments and audits in Kenya.	The proposed Sio-Sango Multipurpose project will have impacts on natural resources and it is required to conduct an ESIA study which comply with national guidelines
	The Water Act 2002 and***National Policy on Water Resources Management and Development, 1999***–The water Act gives legal basis to the aspirations of the Policy, has a number of principles including State ownership of all surface and groundwater resources; management of water resources on catchment basis and not administrative boundaries; recognition of the economic value of water; the equitable allocation of water for all Kenyans, protection of the quality of water resources; and stakeholder involvement in the management of water resources.	The proposed Sio-Sango Multipurpose project is a water resources project and will have to comply with national requirements
	The Forests Act 2005–provides for the establishment, development and sustainable	The proposed Sio-Sango Multipurpose project being

	management, including conservation and rational utilization of forest resources for the socio-economic development of the country. The Act applies to all forests and woodlands on state, local authority and private land.	located near natural forests will have to comply with national regulations
	Wetlands, River Banks, Lake Shores and Sea Shore Management Regulation, 2009–applies to all wetlands in Kenya whether occurring on private or public land. It contains provisions for the utilization of wetland resources in a sustainable manner compatible with the continued presence of wetlands and their hydrological, ecological, social and economic functions and services.	The proposed project is developed on Sio-Sango river and will include a watershed management component.
	The Land Act, 2012 et al. **repeals the Land Acquisition Act, Cap 295**–provides the basis of compensation for titled land compulsorily acquired for a public purpose. The Act provides for a linkage between the Commission, county governments and other institutions dealing with land and land related resources.	The proposed project will impact on land access. Resettlement and compensations process will have to comply with the regulations.
	The *National Policy on Gender and Development, 2000*–focuses on critical areas in order to facilitate the mainstreaming of the needs and concerns of men and women in all areas in the development process of the country.	The proposed project will have to comply with this policy
	The National Museums and Heritage Act, 2006 (Cap 216)–provides for the establishment, control, management and development of national museums and the identification, protection, conservation and transmission of the cultural and natural heritage of Kenya.	The project site might contain Physical cultural sites and in this case will have to comply with this regulation
	HIV and AIDS Prevention and Control Act, 2006–includes public awareness about the causes, modes of transmission, consequences, means of prevention and control of HIV and AIDS. The extension of full protection of human rights and civil liberties to persons infected or suspected to be infected with HIV/AIDS by outlawing discrimination in all its forms and subtleties against persons with or persons perceived or suspected of having HIV and AIDS; and ensuring the provision of basic health care and social services for persons infected with HIV and AIDS.	The proposed project will have to comply with this regulation
TANZANIA	***The Constitution of the United Republic of Tanzania, 1998***–is the supreme law of Tanzania and the State has committed itself under this supreme law to the conservation of the environment. Every per-son has the obligation to ensure that the natural resources of the State are well managed and preserved.	The proposed project on development of irrigation schemes on the Mara and Ngono Valley meant to address food self-sufficiency and food security.
	The Environment Management Act, 2004–provides the legal and institutional framework for the sustainable management of the environment, outlines the principles for sound environment management including impact and risk assessments. It provides the basis for implementation of international agreements on the environment.	The proposed projects will have impacts on natural resources and they are required to conduct an ESIA study which comply with national guidelines
	The National Water Policy–establishes a comprehensive framework for sustainable development and management of Tanzania's water resources and addresses three main issues; water resources management, rural water supply, and urban water supply and sewerage. *The Water Resources Management Act 2009* outlines the principles of water re-sources management and provides for the institutional and legal framework for the sustainable management and development of water resources.	The proposed projects are developed on the Ngono and Mara rivers and shall comply with the policy and regulations. The projects include also a watershed management component.
	The Wildlife Conservation Act, 2009–provides for the conservation, management, protection and sustainable utilization of wildlife and wildlife resources. Conservation means the protection, management and sustainable utilization of wildlife resources, habitat, ecosystem	The Mara Valley project is located near the Serengeti and the Mara Protected Areas and shall comply with this regulation

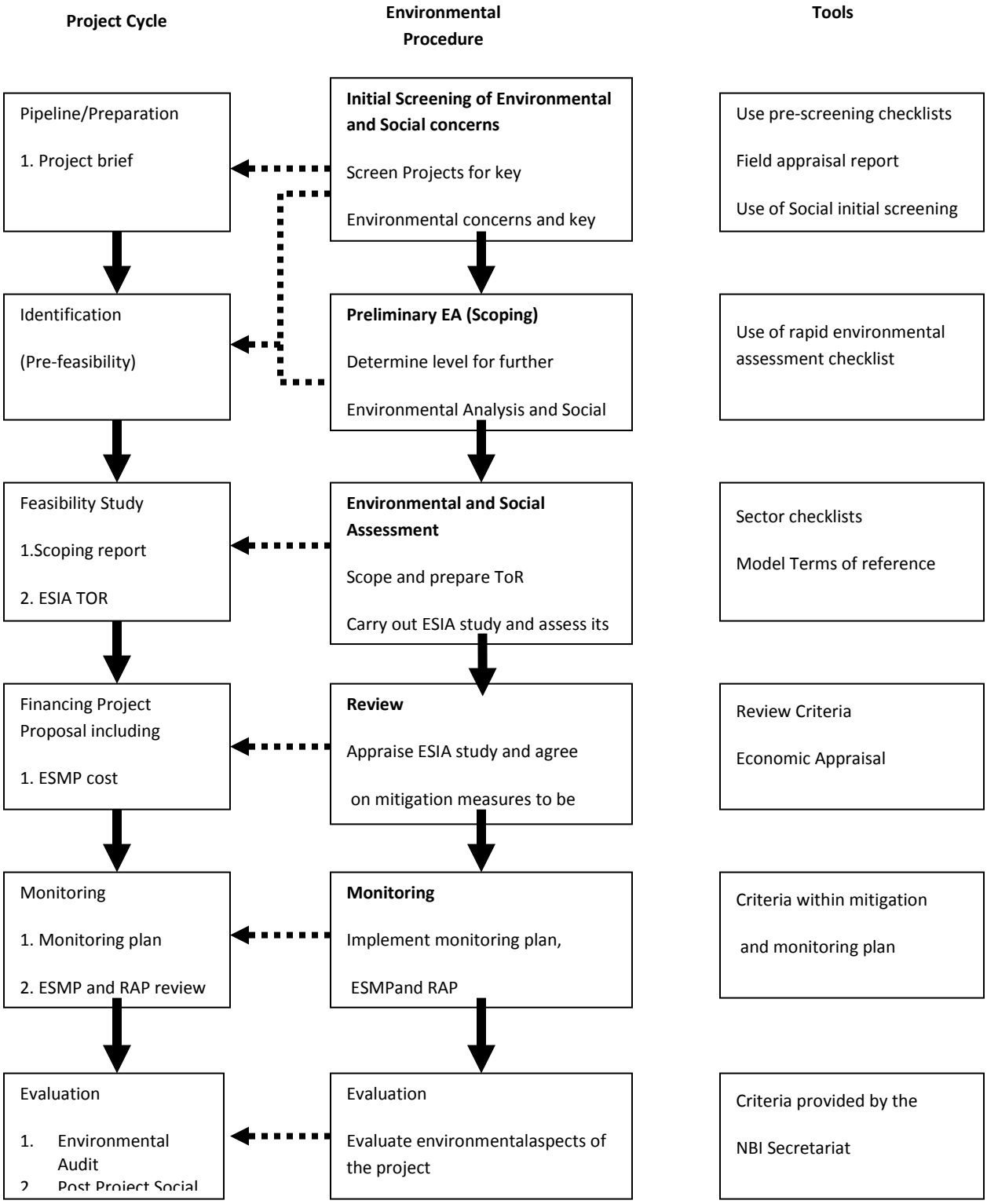
	and the non-living environment supporting such resources, habitat or ecosystem.	
	The Land Act, 1999–provides for land holdings in accordance with the tenure systems in place. The law provides for customary rights and statutory rights of occupancy. Tenure rights to land can be held by individuals and communities. Compensation is made for acquisition of land. According to ***Land Regulations (Assessment of Value of Land for Compensation), 2001***– one must be compensated for the value of property and land.	The proposed projects shall impact on land access and will comply with this regulations
	The Village Land Act No. 5 of 1999*:* The village Land Act No. 5 of 1999 was enacted specifically to cater for the management of and administration of land in villages, the role of local government in land administration, land allocation and occupation. The Act empowers the village council to manage all village lands in accordance with the principles of a trustee with the villagers being the beneficiaries.	The proposed projects shall impact on land access and will comply with these regulations
	National Strategy for Gender Development, 2005 The aim of the strategy is to implement the Women and Gender development policy which strives to redress gender gaps and inequalities between men and women. It also aims to guide implementers to incorporate gender concerns into their plans policies and programs.	The proposed projects will have to comply with this strategy
UGANDA	***The Constitution of the Republic of Uganda, 1995(as amended)***–is the supreme law of Uganda. It is a national objective and directive principle of state policy that the State shall protect important natural re-sources including land, water, wetlands, minerals, oil, fauna and flora on behalf of the people of Uganda.	The proposed projects on Multipurpose Kabuyanda and NabayanjaDams projects meant to address food self-sufficiency and food security.
	The National Environment Management Policy, 1994key objectives include the enhancement of the health and quality of life of all people in Uganda and promotion of long-term, sustainable socio-economic development through sound environmental and natural resource management and use; and optimizing resource use and achieving a sustainable level of resource consumption. ***The National Environment Act***–provides for the sustainable management of the environment and establishes NEMA as the principal agency responsible for the management of the environment.***The National Environment Regulation S.I No. 2/2000*** **Wetlands, River Banks and lakeshores Management** –provides that a person who intends to use the river in ways indicated in Section 23 (1) of these regulations which includes placing a structure over or under the river bank or lake or drill or any other disturbance, will be required to apply for a permit to the NEMA Executive Director in "Form A" set out in the First Schedule to these regulations.	The proposed projects will have impacts on natural resources and it is required to conduct an ESIA study which comply with national guidelines and apply to required permits.
	The Water Act, Cap 152 and Policy–The National Water Policy, 1999–lays the framework for the management of water resources in Uganda. It promotes a new integrated approach to manage the water resources in ways that are sustainable and most beneficial to the people of Uganda; and gives recognition to the social value of water while at the same time giving attention to its economic value. *The Water Act* provides for the use, protection and management of water re-sources and supply.	The proposed projects are developed on the Mishumba and Malaba rivers and shall comply with the policy and regulations. The projects include also a watershed management component.
	The Land Act, Cap 227 and Policies–makes provision for the procedures and method of compulsory acquisition of land for public purposes whether for temporary or permanent use. The Government or developer is to compensate any person who suffers damage as a result of a project development.	The proposed projects shall impact on land access and will have to comply with national regulations and policies

	Uganda Wildlife Act, Cap 200 and Policy –aim to promote the long term conservation of the country's wildlife and biodiversity in a cost effective manner. In order to conserve and manage species, Government shall promote and maintain viable and representative wildlife populations in Uganda both within and outside protected areas.	Although there are no wildlife protected areas near the two project areas some few wildlife animals are expected to exist within the Kabuyanda area. Thus this act will be relevant to this project.
	The Access to Information Act, 2005–provides for the constitutional right to access to information, the classification of information, the modes through which public information may be obtained and related matters. The Act applies to all information and records of Government ministries, departments, local governments, statutory corporations and bodies, commissions and other Government organs and agencies, unless specifically exempted by this Act.	The proposed projects shall comply with this regulation
	The Gender Policy, 1997–recognizes women and children as the main carriers and users of water. It emphasizes the importance of gender responsiveness in terms of planning, implementation and management of water and sanitation initiatives.	The proposed projects shall comply with this policy
	The Equal Opportunities Commission Act, 2007–Affirmative action may be taken, in accordance with the stipulations of the Act, in favor of groups marginalized on the basis of gender, age, disability or any other reason created by history, tradition or custom for the purpose of redressing imbalances which exist against them.	The proposed projects shall comply with this regulation

Appendix 3: Biodiversity and Physical cultural hotspots in the NEL region



Appendix 4: Environmental and social assessment process scheme



Appendix 5: Environmental and Social Screening Form (ESSF)

The Environmental and Social Screening Form (ESSF) is designed to avail information to the decision-makers and reviewers so that impacts and their mitigation measures, if any, can be identified and/or that requirements for further environmental analysis be determined. This Form will be filled for each investment project and be used for the registration of the project at the National Environmental Authority accompanied with the Terms of Reference of the ESIA study.

Name of sub-project……..

Sector……

Name of the Village/Ward/Town/District/Municipality in which the sub-project is to be implemented……

Name of Executing Agent……

Name of the Approving Authority ……

Name, job title, and contact details of the person responsible for filling out this ESSF:

Name: ……..

Job title:……

Telephone numbers:……; E-mail address……..

Date:

Signature:……

PART A: BRIEF DESCRIPTION OF THE PROJECT

Please provide information on the type and scale of the sub-project (area, required land, approximate size of total building floor area).

Provide information about actions needed during the construction of facilities including support/ancillary structures and activities required to build it, e.g. need to quarry or excavate borrow materials, laying pipes/lines to connect to energy or water source, access road etc.

Describe how the sub-project will operate including support/activities and resources required to operate it e.g. roads, disposal site, water supply, energy requirement, human resource etc.

PART B: BRIEF DESCRIPTION OF THE ENVIRONMENTAL AND SOCIAL SITUATION AND IDENTIFICATION OF POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

Describe the project location, project site, surroundings (include a map, even a sketch map)

_____

Describe the land formation, topography, vegetation in/adjacent to the project area

_____

Estimate and indicate where vegetation might need to be cleared.

_____

Environmentally sensitive areas or threatened species

Are there any environmentally sensitive areas or threatened species (specify below) that could be adversely affected by the project?

(i) Intact natural forests: Yes _____No _____

(ii) Riverine forest: Yes _____ No _____

(iii) Surface water courses, natural springs Yes _____ No _____

(iv) Wetlands (lakes, rivers, swamp, seasonally inundated areas)

Yes _____No _____

(v) How far is the nearest wetland (lakes, rivers, seasonally inundated areas)?_____ km.

(vi) Area of high biodiversity: Yes _____ No _____

(vii) Habitats of endangered/ threatened, or rare species for which protection is required under Tanzania national law/local law and/or international agreements. Yes _____ No _____

(viii) Others (describe). Yes _____ No _____

Rivers and Lakes Ecology

Is there a possibility that, due to construction and operation of the project, the river and lake ecology will be adversely affected? Attention should be paid to water quality and quantity; the nature, productivity and use of aquatic habitats, and variations of these overtime. Yes _____ No _____

Protected areas

Does the project area (or components of the project) occur within/adjacent to any protected areas designated by government (national park, national reserve, world heritage site etc.) Yes _____ No _____

If the project is outside of, but close to, any protected area, is it likely to adversely affect the ecology within the protected area areas (e.g. interference with the migration routes of mammals or birds). Yes _____ No _____

Geology and Soils

Based upon visual inspection or available literature, are there areas of possible geologic or soil instability (prone to: soil erosion, landslide, subsidence, earthquake etc.)? Yes _____ No _____

Based upon visual inspection or available literature, are there areas that have risks of large scale increase in soil salinity?

Yes _____ No _____

Based upon visual inspection or available literature, are there areas prone to floods, poorly drained, low-lying, or in a depression or block run-off water Yes _____ No _____

Contamination and Pollution Hazards

Is there a possibility that the project will be at risks of contamination and pollution hazards (from latrines, dumpsite, industrial discharges etc.) Yes _____ No _____

Landscape/aesthetics

Is there a possibility that the project will adversely affect the aesthetic attractiveness of the local landscape? Yes _____No ___

Historical, archaeological or cultural heritage site.

Based on available sources, consultation with local authorities, local knowledge and/or observations, could the project alter any historical, archaeological, cultural heritage traditional (sacred, ritual area) site or require excavation near same?

Yes _____ No _____

Resettlement and/or land Acquisition

Will involuntary resettlement, land acquisition, relocation of property, or loss, denial or restriction of access to land and other economic resources be caused by project implementation? Yes _____ No _____

If "Yes" Involuntary Resettlement OP 4.12 is triggered. Propose the appropriate mitigation measures to be taken.

Loss of Crops, Fruit Trees and Household Infrastructure

Will the project result in the permanent or temporary loss of crops, fruit trees and household infra-structure (such as granaries, outside toilets and kitchens, livestock shed etc.)? Yes _____ No _____

Block of access and routes or disrupt normal operations in the general area

Will the project interfere or block access, routes etc. (for people, livestock and wildlife) or traffic routing and flows?

Yes _____ No _____

Noise and Dust Pollution during Construction and Operations.

Will the operating noise level exceed the allowable noise limits? Yes _____ No _____

Will the operation result in emission of copious amounts of dust, hazardous fumes? Yes _____ No _____

Degradation and/or depletion of resources during construction and operation

Will the operation involve use of considerable amounts of natural resources (construction materials, water spillage, land, energy from biomass etc.) or may lead to their depletion or degradation at points of source? Yes _____ No _____

Solid or Liquid Wastes

Will the project generate solid or liquid wastes? (including human excreta/sewage, hospital waste).Yes _____ No _____

If "Yes", does the project include a plan for their adequate collection and disposal? Yes _____No _____

Occupational health hazards

Will the project require large number of staff and laborers; large/long-term construction camp? Yes _____ No _____

Are the project activities prone to hazards, risks and could result in accidents and injuries to workers during construction or operation? Yes _____ No _____

Will the project require frequent maintenance and or repair Yes _____ No _____

Public Consultation

Has public consultation and participation been sought? Yes _____ No _____

PART C: MITIGATION MEASURES

For all "Yes" responses, describe briefly the measures taken to this effect.

Appendix 6: Public participation and consultation checklist

INFORM	CONSULT	ENGAGE	COLLABORATE	EMPOWER
Goal:	***Goal:***	***Goal:***	***Goal:***	***Goal:***
Promote stakeholder understanding of issues, problems alternatives, opportunities and solutions through balanced and objective information	Obtain feedback on analysis, alternatives, and decisions.	Work directly with stakeholders to ensure that their concerns and aspirations are understood and considered.	Stakeholders become partners in each aspect of the decision, including development of alternatives and identification of preferred solution.	Final decision-making in the hands of stakeholders.
Commitment	***Commitment***	***Commitment***	***Commitment***	***Commitment***
"Will keep you informed."	"As keep you informed, Will listen and acknowledge your concerns and aspirations	"Will work with you to ensure that your concerns/aspirations are directly reflected in the developed alternatives and Will provide feedback on how your input influenced the decision."	"Will look to you for direct advice and innovation in devising solutions and incorporate your advice and recommendations to the maximum extent."	"Will implement what you decide."
Tactics/Techniques	***Tactics/Techniques***	***Tactics/Techniques***	***Tactics/Techniques***	***Tactics/Techniques***
✓ Fact Sheets ✓ Websites ✓ Open Houses ✓ Briefings	✓ Public comment ✓ Focus groups ✓ Surveys ✓ Public meetings	✓ Workshops ✓ Deliberate polling	✓ Citizen Advisory Committees ✓ Consensus-building ✓ Participatory decision-making	✓ Citizen juries ✓ Ballots ✓ Delegated decisions

Appendix 7: Resettlement checklist

1) Objectives of Resettlement and Policy Framework
    a. Description of the purpose and objectives of resettlement
    b. national and local land and compensation laws that apply to the project
    c. description of donor policies and how these will be achieved under the project
    d. statement of principles and legal/policy commitments from the borrower/executing agency
2) Project Design and Scope of Resettlement
    a. detailed description, including:
        i. how baseline for resettlement was established
        ii. maps, of the scope of resettlement
        iii. how resettlement relates to the main sub-project
    b. description of alternative options, if any, considered to minimize resettlement
    c. details of special consideration given to how the project will impact indigenous people and other vulnerable groups, including women
    d. responsibility for resettlement planning and implementation
3) Socio-economic Information and Entitlements
    a. impact of land acquisition on potential affected peoples
    b. identification of losses to resettles and host communities
    c. details of common property resources
    d. cut-off dates of eligibility
    e. new eligibility of policy and Entitlement Matrix
4) Resettlement Site Development and Income Restoration
    a. location, quality of site, and development needs
    b. layout, design and social infrastructure
    c. safeguarding income and livelihoods
    d. income restoration programs
    e. gender issues and other vulnerable groups
    f. integration with host communities
5) Institutional Framework for Resettlement Implementation
    a. mandate of resettlement agency
    b. establishing a resettlement unit and staffing
    c. technical assistance for capacity building
    d. role of NGOs and Civil Society Organizations in resettlement
    e. grievance redress committees
6) Consultation and Community Participation
    a. identification of project stakeholders
    b. mechanisms for participation
    c. participatory resettlement management
    d. institutions in participation
    e. NGOs as a vehicle for participation
7) Resettlement Budget and Financing
    a. land acquisition and resettlement costs
    b. budgetary allocation and timing
    c. sources of funding and approval process
8) Monitoring and Evaluation
    a. establishing a monitoring and evaluation system
    b. monitoring and reporting
    c. NGO and Civil Society participation in monitoring and evaluation
    d. resettlement impact evaluation

Appendix 8: NEL Countries key institutions involved in the ESMF process

KENYA		
Government Agencies	**Role / Influence**	**Identified capacity gaps**
Ministry of Agriculture, National Irrigation Board (MOA-NIB)	Its mandate is formulation, review and implementation of policy on the Agriculture sector, the irrigation and drainage sector and in the reclamation of degraded lands for sustainable development of Kenya. It also promotes and facilitates production of food and agricultural raw materials for food security and incomes; advance agro based industries and agricultural exports; and enhance sustainable use of land resources as a basis for agricultural enterprises. **Lead Agency for the feasibility studies of Sio-Sango irrigation development project and will lead the process of approval of the ESIA & RAP studies**	Limited consideration of Environmental and social safeguards into Ministry services and limited collaboration with Environmental Agency
Ministry of Energy (MoE)	Its mandate is to facilitate the provision of clean, secure, sustainable and affordable energy services for social-economic development while protecting the environment. **Key agency in the feasibility and design studies with regards to hydropower generation from the two investment projects.**	-
Ministry of Lands	Its mandate is to formulate and implement land policy, undertake physical planning, register land transactions, undertake land surveys and mapping, land adjudication and settlement, land valuation and administration of state and trust land. **This Ministry will play a key role in the preparation, validation and implementation of the RAP.**	-
National Environment Management Authority(NEMA)	Principal agency responsible for enforcing regulations and actions related to environmental management and conservation; It has the duty to safeguard and enhance the environment. **Key agency in the preparation of the ESIA & RAP studies and in monitoring and auditing of mitigation measures. Also responsible of issuance of approval certificate for the ESIA&RAP reports which is essential for further implementation of the investment projects.**	Limited capacities for monitoring and auditing for implementation of projects Management Plans (ESMP, RAP, DSMP, PMP…) Limited capacities to assess projects social impacts and required mitigation measures
Water Resources Management Authority (WRMA)	Lead agency in charge of water apportionment and allocation, catchment; Catchment protection and conservation; Water resource assessments and conservation, Gazetting water protected areas; Protection of wetlands; Gazetting water schemes to be state and community owned; Establishing Catchment Management Strategies (CMS) and Collecting water use and effluent discharges. **Key agency in the preparation of the of the ESIA & RAP studies and for issuance of water permits essential for further implementation of the projects.**	-
Kenya Forest Service (KFS)	Principal agency for conserving, developing and sustainably managing forest resources for Kenya's social-economic development. **Key agency in preparation of the ESIA & RAP studies in case forest resources are impacted by the investment projects.**	-
UGANDA		
Government Agencies	**Role / Influence**	**Identified capacity gaps**
Ministry of Water and Environment (MWE)	Has the responsibility for setting national policies and standards, managing and regulating water resources and determining priorities for water development and management. **Lead Agency for the feasibility and design studies of Nyabanja and Kabuyanda irrigation development projects and will lead the process of seeking the ESIA & RAP reports approval certificate and is also key agency for issuance of water permits essential for further implementation of the projects and monitor project implementation.**	-
Ministry of Energy and Mineral Development (MEMD)	Its mandate 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. **Key agency in the feasibility and design studies with regards to hydropower generation from the two**	-

	investment projects.	
Ministry of Lands, Housing and Urban Development	Its mandate 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. **This Ministry will play a key role in the preparation, validation and implementation of the RAP.**	-
Ministry of Agriculture, Animal Industries and Fisheries (MAAIF)	Its mandate is to promote and support sustainable and market oriented agricultural production, food security and household incomes. **Key agency in the preparation of the feasibility and design studies and Lead Agency during the implementation of Pest Management Plans for the two investment projects**	Limited consideration of Environmental and social safeguards into Ministry services and limited collaboration with Environmental Agency
National Environment Management Authority (NEMA)	Responsible for the regulatory functions and activities that focus on compliance enforcement of the existing legal and institutional frameworks on environmental and management in Uganda. Its mandate is to oversee the implementation of all environment conservation programs and activities of the relevant agencies both at the national and local Government level. **Key agency in the preparation of the ESIA & RAP studies and in monitoring and auditing of mitigation measures. Also responsible of issuance of approval certificate for the ESIA&RAP reports which is essential for further implementation of the investment projects.**	Limited capacities for monitoring and auditing for implementation of projects Management Plans (ESMP, RAP, DSMP, PMP…) Limited capacities to assess projects social impacts and required mitigation measures
National Forest Authority (NFA)	Responsible for sustainable management of Central Forest Reserves (CFRs), supply of seed and seedlings, and provision of technical support to stakeholders in the forestry sub-sector on contract. **Key agency in preparation of the ESIA & RAP studies in case forest resources are impacted by the investment projects.**	
TANZANIA		
Government Agencies	**Role / Influence**	**Identified capacity gaps**
Ministry of Water	Its mandate is ensure a sustainable management and development of water resources for social and economic development, and to enhance sustainable irrigation development that drives to increase productivity, profitability, increased incomes, food security, and therefore contribute effectively in economic growth and poverty reduction. **Lead Agency for the feasibility and design studies of Mara and Ngono Valley irrigation development projects and will lead the process of seeking the ESIA & RAP reports approval certificate. It is also the key agency for issuance of water permits essential for further implementation of the projects and monitor project implementation.**	
Ministry of Energy and Minerals (MEM)	Its mandate is to facilitate development of energy and mineral resources. The Ministry delivers various services related to development of energy and minerals resources through the participation of various stakeholders including public, private, public-private partnerships, local communities, NGOs and civil society. **Key agency in the feasibility and design studies with regards to hydropower generation from the two investment projects.**	
Ministry of Agriculture, Food security and Cooperatives (MAFC)	Its mission is to deliver quality agricultural and cooperative services, provide conducive environment to stakeholders, build capacity of local Government Authorities and facilitate the private sector to contribute effectively to sustainable agricultural production, productivity and cooperative development. **Key agency in the preparation of the feasibility and design studies and Lead Agency during the implementation of Pest Management Plans for the two investment projects**	Limited consideration of Environmental and social safeguards into Ministry services and limited collaboration with Environmental Agency
Ministry of Livestock and Fisheries Development	Has the mandate of overall management and development of livestock and Fisheries resources for sustainable achievement of the Millennium Development Goals, National Strategy for Growth and Reduction of Poverty, Improved Livelihood of Livestock and Fisheries Dependent Communities, Food Safety & Security without compromising Animal Welfare and Environmental Conservation. **Key agency in the preparation of the feasibility and design studies with regards to improve livestock management in the Mara valley Project.**	
National Environment Management Council (NEMC)	Its mission is to undertake environmental enforcement, compliance, review and monitor environmental impact statements, research and awareness raising.	Limited capacities for monitoring and auditing for implementation of projects

	Key agency in the preparation of the ESIA & RAP studies and in monitoring and auditing of mitigation measures. Also responsible of issuance of approval certificate for the ESIA&RAP reports which is essential for further implementation of the investment projects.	Management Plans (ESMP, RAP, DSMP, PMP…) Limited capacities to assess projects social impacts and required mitigation measures
BURUNDI		
Government Agencies	**Role / Influence**	**Identified capacity gaps**
Ministry of Water, Environment, Land Management and Urban Planning (MEEATU)	It is empowered for everything that concerns the development and implementation of national policy in the field of water, environment, land management, and the urban sector. It has the following objectives: promoting a coordinated management of the environment; sound management of land, water, forests, and air; preservation of ecological balance; and conservation of biodiversity. **Lead Agency for the feasibility and design studies of Ruvyironza Multipurpose dam project. It is also responsible for issuance of ESIA & RAP reports approval certificate and water permits essential for further implementation of the projects. It is also responsible for the monitoring and auditing of the mitigation measures as well as water use.**	Limited capacities for monitoring and auditing for implementation of projects Management Plans (ESMP, RAP, DSMP, PMP…) Limited capacities to assess projects social impacts and required mitigation measures.
Ministry of Energy and Mines	Its mission is to design and implement government policy in geology, mining, and energy matters; promote research of geological and mining industry activities; promote the research of hydrocarbons and their exploitation; plan and supervise the actions of rural development through hydropower and electrification promote renewable energy; and ensure the planning, construction, and management of hydraulic and energy infrastructure in collaboration with other ministries involved. **Key agency in the feasibility and design studies with regards to hydropower generation from the two investment projects.**	Limited consideration of Environmental and social safeguards into Ministry services and limited collaboration with Environmental Agency
Ministry of Agriculture and Livestock (MINAGRI)	In charge of the design, planning, coordination, and implementation of national policy on agriculture and livestock. The development and implementation of national policy on protection and fertilization of soils. The promotion and supervision of the exploitation of water, of fishing and fish farming products, in collaboration with other concerned ministries. **Key agency in the preparation of the feasibility and design studies and the Lead Agency during the implementation of Pest Management Plans for the two investment projects**	Limited consideration of Environmental and social safeguards into Ministry services and limited collaboration with Environmental Agency

Appendix 9: Model of Terms of reference for ESIA and RAP study

Independent Environmental and Social Impact Assessment (Irrigation and Watershed Project in the Kagera Basin of Rwanda (approximately 13000 ha))

1. Background

1.1. Project Introduction

The Nile Basin Initiative/Nile Equatorial Lakes Subsidiary Action Program (NELSAP) has received financing from the World Bank Nile Basin Trust Fund towards the cost of the Nile Cooperation for Results Project and intends to apply part of the proceeds for consulting services for undertaking Environmental and Social Impact Assessment (ESIA) and Developing a Resettlement Action Plan (RAP) for the Muvumba Irrigation Development and Watershed Management Project. This study will run concurrently with the feasibility study for the Muvumba Irrigation Development and Watershed Management Project, and will independently evaluate its environmental and social aspects.

The proposed Muvumba Irrigation Development and Watershed Development project is situated downstream the proposed dam site located at 1° 21' 26.46" S, 30° 13' 48.6" E along the Muvumba River in Nyagatare district, Eastern Province in Rwanda, with the upstream watershed extending in Uganda. The feasibility and design studies will explore opportunities for irrigated water resources development with potential direct benefits of: (i) Expansion of existing irrigation area by over 13,000 ha (benefiting approximately 50,000 farmers), (ii) Hydropower generation of 2.9 MW/25.3 GWh/year (benefiting about 28,000 households), (iii) Potable water supply to 118,494 people by 2035, (iv) Flow regulation for drought and flood control, and (vii) Restoration of degraded upstream sub-catchments. The feasibility study reports will include in-depth assessments of technical, institutional, social, environmental, financial and economic aspects of the project, including an optimized long-term water resources assessment, allocation and utilization in the catchments related to the project.

1.2. Environment Overview of the Project Area

The Muvumba River on which the project is planned originates from the South-Western Uganda and North-Eastern Rwanda. 63% of the river catchment is located in Uganda and the remainder in Rwanda. The catchment is characterized by hilly terrain, steep hills in Uganda, rising from 1500m.a.s.l to 2300m a.s.l., while in Rwanda the terrain is hilly but with a lower range, rising from 1370m a.s.l. to 1500m a.s.l. The surrounding areas of the project are characterized by gently rolling hills. The proposed site is relatively flat with a gentle slope towards the River, lying at 1290 m a.s.l.

The Rwanda's Ministry of Agriculture and Animal Resources (MINAGRI) operates diversion weirs downstream the proposed project area, which irrigates about 3,000 ha within the valley. However the weirs do not provide storage and yet the river faces periods of low flows with insufficient water for irrigation and other water uses. The river floods in the rainy seasons and destroys crops.

The main land use around the project site is subsistence cultivation where gardens have been opened close to river banks. The crops grown mainly include maize and sorghum. To the north of the site are expanses of *Eucalyptus* and *Grevalia spp* woodlots which are largely for the supply of wood fuel. South of site has plots of bananas and subsistence crops. There is no natural vegetation in the vicinity of the project (no national parks or forest reserves close by the site). There are no animals of conservation concerns in proximity except for Weaver Birds (*Quelea quelea*) which are drawn to the areas because of cereals (maize and sorghum) cultivated in the area.

The preliminary studies estimated a reservoir elevation of 1415 m asl with 706 ha of land inundation and a total volume of 109 MCM of water. The reservoir fetch will be 4 km along the main river while the average width of the reservoir will be about 1.2km the inundated area will approximately require the resettlement of about 1,435 people.

2. Objectives of the Assignment

The overall objective is to carry out an Environmental and Social Assessment and prepare a resettlement action plan for the Muvumba Irrigation development and watershed management project. This will include establishment of a socio-environmental baseline, assessment of proposed development options, scoping; prediction of the magnitude and significance of environmental and social impacts, recommending mitigation measures for identified impacts, and devising how they can be incorporated into project design and implementation plans. The study will be undertaken within the framework of the Government of Rwanda as well as World Bank Environment and Social safeguards. The project will also use the "NELSAP Environmental and Social Management Framework for Project Preparation and Implementation", which guides NELSAP in addressing and managing environment and social safeguards, public consultations, and disclosure.

Specific Objectives of the ESIA

The specific objectives of the assessment are:

- To provide baseline information about the environmental, social, and economic conditions in the project area;
- To identify, analyze and evaluate the type and extent of likely potential environmental and social impacts with emphasis on significance, magnitude and distribution of beneficial/adverse effects of the planned project on the existing biophysical and socio-economic environmental components, and assess the capacity of the institutions responsible for management of these impacts;
- Evaluate the social and socio-economic aspects of proposed project, identify stakeholders, carry out public consultations, including potentially project affected persons, analyze their views regarding the environmental and social impacts, design social provisions and measures, formulate strategies for participatory implementation, and recommend the incorporation of the findings into the project design.
- To assess the best alternative project at most benefits and least costs in terms of financial, social, and environment.
- To develop an Environmental and Social Management Plans (ESMP). The ESMP shall outline the mitigation/enhancement, monitoring, consultative and institutional strengthening measures to prevent, minimize, mitigate or compensate for adverse environmental and social impacts and to enhance beneficial impacts, costs of the measures and monitoring requirements.
- To develop a Resettlement Action Plan (RAP) consistent with the laws and policies in Rwanda (and Uganda) as well as the World Bank's policy on Involuntary Resettlement and based on up-to-date information as produced and provided by the project feasibility studies.

The study findings and related Environmental and Social Management Plans (ESMPs), as well as the Resettlement Action Plans (RAPs) shall be prepared in a level of detail specific enough for downstream work towards project implementation.

3. Specific Requirements:

In particular, the ESIA will address World Bank Safeguard Policies that are likely to be triggered by the project including (i) Environmental Assessment OP 4.01; (ii) Natural Habitats OP 4.04; (iii) Physical Cultural Resources OP 4.11; (iv) Involuntary Resettlement OP 4.12; (v) Safety of Dams OP 4.37; (vi) Pest Management Policy OP 4.09; and (vii) Projects on International Waterways OP 7.50.

4. The Study Area of Influence

The study area is the Muvumba catchment within the Kagera River Basin. It includes following areas which will benefit from the Project, or which may be affected negatively by any of the components of the Project. Specifically, the study area will include:

- The catchment supplying the Muvumba dam and the reservoir area that will be flooded as a result of the construction of the dam wall, specifically the upstream reservoir area and its adjacent lands;
- The area downstream of the dam wall including the predicted flood lands and surrounding areas that could be affected by a dam break, or by change in water quality;

- The areas and adjacent areas to the proposed irrigation command area and those to be considered for water supply assessment including urban/economic centers, residential areas, etc.;
- The land resources and the people who may be affected by construction activities related to the dam and irrigation infrastructure, access roads, pumping stations and other ancillary works;
- Natural ecosystems, farmlands, infrastructure, and other water users downstream of the dam which could be affected by the change in the river flow regime or/and by abstractions from the river;

5. Scope of work

Task 1: Establishment of a Socio-Environmental Baseline

Task 1.1: Description of the Proposed Project

In close collaboration consultation with the team undertaking the Feasibility and design studies, the Consultant undertaking ESIA & RAP shall review existing documentation, Feasibility studies interim reports, and describe all project components including associated facilities and infrastructure (drawing from the conceptual project formulation from the feasibility study consultant). The description shall indicate components requiring land acquisition and resettlement; and give an overall estimate of land acquisition and resettlement. In addition, the description shall provide information on, but not limited to, the general design and extent of irrigation and drainage works including specifications of dam and reservoir, the other uses benefiting from the reservoir other that irrigation, size and characteristics of the catchment, and aspects related to operation and maintenance of irrigation schemes.

Task 1.2: Description of the Environmental and Socio-economic condition of the Project Area

The baseline surveys are intended to provide a measure of existing environment and the socio-economic situation against which future changes due to the project can be monitored. The consultant shall describe and analyze the physical, biological and socio-cultural conditions prevailing in the project area, highlighting relevant environmental and social issues. The description will include the characteristic of proposed project area and cover areas potentially affected by impacts, the potential compensation area, and area affected by alternatives. Monitoring indicators will be developed.

The Consultant shall collect, evaluate and present baseline data and information on the relevant environmental characteristics of the present environment in the area of influence of the proposed dam and irrigation command area and related activities, determined from actual site visits, site specific and regional baseline studies in physical, biological, and socio-economic domains. Collection of baseline data should be designed to satisfy information requirements and focused on relevant aspects that are likely to be affected by the proposed project. In addition to field sampling and consultation with the feasibility studies Team, the Consultant will review information from secondary sources, such as the Kagera Monograph and information data base, the basin development plan, the NEL Multi Sector Strategic Environment and Social report, and other relevant documentation.

Key socio-economic issues to be considered include demographic profile with social categories, number of households/families, types of housing, health and education profile, migration patterns, if any; Land ownership and holding; Existing cropping pattern of the project area and changes; Agricultural practices including traditional knowledge on endemic species; Improvement in crop production and productivity; Possible improvement in surface and ground water availability and benefits accrued to irrigated agriculture, drinking water use, and industries; Agricultural input pattern; Economics of cultivation; Non-agricultural practices such as poultry, livestock keeping etc.; Employment profile; Income profile; Other economic activities prevailing in the region; Availability of social and economic infrastructure; Gender issues; revenue disparities, health problems, land use patterns and civil society structures. The level of detail should be sufficient to convey the general nature of environmental and social resources condition of the affected areas.

Task 2: Socio-Environmental Scoping

The Consultant shall carry out an environmental scoping exercise to define the important issues and impacts that need to be studied and confirm the ToR for the study. The scoping, which will involve stakeholder consultation will

cover the physical, biological, socio-economic and cultural environments of the proposed project. The exercise shall focus on the following areas amongst others:

- Impacts on the flora and fauna.
  Likely change in the river regime;
- Impact due to change in hydrological cycle;
- Impact on siltation preferably using quantitative techniques;
- Impact on water quality (surface and ground water);
- Impact on ground water levels and recharge potential;
- Impact due to change in waste assimilation capacity of the river system;
- Impacts on the drainage and water resources
- Impacts on landscape and general aesthetics,
- Impacts on recreation
- Erosion concerns and associated siltation
- Impacts on land use and agriculture
- Impacts on protected areas, swamps, as well as other relevant natural and critical habitats
- Impacts on cultural property
- Water issues for livestock purposes
- Impacts on property, settlements and community facilities
- Land uptake and resettlements;
- Disease burden and associated health impacts, HIV/AIDS issues, safety issues
- Induced development resulting from the implementation of the project
- Gender related issues
- Potential cumulative impact assessment issues, appropriate boundaries for analysis, and identifying relevant past, present, and future actions.
- Security implications

As part of the scoping exercise, the Consultant will consult the affected population and other relevant stakeholders using an appropriate methodology. The outcome of the Public Consultations shall be recorded in the Scoping Report. The findings of these consultations will also be made accessible to the relevant stakeholders, including potentially affected persons.

Task 3. Policy, Legislative, Regulatory and Administrative Considerations

The Consultant shall identify and describe the pertinent policy, regulations and standards - both local and international (World Bank Safeguard Operational Policies, identifying which of these should be triggered), governing the environmental quality, health and safety, protection of sensitive areas, protection of endangered species, land use control at the national and local levels and ecological and socio-economic issues. The examination of the legislation should include the relevant international conventions to which the governments are signatories. The consultant shall assess the relevant government agencies involved in environmental and social management issues, to ensure that the ESMP will be effectively implemented. Thereafter, the Consultant shall identify the project activities that should comply with the identified regulations.

Task 4: Determination of the potential impacts of the proposed projects

Following the scoping and baseline assessment, the consultant will predict and assess the environmental and social benefits and negative impacts of the Project as well as any environmental enhancement that may occur. The assessment will distinguish between positive and negative impacts, direct and indirect impacts, and immediate and long-term impacts as well as impacts that are unavoidable or irreversible. Wherever possible, impacts will be described quantitatively, in terms of costs and benefits. For each potential impact, the consultant should determine the magnitude, the consequences (who it will affect and how), the probability of reversing the impact, and the probability that the impact can be avoided. Once the impacts have been analyzed, their significance will be determined, i.e., whether they are acceptable, require mitigation, or are unacceptable. Potential impacts will include but not limited to:

- Social and ecological effects of reservoir inundation (loss of agricultural, forestry and grazing land, population resettlement, impact on flora and fauna; impact on historic and cultural sites, effects on water resources outside and inside command area, etc.).
- Effects on the hydrology and water quality of the river
- Effects related to construction works: soil erosion; construction spoils (disposal of); sanitary conditions and health risks associated with construction camp and workers coming into the area; social and cultural conflicts between imported workers and local people.
- Effects related to project operation: pollution by agrochemicals impacts on soils (waterlogging, salinization, etc.); changes in groundwater levels inside and outside command area; changes in surface water quality and risks of eutrophication, potential for increased incidence of water-borne and water-related diseases.
- Effects on riverine fisheries and potential for creating a reservoir fisheries resource.
- Impacts of altering river flow regimes on the ecology of the floodplain, and the economic activities/land use on the floodplain (agriculture, livestock production, etc.).
- Impact of altering water supply on urban and rural users.
- Potential environmental and social impacts by planned and unplanned immigration into the area.
- Effect of existing and predicted landuse in the watershed on the functioning and longevity of the dam, reservoir and the irrigation command area.
- Effects of climate change and variability on the planned project during project implementation. Reference will made to previous climatic studies undertaken by the NELSAP, as well as the NELSAP climate adaptation mainstreaming guidelines,
- Cumulative impacts and their contribution to the overall cumulative effect.

Task 5: Formulation of Mitigation Measures

The Consultant will formulate cost-effective measures to mitigate (preventing, minimizing, compensating or enhancing beneficial impacts) anticipated environmental and social changes and impacts during project implementation and operation, or further reduce the residual environmental and social changes inherent in the selected project design and propose optimized alternatives as necessary. The scope will include technical, social, and institutional measures to be implemented as integral elements of the project. The measures will inform technical designs of the project components (under the feasibility study). The extent to which the different mitigation measures will reduce the scale of impacts arising from the scheme will be evaluated, and unavoidable residual impacts identified. The measures will be incorporated in the Environmental and Social Management Plan (ESMP).

Task 6: Analysis of alternatives to the proposed project

The objective of comparative analysis will be to define the merits and demerits of realistic alternatives, thereby providing decision makers and the public with a clear basis for choosing between options. The consultant will assess alternatives that were examined in the course of developing the proposed project (by the feasibility study) and identify other alternatives which would achieve the same objective. The Consultant will systematically compare feasible alternatives to the proposed project site, technology, design, and operation--including the "without project" situation--in terms of their potential environmental impacts; the feasibility of mitigating the negative impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training, and monitoring requirements. For each of the alternatives, the analysis shall quantify the environmental costs and benefits to the extent possible, and attach economic values where feasible. This will include analysis of (i) costs and benefits of environmental impacts; (ii) costs, benefits, and cost-effectiveness of mitigation measures; and (iii) discussion of impacts that have not been expressed in monetary values, in quantitative terms where possible (e.g. weight of volume estimates of pollutants).

Task 7: Preparation of Dam Safety Plans

The consultant shall prepare Dam Safety Plans covering all aspects related to the World Bank dam safety safeguard operational policy according (OP4.37), and the plans shall make an integral part of the ESMP. The plans shall include: (i) Operation and Maintenance Plan including the first impoundment and dam safety inspection

procedures (ii) Dam safety monitoring and instrumentation plan (iii) Emergency preparedness plan and (iv) Quality control plan.

Task 8: Development of Environmental and Social Management Plan (ESMP)

The objective of this task is to describe how the mitigation and other measures to enhance the benefits of Environmental and social protection will be managed, who will implement them, and when and where they will be implemented. As part of the ESMP preparation, the consultant will assess the institutional needs required to implement environmental assessment recommendations and recommend steps to strengthen or expand them so that the management and monitoring plans in the environmental assessment can be implemented. The consultant will also prepare a detailed schedule to monitor the implementation of mitigation measures and the impacts of the project during construction and operation. The ESMP shall not only include recommendations for actions and the procedures for their implementation in the short and long term, but must also set out the costs for its implementation. It should show how management and mitigation methods are phased with project implementation and when costs will be incurred.

Elements to be included in the ESMP will include but not limited to the following:

- Summary of Potential Impacts
- Description of Planned Mitigation Measures (incl. dam safety requirements)
- Description of Planned Environmental Monitoring
- Description of Planned Public Consultation Process
- Description of the Responsibilities and Authorities for Implementation of Mitigation
- Measures and Monitoring Requirements
- Description of Responsibilities for Reporting and Review
- Work Plan including staffing chart, proposed schedules of participation by various members of the project team, and activities and inputs of various government agencies
- Detailed Cost Estimates
- Mechanisms for feedback and adjustment

Elements to be included in the Monitoring Program will include but not limited to the following:

- Realistic sampling program (temporal and spatial)
- Sampling methods relevant to source
- Collection of quality data
- Comparable new data with other relevant data used in environmental assessment
- Cost-effective data collection
- Quality control in measurement and analysis
- Innovations (e.g., in tracing contaminants and automated stations)
- Appropriate databases
- Multidisciplinary data interpretation to provide useful information
- Reporting for internal management and external checks
- Allowance for, and response to, input from third parties
- Presentation in the public arena (external assessment)

Task 9: Development of a Resettlement Action Plan (RAP)

The purpose of this task is to develop a detailed plan that lays out all the activities to be done to implement the resettlement program. The RAP will be developed based on up-to-date information about the number and characteristics of affected people, the impacts on the displaced populations and other adversely affected groups, resettlement alternatives and appropriate mitigation measures, as well as legal issues involved in resettlement. Using appropriate and standard methods, the RAP shall identify the full range of people to be affected by the project and justify their displacement after consideration of alternatives that would minimize or avoid dis-placement. It shall outline eligibility criteria for affected parties, establish rates of compensation for lost assets, and describe levels of assistance for relocation of affected households.

In addition, the RAP shall document elements including but not limited to:

- Identification of affected people and Impacts

- Socio-economic profile of communities within the project area eligible for compensation
- The legal framework for land acquisition and compensation; including i) Establishing rates of compensation; ii) determining eligibility for compensation and resettlement assistance including development initiatives aimed at improving the socioeconomic well-being of affected populations; iii) establishing mechanisms to resolve grievances among affected populations related to compensation and legibility
- An entitlement matrix listing all likely effects, both permanent and of temporary land acquisition.
- An compensation framework, which details compensation guidelines established by the host government, methodology for valuation, proposed types and levels of compensation to be paid, compensation and assistance eligibility criteria, which groups of affected people are entitled to which forms of compensation and how and when compensation will be paid;
- A description of resettlement assistance and livelihood restoration activities;
- Preparation of an institutional framework that designates responsibilities to prepare the detailed assets inventories, provide compensation, undertake relocation work, take responsibilities for income restoration, supervise, manage and monitor the implementation of land acquisition and resettlement. Recommend an institutional strengthening strategy and/or formulation and training of resettlement units in the executing agencies.
- Identification of alternative relocation sites, where affected person might have to be resettled.
- A description of organizational responsibilities for the different aspects of a resettlement;
- A framework for stakeholder engagement and development planning; taking into consideration the gender concerns and vulnerable groups
- Description of livelihood restoration mechanisms
- A description of the procedures for addressing complaints, disputes and grievances;
- An implementation schedule covering all resettlement activities from project preparation through implementation, including a description of the linkage between resettlement implementation and the initiation of civil works as well as agencies responsible for each activity.
- A budget comprising itemized cost estimates for all resettlement activities, including planning and implementation, management and administration, monitoring and evaluation, and contingencies; specification of sources of funding and approval processes.
- A monitoring, evaluation and reporting plan, with provision for corrective actions to address issues as they arise.

Task 10. Preparation of the ESIA Report

The consultant will prepare an Environment and Social Impact Assessment report, with the Baseline report, ESMP and RAP as appendices. The report shall be in the English Language and should be clear and concise. The report should include but not limited to the following:

- Executive or non-technical summary;
- Introduction
- Description of the Project
- Description of the Environment
- Alternatives
- Anticipated Environmental Impacts and Mitigation Measures
- Economic Assessment
- Environmental and Social Management Plan
- Public Involvement and Disclosure
- Conclusions
- Appendices –(i) glossary, (ii) an explanation of acronyms (iii) references, names of members of the ESIA team (iv) and ToRs for the ESIA.
- Annexes –(i) Baseline Report (ii) ESMP and (iii) RAP

6. Methodology and Standards

The Consultant will be expected to employ the most effective methodology and standards to achieve results with optimal national stakeholder involvement. In addition the Consultant will be expected to: (i) collect most data from review and analysis of existing secondary sources of information such as assessment reports and various other regional and relevant global publications (iii) Prepare clear, concise and focused reports and (iii) Ensure reports are delivered in time as per the agreement. A summary of some available reference documentation is attached as appendix 3, for ease of reference.

7. List of Reports, Schedule of Deliveries, and Period of Performance

The Consultant will produce the following reports and attend the related meetings

Report	Description	No of Copies
Inception report (Month 2)	Contains the updated work plan, state of mobilization, refined work methodology and understanding of assignment, issues identified for Client's attention, proposed content and structure of the various reports. A meeting will be held after month 2 to discuss the report.	5 to NELSAP CU
Baseline report (Month 4)	Contains preliminary analysis of baseline environmental and social findings together with environmental and social impact scoping results with the relevant annexes	5 to NELSAP CU
Interim Report(Month 8)	Report covering Environmental and Social Impact Assessment (ESIA),	5 to NELSAP CU
Draft final report (Month 10)	Report covering Environmental and Social Impact Assessment (ESIA), Environmental and Social Management Plans (ESMP), as well as Resettlement Action Plan (RAP)	5 to NELSAP CU
Final ESIA & RAP report (Month 12)	Report covering Environmental and Social Impact Assessments, Environmental and social management Plan (ESMP) of the Project as well as Resettlement Action Plan (RAP)	10 to NELSAP CU and on CD
Monthly reports 1st week of every month	1-2 page maximum comprising a narrative and bar charts or other graphic presentation, showing details of the Consultant's progress, changes in the assignment schedule, impediments and proposed remedies will be submitted on a monthly basis.	Submission by electronic mail

Three workshops will be organized. The first will be conducted at the end of the inception phase. The second will be held to discuss the 2nd interim report. The third workshop will be organized after submission of the draft final report containing the ESIA, ESMPs and RAPs to discuss the report with stakeholders. The workshops will be facilitated by the Client. At each workshop, the consultants will make PowerPoint presentations and provide concise reports for discussion.

Note: *The abovementioned workshops are different from the expected stakeholder public consultative meetings and/or workshops to be organized and facilitated by the Consultant in the project-affected areas for information gathering (as part of Consultant's fieldwork) and stakeholder review and comment on draft documents during the course of the assignment.*

8. Data and Services to be Provided by the Client

Data and documentation on hydrological, meteorological, water quality and other relevant aspects of the Muvumba basin which the Client may have will be availed to the consultant; however, the consultant has the ultimate responsibility for collecting all the required data and documentation which cannot be made available by the project from official sources. The Client will: (i) Facilitate in establishing communication with the relevant institutions, (ii) Liaise and assist the consultant in obtaining any other information and documents required from other government agencies in Rwanda and Uganda and which the Client considers essential for conducting of the assignment, (iii) Provide assistance to obtain work permits for staff of the Consultant, (iv) Provide assistance in obtaining Tax Exemptions as detailed in Special Conditions of the Consultancy Agreement and (v) Arrange

consultative meetings and ensure linkage with relevant regional authorities. The Consultant shall operate their own project office and shall bear all accommodation, local transportation, visas, and other costs necessary to carry out the assignment.

9. Qualification of the Consultant

The Consultant should demonstrate past experience in conducting ESIAs and preparing RAPs for irrigation development and multipurpose water storage infrastructure projects for the last ten years. The team will be led by a Senior Environmental Assessment Specialist with a clear strategic understanding of project objectives from a regional and multipurpose perspective. The areas of expertise required include: environmental and social impact assessment, dam/hydraulic engineering, hydrology, aquatic and terrestrial ecology, public health, and public consultation. The Consultant may optimize their personnel to demonstrate the competences required for the assignment. The personnel of the Consultant should have a wide practical experience in the areas mentioned. The use of regional experts among the core personnel is required. The qualifications of the key experts are as follows:

Position	**Competencies**
Team Leader / Environmental Assessment Specialist	Post graduate qualification in Environmental Science or Natural Resource Management with at least 10 years of experience in environmental and social impact assessment (ESIA) studies preferably related to water resources development projects including irrigation and dam projects. The specialist should have demonstrated experience in elaboration of ESIA studies and Environment and Social Management Plans (ESMP), preferably in the region. Familiarity with World Bank environmental and social safeguards policies is a necessity.
Sociologist/Anthropologist and Gender issues/Rural Development Specialist	Post graduate qualification in social sciences (anthropology, sociology, social work or economics), with at least 10 years progressively experience in preparing and implementing social impact assessments, resettlement and compensation plans for large irrigation projects, as well as dam projects, preferably in the region. Familiarity with World Bank environmental and social safeguards policies is a necessity. The Specialist shall ensure that gender issues are appropriately included during the project preparation/design stage.
Hydrologist	Post graduate qualification in Hydrology or Water Resources Engineering with at least 10 years of experience in the hydrologic and aquatic environment aspects of water resource infrastructure development projects, and especially in determining in-stream/environmental flow requirements.
Aquatic Ecology and Fisheries Specialist	Post graduate qualification in Ecology with at least 10 years of experience in environmental assessments, management and the preparation of EIAs and EMPs. The specialist should have demonstrated experience in aquatic ecological assessments appropriate to dams and rivers, and preferably in sub-Saharan Africa.
Public Health Specialist	Postgraduate qualification in Public Health, with at least 10 years of involvement in preparing environmental and social impact assessments for irrigation and major water infrastructure projects. The specialist should have demonstrated experience in water-borne and water-related diseases, rural sociology, and preferably in the region.
Dam Safety Specialist	Postgraduate qualification in Civil/Dam/Hydraulic Engineering with a minimum of 15 years professional experience, including a minimum of 5 years in dam design and/or dam safety. The dam safety specialist will among other things review the proposed dam designs from the parallel feasibility study, and will recommend modifications where necessary.

Public Consultation and Participation Specialist	Postgraduate qualification in Social Sciences and Public Administration, with at least 15 years of progressively experience in designing and implementing public/stakeholder consultation and participation processes, especially for large water resource development projects, preferably in East Africa.

10. Contract Details

It is estimated that the work will commence in ***March 2014 and take 12 months.*** Proposals should indicate how the funds will be best utilized to achieve the objectives of the assignment. Whilst all of the Consultant' costs incurred in their participation, supporting the arrangement and running of national and regional workshops must be included in the consultant's financial proposal, the costs of holding the workshops themselves (costs of venue, participants' expenses such as transport and accommodation, materials etc.) will be met by the Client and should not be included in the Consultant's financial proposals. The costs of all other consultations, meetings etc. required by the Consultant to adequately complete the assignment must be included in the financial proposals.

11. Supervision Arrangements

The Client is the Nile Basin Initiative/Nile Equatorial Lakes Subsidiary Action Program (NBI/NELSAP). The Consultant will be directly supervised by the NELSAP CU with close participation of the Kagera River Basin Project Management Unit, on behalf of the NBI. The NELSAP CU will ensure close coordination with other regional projects, to ensure information exchange. Results from the study will be communicated to the World Bank by the CU. The Client will hold discussions with the Consultant at various stages of the consultancy to assess work progress, discuss constraints encountered and possible interventions to ensure adherence to quality and deadlines.

12. Quality Assurance and Control

The Consultant will be required to demonstrate in their proposal evidence of adoption of the use of a Quality Assurance System (ISO 9001 or equivalent), as well as describe how quality control will be implemented in the course of the project.

13. Nature and Timing of Future/Downstream Work

The outputs of this consultancy will provide input into downstream work which involves detailed designs and resource mobilization for implementation of the identified investments. This work will commence in June 2015, subject to availability of financing.

Appendix 10: Guidelines for a Dam Safety Assessment

- ***Purpose and Scope of Work:***

The purpose of the dam safety assessment is to prepare a reconnaissance-level assessment of quality management of a dam or weir, and of the reliability of the water source. The work will involve initial and wrap-up meetings with personnel responsible for the dam/weir; a field examination; and a Dam Safety Report of findings and recommendations. If deemed necessary, the report will provide terms of reference for more thorough follow-up activities to identify (to feasibility level with cost estimates) the investments and other measures needed to ensure the safety of the dam/weir.

- ***Qualifications of the Dam Specialist:***

The work will be carried out by a Dam Specialist (DS) of suitable independence from the owner/operator of the dam/weir, and who has not been associated with the design, construction, and operation of the dam/weir. The DS will have appropriate qualifications and substantial experience with the design, construction, operation and maintenance of dams, especially in developing countries.

- ***Investigations of Operating Conditions:***

The owner/operator of the dam/weir will provide the DS with the following information:

a) Construction year, first impoundment;
b) Dam size: height (m), crest length (m);
c) Reservoir size (m3);
d) Dam type;
e) Estimated population downstream that would be threatened by dam failure; and
f) Estimated replacement cost.

The DS will discuss with the owner/operator past and current O&M practice with particular reference to:

a) Existing records;
b) Maintenance logbooks;
c) Instrumentation and monitoring;
d) Emergency preparedness;
e) O&M resources (human and financial); and
f) Status of reservoir sedimentation and measures to prolong the life of storage (reservoir conservation).

- ***Investigations of Structural Conditions:***

Depending on the type of dam/weir, a suitable checklist for the inspection activities will be used. Inspection details are left to the DS who will carry out the task, however the inspection report should contain the following information:

a) Construction year, first impoundment;
b) Dam/weir size: height (m), crest length (m);
c) Reservoir size (m3);
d) Dam type;
e) Geotechnical aspects of foundations;
f) Design flood return period (years);
g) Availability of as-built drawings;
h) Spillway reliability assessment;
i) Bottom outlet reliability assessment;
j) Seepage;
k) Deformations, settlements;

l) Conditions of slopes/concrete structures;
m) Active storage (m3);
n) Estimated population downstream that would be threatened by dam failure; and
o) Estimated replacement cost.

- ***Investigations of Regulatory Framework:***

The DS will:

- Discuss with relevant authorities (regulator, line ministries, utilities, etc.) the existing regulatory framework for dam/weir safety;
- Compare the existing regulatory framework, in a matrix format, with comments as necessary, to the "essential elements" identified in the World Bank publication "Regulatory Frameworks for Dam Safety - A Comparative Study"[5];
- Identify opportunities and constraints to the achievement of the "essential elements"; and
- If judged feasible, develop terms of reference for an action plan aimed at achieving the "essential elements" in the national context (priorities, institutional reforms, incentives, enforcements, etc.)

Dam Safety Report:

The DS will produce a Dam Safety Report that includes:

- Description of the dam/weir, ownership, and regulatory framework.
- Dam safety assessment according to international standards (ICOLD).
- Structural measures required to bring safety to acceptable standards, including a preliminary cost estimate differentiating interventions in three categories: a) emergency (human life at immediate risk); b) urgent (likely to pose a risk to human life, major assets at risk); c) significant (any needed rehabilitation beyond meaningful maintenance).
- Non-structural measures (instrumentation and monitoring, stand-by electricity supply, training, dam safety plans) to be implemented to make dam safety sustainable after rehabilitation; reference should be made to OP4.37 "Safety of Dams", and appendices to the publication "Regulatory Frameworks for Dam Safety - A Comparative Study".
- Preliminary assessment of reservoir sedimentation status, and recommendations aimed at prolonging the life of storage facilities.
- Resources needed for reliable O&M (human resources and recurrent costs).
- Overall assessment of challenges and opportunities for the management of the dam/weir.
- Terms of reference for the preparation of feasibility studies for any required rehabilitation measures (structural and non-structural).

[5] D. Bradlow, et al. (2002) "Regulatory Frameworks for Dam Safety – A Comparative Study" The World Bank Law, Justice, and Development Series. ISBN 0-8213-5191-5.

Appendix 11: Sample Chance Finds Procedure

Chance find procedures will be used as follows:

(a) Stop the construction activities in the area of the chance find;

(b) Delineate the discovered site or area;

(c) Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be present until the responsible local authorities and the equivalent take over;

(d) Notify the supervisory Engineer who in turn will notify the responsible local authorities and the General Authority of Antiquities[6] immediately (within 24 hours or less);

(e) Responsible local authorities and the General Authority of Antiquities would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by the archeologists of the General Authority of Antiquities (within 72 hours). The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic, scientific or research, social and economic values;

(f) Decisions on how to handle the finding shall be taken by the responsible authorities and the General Authority of Antiquities. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage;

(g) Implementation for the authority decision concerning the management of the finding shall be communicated in writing by the General Authority of Antiquities; and

(h) Construction work could resume only after permission is given from the responsible local authorities and the General Authority of Antiquities concerning safeguard of the heritage.

These procedures must be referred to as standard provisions in construction contracts, when applicable, During project supervision, the Site Engineer shall monitor the above regulations relating to the treatment of any chance find encountered are observed

[6] The "General Authority of Antiquities" is used here as an example of the relevant national authority in a specific country. The appropriate national authority in each countr(y)(ies) will be identified and specified in this procedure during the ESIA process for each sub-project.

Appendix 12: StakeholderConsultations

Overall Project Consultations

NCORE – Basin-wide Consultations				
	CONSULTATIONS MEETING CONDUCTED/PLANNED	**DATE**	**STAKEHOLDERS**	**Decisions/discussion points**
1	Nile Technical Advisory Committee – Kigali, Rwanda	July 4, 2012	Technical staff from Nile Ministries	- Nile TAC agreed to recommend the Nile Basin Climate Resilient Growth program (derived from NBI's Overarching Strategic Plan), which includes fostering cooperation, improving WRM, supporting regional, national and line agencies, focusing on financial sustainability and promoting investment, to the Nile COM for approval. - TAC agreed to review and comment on the ESMF of the first phase project (NCORE) and to provide approval of ESMF once country comments have been successfully incorporated. - NELSAP priorities for the next five years were presented and included resource mobilization, for investments and preparation of investment projects. - TAC recommended that NBI visibility be enhanced beyond routine documents shared. - TAC confirmed commitment to sustaining DSS at national and regional levels as a support tool for addressing WRM and WRD issues.
2	Nile COM - Project design review, endorsement – Kigali, Rwanda	July 5, 2012	Nile Ministers	- NileCOM commended and endorsed NCORE, phase 1 of the Nile Basin Climate Resilient Growth Project (NBCRGP) for the two years 2013/2014.and instructed the NBI to proceed with the project preparation. - Nile COM noted the continued program development as a basis for securing funding. - NileCOM urged member states to clear outstanding arrears and to commit to paying country contributions in a timely manner, and also approved the scaling up of country contributions starting with financial year 2013/2014.
3	Nile Strategic Dialogue – Kampala, Uganda	November 2012	Technical Staff from Nile Ministries, NGOs, development partners	- Meeting reviewed NCORE project plans. - Trust fund committee endorsed use of NBTF funds. - Donorsrequested more focus on integrating modelling tools into national level planning processes, and greater focus on poverty and gender reduction in NBI programs.
4	Nile Technical Advisory Committee – Juba, South Sudan	June 19, 2013	Technical staff from Nile Ministries	- Nile TAC consulted on and recommended social and environmental strategies/policies that include the NBI Environmental and Social Policy, Climate Change Strategy, and Wetland Management Strategy. The Communications and Stakeholder Engagement Strategy was recommended by the TAC at a later date. - Strategies used to inform social and environmental aspects of NCORE. - TAC noted NCORE project progress and expressed interest in NBI's preparation of a second phase of NCORE.
5	Nile COM - Project	June 20, 2013	Nile Ministers	- Nile COM expressed appreciation of donor support

NCORE – Basin-wide Consultations				
	CONSULTATIONS MEETING CONDUCTED/PLANNED	**DATE**	**STAKEHOLDERS**	**Decisions/discussion points**
	progress update – Juba, South Sudan			andcalled for further resource mobilization; COM expressed commitment to pursue inclusiveness and to hold meeting to resolve Eastern Nile institutional issues. - Nile-COM requested support to NCORE 2 and indicated need to for centers to begin preparation for dialogue in Strategic Dialogue (Oct 2013).
6	Nile Technical Advisory Committee Meeting on project progress – Kigali, Rwanda	October 2013	Government officials	- Progress on NCORE was presented and commended by TAC. Preparation of the second NBCRG phase was strongly recommended. It was noted thatone trigger for a CIWA-supported NCORE 2 is NBI ownership (payment of country contributions to NBI). -Update on country contributions was presented; follow up on arrears was recommended anddraft institutional sustainability strategy was introduced. -Meeting reaffirmed commitment to cooperation, but there is need to seek new dialogue around the issue such as by highlighting benefits of cooperation, challenges to it and focusing on how countries have demonstrated ownership of cooperation process.
7	Nile Strategic Dialogue – Kigali, Rwanda	October 2013	Technical Staff from Nile Ministries, CSOs, development partners	-Issues of NBI sustainability discussed, including lack of finance for NBI in future. -brief overview of issues facing the basin (salinity, lake levels, sedimentation, hydro variability), -request for greater cooperation between NBI and other organizations (LVBC, etc), -requests from countries to donors for more support in 2015 onwards
8	Project Committee Meeting – Kigali, Rwanda	September 2013	Technical Staff from Nile Ministries	-Review of NCORE project progress to date. Implementation largely on track, with small corrective actions planned where implementation is slow. -Request from countries for more regional meetings to pursue discussion of transboundary issues. -Endorsement of NBI proposal for Additional Financing from NCORE. - Request for NBI to provide Nile Technical Advisory Committee with more information about how they can fundraise for NBI. -Request from South Sudan, as the newest Nile country, for assistance and capacity building support. Sudan offered assistance to its neighbor in sharing data and information.
9	CIWA Nile Advisory Committee Meeting	October 2013	Ministers, Ministry technical officials, Nile Basin Discourse, LVBC	-Review of plans for CIWA in the Nile. Review of NCORE progress to date, plans for NEL development project, as well as Project to support the Nile Basin Discourse. -Call for greater attention on setting up results framework for the program. Country participants requested more support for the NBI for 2015-2017. -Governments reiterated commitment to increase funding for NBI, to cover full core costs of institution by 2018. -Countries requested assistance from donors in the areas of: preparation of bankable projects that address regional hot spots, and for action on the ground with regional

NCORE – Basin-wide Consultations				
	CONSULTATIONS MEETING CONDUCTED/PLANNED	**DATE**	**STAKEHOLDERS**	**Decisions/discussion points**
				investments, to show the benefits of regional cooperation, support to prepare investments emerging as priorities through NBI studies and tools, such as the Multi-Sectoral Investment Opportunity Analysis, the NEL sub-basin studies, and the EN Cooperative Regional Assessments. -Representatives expressed interest in working on several types of transboundary challenges affecting their countries, including: water quality, water quantity (security), agricultural development and deforestation, access to drinking water, watershed management and erosion, deforestation, challenges related to climate change and variability, such as floods and droughts, and climate resilience; hydropower development and trade, vulnerable groups and access to water, navigation, mapping of groundwater resources . Many noted a strong need for sharing and generation of hydro-met data; application and use of the Nile DSS, and stakeholder participation in transboundary water issues. Others noted that water resource management is closely tied with reconstruction/development efforts in their countries, and can be used as a vehicle for peace and security. Almost all noted a need for capacity building, for application of water resource planning tools, and several noted a need to continue developing basin-wide policies. Many participants also noted that they would like CIWA support to provide them with a platform for dialogue, at the NBI and elsewhere.
10	Consultations with Government of South Sudan	October 2013	National and regional authorities	Exploration of modelling tools, transboundary policy issues, discussion of plans for power sector expansion planning, need for least cost generation study. Request from government to NBI for help establishing a water information system, in selecting investments, and in flood early warning.
11	Project Committee Meeting – Entebbe, Uganda	*March 2014 - planned*	Technical Staff from Nile Ministries	*Planned consultation with country governance to review project progress.*
12	Nile Technical Advisory Committee - Project progress update	*June 2014 - planned*	Technical staff from Nile Ministries	*Planned consultation.*
13	Nile COM - Project progress update	*June 2014 - planned*	Nile Ministers	*Planned consultation.*

Component 1 – Nile Secretariat

CONSULTATIONS MEETING CONDUCTED/PLANNED		DATE	STAKEHOLDERS	Decisions/discussion points
1	SEC consultation with TAC on water resources priorities - Entebbe, Uganda	March 2013	Technical staff from Nile Ministries, development partners.	Exploration of major topics for the SEC to explore through NBI analytical work. Decision to focus on enhancing knowledge base, risks to water resources management, policies for management and development, and harnessing the opportunities for development.
2	Final Workshop on Adapting to Climate Change Induced Water Stress in the Nile	March 2013	Government, CSOs, UNEP, GWP	Part of a larger program on climate change adaptation, whereby NBI's role was to advance policy, capacity, awareness raising and communication. Workshop recommendations included: - Scale upnational pilot projectsthat addressed vulnerable groups and gender analysis to sub-basin/watershed levels - Develop measures to for turning policiesinto actions - scale down climate assessment as to prioritize on specific geographic areas – for example, hot spots, sub-catchments; focus on agriculture which constitutes majority of water use in the basin. - Make linkages between different spatial scales - Focus on transboundary issues in an integrated approach - Build on partnership strengths of non-state actors (CSOs, academic institutions) on knowledge sharing and access to technology - Present project results to Nile TAC/COM in 2014 - Consider phase 2 project for addressing gaps in analysis and to involve UNFCCC Focal Point during its consultation process
3	Regional Meeting of NBI National Focal Points (NFPs) (Desk Officers)	February 2013	National authorities	- Meeting reviewed progress to date of the work of NFPs, plan for 2013and strategic challenges to NFP functionality based on assessment criteria formulated by the SEC. Major challenges were: - Low operations at national level - Non-involvement National Desk Officers (NDOs) in NBI activities - Poor coordination among SEC, SAPs, TAC, and NDOs - High turnover of NDOs and need for induction plan/program - Inadequate facilitation from the countries - Poor linkages with other regional organizations like EAC, LVBC, IGAD, etc
4	Consultative meeting on the engagement of Private Sector in Nile Basin Development	June 2013	Governments, private sector representatives	The consultative meeting focused on water, climate change and private sector. The consultation: - Commended analysis on linkages between hydraulics and economics - Noted therarity of private sector engagement activities and recommended efforts in NBI-private sector activities in institutional and capacity building as well as involving other financial institutions such as IFC, African Development Bank and RECs in East Africa

				- Recommended resource mobilization for investment projects identified under NBI (e.g. small agricultural project, hydropower project and virtual water use) - More research work and enhanced engagement of private sector in NBI activities
5	Nile Basin Discourse Regional Expert Consultation Meeting on UNWC	June 2013	CSOs	Objective was to develop awareness raising on the specific value added of the UN Water Course Convention, awareness raising and capacity building to appreciate the Convention. Workshop recommendations include: - More information dissemination and training at all levels – local and national - on UNWC - That contentious issues be addressed through further analysis of the merits and demerits of the convention - That local communities should be capacitated to well-understand the Convention and accommodate the concerns -Accession must be cautious and informed by regular public consultations - They should draw lessons from other basins
6	Study Tour and consultation for Permanent Secretaries in Charge of Water Affairs to Eastern Nile – Ethiopia	September - October 2013	Government officials	Discussion of flood and watershed management, deforestation issues across the Nile Basin. Request from State Ministers to continue annual meetings. Pledge from State Ministers to strengthen cooperation.
7	Nile Basin Discourse Consultation – Ecosystem Restoration	February 2014	CSOs	Workshop on "Future planning for restoration of ecosystem services" was carried out to raise awareness on water quality, quantity and restoration of ecosystem services, and employed tools of participatory awareness raising andscenario developmentto enhance understanding of water planning. Main outcomes of the workshop were: - A paper on the workshop to be submitted to NBDF 2014 and other relevant conferences - Final stories that will be refined further with NBI and other actors to incorporate quantitative data to inform decision making - NBD to work on piloting scenario design phase to develop community-based local scenarios - Consultative processes from NBI projects were incorporated into the workshop and workshop lessons learned will be integrated into future project preparation and design
8	Regional Meeting of NBI Desk Officers	February 2014	National Authorities	Objective is to ensure coordination between SEC and SAPs and national desk officers. Meeting discussed the following: - Inclusion of coordination activities in recurrent budgets - Mainstreaming NBI into established national structures - NBI should be recognized during launching of projects conceived under it. - More efforts on monitoring of NBI projects - Continuously update stakeholders on NBI activities - Undertake creation of a stakeholder database - Most NBI/DO functions are increasing but funding is waning

				- Sustainability of National Coordination requires more support from countries - Mainstreaming of NBI projects into national plans is low in some countries - More interaction and support from NILE-SEC and SAPs required
9	Consultations for planning Nile Basin Development Forum	*January – August 2014 - planned*	Governments, CSOs, private sector, donors	Coordination meetings with Nile Basin Discourse. Call for papers released February 2014 on NBI website, distributed through the Nile Basin Discourse email list serve, including over 800 organizations.
10	Nile Basin Development Forum	*September 2014 - Planned*	Governments, CSOs, private sector, donors, press	*Platform for policy makers, researchers, academia, business and local communities for bringing forth and exchange ideas, research findings, novel practices and policies on the River Nile.*

Component 2 – NELSAP-CU

	South Sudan Power Sector Studies			
	CONSULTATIONS MEETING CONDUCTED/PLANNED	**DATE**	**STAKEHOLDERS**	**Decisions/discussion points**
1	Consultations with Government of South Sudan	October 2013	National and regional authorities – Ministry of Electricity and Dams, Ministry of Water and Irrigation	-The government of South Sudan asked NELSAP to conduct a least cost expansion plan and demand analysis for South Sudan, to incorporate South Sudan in the regional analysis for the NEL region already conducted by NEL. -South Sudan also asked NELSAP to look for funding for the Uganda-South Sudan power interconnection. --NELSAP and South Sudan to form a Memorandum of Understanding for the least cost generation expansion plan.

	NGONO AND MARA VALLEY IRRIGATION PROJECTS (TANZANIA)			
	CONSULTATIONS MEETING CONDUCTED	**DATE**	**STAKEHOLDERS**	**Decisions/discussion points**
1.	Consultation meeting with community officials along the proposed Ngono valley irrigation and watershed project.	January 2011 Misenyi District	▸ DED Misenyi ▸ Task team members	▸ From the observations made on the proposed irrigation site, the living conditions of the population around the schemes, the topography and soils of the proposed sites, the site was found adequate to carry out the pre-feasibility studies of the sites as they are very promising for irrigation development.
2.	Consultation meeting with community officials along the proposed Ngono valley irrigation and watershed project.	January 2011 Bukoba / Bukoba Rural District	▸ RAS ▸ DED/Bukoba Rural ▸ Task team members for the project	▸ From the observations made on the proposed irrigation site, the living conditions of the population around the schemes, the topography and soils of the proposed sites, the site was found adequate to carry out pre-feasibility studies to the sites as they are very promising for irrigation development.

	NGONO AND MARA VALLEY IRRIGATION PROJECTS (TANZANIA)			
	CONSULTATIONS MEETING CONDUCTED	**DATE**	**STAKEHOLDERS**	**Decisions/discussion points**
3.	Consultation meeting with community living along the proposed Ngono valley irrigation and watershed project.	November 2011 Misenyi District	▸ DED Misenyi ▸ Task team members for the project ▸ Beneficiaries and village council representatives	▸ Official communication from the government of Tanzania was deemed necessary to allow the consultant to undertake field works ▸ Discussed fieldwork recommendations on irrigation selected areas ▸ Met beneficiaries and village council reps ▸ Assessment of irrigation areas and related water sources and conveyance routes ▸ Preliminary layout discussion and agreement ▸ Determination and agreement on beneficiary villages / members
4.	Consultation meeting with community living along the proposed Ngono valley irrigation and watershed project.	November 2011 Bukoba / Bukoba Rural District	▸ RAS ▸ DED/Bukoba Rural ▸ Task team members for the project ▸ Beneficiaries and village council representatives	▸ Official communication from the government of Tanzania was deemed necessary to allow the consultant to undertake field works ▸ Discussed fieldwork recommendations on irrigation selected areas ▸ Met beneficiaries and village council reps ▸ Assessment of irrigation areas and related water sources and conveyance routes ▸ Preliminary layout discussion and agreement ▸ Determination and agreement on beneficiary villages / members
5.	Consultations for the "Mara Valley Irrigation Development and Watershed Management Preliminary Environmental And Social Impact Assessment Report"	June 2012	Officers from the Mara region: Assistant administrative Secretary; Game officer; Water Engineer; Livestock officer; Agricultural Engineer – Serengeti District Officers; Serengeti District Forest Officer; District Water Engineer; District Lands and Natural Resources Officer; District Land Use Planning Agricultural Officer; District Fisheries Officer; District Health Officer and the District Environmental Management Officer.	▸ The project would attract job opportunities to the locals which would result to increase in human population that may lead to destruction of surrounding forest ecosystems ; ▸ The flora and fauna in such forest ecosystems could be destroyeddue to the project or population influx - from need to obtain construction materials (wood), energy (firewood/charcoal) ; ▸ Introduction of land management systems to regulate land use in the region hence reducing land use conflicts;Development of by-laws that would enable the protection of forest ecosystems. ▸ Benefits of project are needed: flood, agriculture ▸ Request that canals should be lined to reduce water waste ▸ Detailed consultations before the project should include land loss, compensation, grievance mechanism ▸ Study tours could help improve local knowledge, practice ▸ the Common top 10 diseases in the district: Malaria ; URTI(upper respiratory tract infection); Diarrhea; Intestinal worms; Pneumonia; Skin disease; Eye infection; Anaemia for under 5 population; Schistosomiasis; Dysentery; Typhoid fever. ▸ Settlements should be located 2 km from

	NGONO AND MARA VALLEY IRRIGATION PROJECTS (TANZANIA)			
	CONSULTATIONS MEETING CONDUCTED	**DATE**	**STAKEHOLDERS**	**Decisions/discussion points**
				irrigation area to avoid possible diseases. Pit latrine usage should be increased ▸ Baseline survey will help identify training needs in the community in relation to the project from the highest authority to village level using a range of communications methods. ▸ Village land use systems should be encouraged where separate areas for grazing, farming, residential and water points should be allocated so as to reduce land use conflicts in the proposed project land area. ▸ The ministries should work together. ▸ When asked about whether they were aware of the proposed project, 43% of the respondents were affirmative. The majority of respondents knew about the project through government officials (80.1%), meetings held by the consultants (11.7%) and media (1.2%) as well as neighbours (3.6%). Iseresere village did not participate in this study as the leaders opposed the project. However, 62% of the nine villages that participated in the study did welcome the project with 38 % against the project. Borenga village has the highest proportion of those who were against the project citing the fact that the government should sensitize them on the project so that they can have a better understanding on how they will integrate irrigation and livestock keeping. An intensive awareness campaign is required so as to provide accurate information to the local people to enhance acceptance of the project
6.	Ngono Project – Consultations for the Preliminary ESIA	July 2012	▸ Regional Level: Kagera Region Agricultural and Irrigation Engineer; Kagera Region Social Welfare Office; and Kagera Region Youth Office. ▸ District Level: Kagera Region Youth Office; Forests and Natural Resources Office; District Level Community Development Officers; District Water Engineers; District Irrigation Engineers; District Agriculture and Livestock Development; District	▸ Land related issues are sensitive and therefore there is need to know the tenure system of the project area ▸ The use of fertilizers and quality seed breeds will boost agricultural productivity and reduce the effects of pests ▸ Seasonal migration of pastoralist into the wetlands during dry Season may interrupt the crop output. ▸ Bush fires can also lead to destruction of food crops in the field ▸ Diseases reduce the crop productivity as well as posinghealth risk to those consuming them. ▸ Flooding occurs periodically leading to massive destruction of crops and existing facilities. ▸ Drought can lead to massive loss of life if proper mitigation measures are not in place

	NGONO AND MARA VALLEY IRRIGATION PROJECTS (TANZANIA)			
	CONSULTATIONS MEETING CONDUCTED	**DATE**	**STAKEHOLDERS**	**Decisions/discussion points**
			Water Technicians; District Social Welfare Officers; District Youth Development Officers ▸ Regional Administrative Offices ▸ District Executive Director's Offices. ▸ Farmer and village representatives through workshops; ▸ Collection of comments on the Project from sample households in villages within and around the proposed project through household questionnaires.	▸ The loss of vegetation cover during the construction phase will expose the soils to agents of erosion leading to soil infertility ▸ The community plays an important role in ensuring the long-term Sustainability of the project ▸ Land will be acquired and some properties will be affected for the smooth operations during construction and for safety of the families within the project area
7.	Consultations with stakeholders for the reviewed and approved the study reports, and confirmation of the need for the project.	October 2012 Mwanza, Bukoba, Missenyi Districts	▸ Ministry of Agriculture, Food Security and Cooperatives ▸ National Irrigation Department ▸ Mwanza Irrigation Zonal Office ▸ Ministry of Water (MOW) ▸ Lake Victoria Basin Office (Mwanza) ▸ Kagera Regional Irrigation Office	▸ The final reports should have a chapter or a section identifying and clearly describing the kind of activities to be undertaken during the feasibility and design stages. ▸ The development planning should be considerate of the livestock resources and so the investment costs, and financial and economic analysis should include options showing with and without livestock conditions. ▸ Since the whole objective of developing the irrigation schemes is to improve livelihoods and food security and reduce poverty, the irrigation scheme development process should look at fishery development program as part of the dam, reservoirs, main canal or individual rice fields or a separate aquaculture program in the peripheral areas of the scheme where some of the drainage water is disposed. This will have an added value in terms of nutritional supplement or income generation
8.	Reconnaissance visits to the project area and consultations with local stakeholders	July 2013Bukoba, Missenyi Districts	▸ Bukoba and Missenyi District Executive Offices Mwanza Irrigation Zonal Office ▸ Lake Victoria Basin Office (Mwanza) ▸ Kagera Regional Irrigation Office ▸ Bukoba Sub-basin Water Office (covering the Kagera sub-basin in Tanzania)	▸ The visit to the district offices and the project area was to update the district leaders of the next steps for the planned Ngono project, and to conduct joint reconnaissance visits to the project area with District leadership and technocrats.
9.	Consultation meeting with community living along the proposed Mara valley irrigation	03rd – 04th February, 2014, Wegero, Hekwe/Magatini, Busawe and	▸ Mara Regional Commissioner, members of Regional Security Committee, District Commissioners for Butiama	▸ Increased knowledge on protection and management of the investment projects current being undertaken; ▸ Improved communities' awareness and

	NGONO AND MARA VALLEY IRRIGATION PROJECTS (TANZANIA)			
	CONSULTATIONS MEETING CONDUCTED	**DATE**	**STAKEHOLDERS**	**Decisions/discussion points**
	and watershed project.	Kisaka villages.	and Serengeti, District Executive Directors for Serengeti and Butiama, Regional Secretariat and Council Officers from Land, Water, Agriculture and Community Development sectors; ▸ Ward councilors of Buswahili, Kisaka, Kenyamonta and Busawe; ▸ Village Government Council members and Opinion/Influential leaders from Hekwe/Magatini, Wegero, Buswahili, Busawe and Kisaka villages (villages under proposed Mara valley irrigation project). Village general assemblies were also conducted in respective villages; ▸ Divisional Secretary, Ward and Village Executive Officers.	capacity on proposed projects to enhance and increase their food productivity in sustainable livelihood manner; ▸ Need for more project awareness to Buswahili, Kongoto and Wegero community; ▸ Increased community willingness to accept the proposed projects; and ▸ Increased communities' awareness on the objectives of Mara RBM Project as well as NELSAP and NBI.

	SIO-SANGO (KENYA) AND NYABANJA (UGANDA) IRRIGATION PROJECTS			
	CONSULTATIONS MEETING CONDUCTED/PLANNED	**DATE**	**STAKEHOLDERS**	**Decisions/discussion points**
1.	Consultations in undertaking the Pre-feasibility Study for potential MSR within SMM Basin	March 20-April 11, 2010	▸ Communities within SMM basin ,district administration and technical officers (Tororo, Busia , Bungoma , Teso North/South,Butaleja,MWE –Entebbe, MWI-Nairobi, Ministry of energy, MOA,	▸ Stakeholders highlighted the need for involvement of all stakeholders , need for resettlement and compensation before commencement of project implementation ▸ Need for consideration of conservation of watersheds upstream of the identified potential sites for Reservoirs.
2.	Review meeting of Pre feasibility study report for potential projects within SMM Basin	May 23-24, 2010 Prime Hotel, Tororo, Uganda	▸ RPSC members, ▸ Ministry of Water & Environment Staff, ▸ District Officials, NEMA, Water for Production Staff, Ministry of Agriculture, Ministry of Energy	▸ The meeting discussed the report and recommended for ranking the 27 identified potential dam sites in consideration to use of reservoirs, environmental /social ,technical and economic/ financial aspects . ▸ Need for consideration of conservation of watersheds upstream of the identified potential

				sites for Reservoirs.
4.	Pre-feasibility study report for potential MSR within SMM Basin review meeting	August25-26, 2010 Rock Classic Hotel, Tororo , Uganda	▸ RPSC members, ▸ Ministry of Water & Environment Staff, ▸ District Officials, NEMA, Water for Production Staff, Ministry of Agriculture, Ministry of Energy ,	▸ The meeting discussed the report and recommended for further investigation to be undertaken during feasibility level for priority multipurpose projects, and to consider the potential environmental and social impacts
5.	Identification and ranking of Irrigation and watershed management projects	February 14-16,2013 Tororo, Uganda	▸ LC5 Chair and Secretary for Production ▸ Director for Water and 3 officials from Ministry of Water & Environment, CAO ▸ Water Officer, SMM PMU staff, Water for Production, Kyoga Management Zone	▸ The meeting discussed several projects in consideration for further preparation, including benefits, environment and social aspects. Projects discussed included Nyabanja, Amagoro, Pokach, Angolola and Nyamatunga. The team ranked Nyabanja first followed by Amagoro to be taken to feasibility level.
6.	Meeting on prioritization and commitment from the political leadership of Tororo District for Nyabanja Irrigation and Watershed Management Project	June 27, 2013 Luzira, Ministry of Water & Environment Headquarters, Uganda	▸ Minister of Water staff, Members of Parliament for Budama North and South and Tororo County, ▸ LC5 Chair, RDC, Directors for Water Resources Management and Water Development, District Production Coordinator, ▸ Community Development Officer, District Water Officer, SMM PMU staff, ▸ RPSC members and NLO, Water for Production Staff	▸ The meeting discussed several possible projects, and considered use, environment and social aspects and equity. Projects considered included Nyabanja, Amagoro, Pokach, Angolola and Nyamatunga .Nyabanja was prioritized with commitment from Tororo political /administrative leaders.
7.	Meeting on prioritization of irrigation and watershed management projects for the Sio-Sango Project	September 3,2013 NIB Headquarters, Nairobi , Kenya	▸ MOA/National irrigation board, MEW& NR, SMM staff	▸ The meeting discussed several projects including Kwangamur, Lerekwe, Sio Sango , Sikoma, including consideration of use, environment and social aspects. Sio Sango was prioritized to be taken to feasibility level with National irrigation board taking lead role in implementation of the project

	MUVUMBA PROJECT (RWANDA)			
	CONSULTATIONS MEETING CONDUCTED/PLANNED	**DATE**	**STAKEHOLDERS**	**Decisions/discussion points**
1.	Consultations in conducting the "DETAILED IDENTIFICATION STUDIES FOR	March 2012 Kigali, Rwanda	▸ Regional officers (NELSAP-CU, Kagera Basin Organization)	▸ The study should explore land ownership issues for the project especially regarding marshlands. In Rwanda, the land belongs to government ▸ These are multi-purpose dams and therefore, potential issues of water use

	POTENTIAL LARGE DAMS IN THEKAGERA BASIN"			conflicts are likely to arise, these concerns should be built into the ToRs for subsequent detailed ESIA investigations; ▸ How will agro-chemicals concerns be managed especially where there will be water supply components? ▸ The above comments of stakeholders were considered by the consultant
2.	Consultations in conducting the "DETAILED IDENTIFICATION STUDIES FOR POTENTIAL LARGE DAMS IN THEKAGERA BASIN"	March 2012 Kigali, Rwanda	▸ National Ministries, Rwanda (Water, Agriculture, Rwanda Development Board, Energy, Water and Sanitation Board)	▸ Do not stop farmers from cultivation to allow for dam construction without recourse, making people vulnerable to famine due to poor project planning; ▸ Measures for ensuring water quality is maintained ▸ Modalities for equitable water usage between users (irrigation, fish, power, other farming) should be set out early in the projects t ▸ release of water should be based on the needs of the users and the water levels. ▸ The dams will be located in valleys which are prone to siltation - wider watershed management needed. ▸ Irrigation canals are sometimes damaged by livestock - watering points needed ▸ The above comments of stakeholders were considered by the consultant, although they will be further elaborated during the planned feasibility and detailed design studies
3.	Consultations in conducting the "DETAILED IDENTIFICATION STUDIES FOR POTENTIAL LARGE DAMS IN THEKAGERA BASIN"	April 2012 Muvumba Project area	▸ Local authorities (irrigation, District Environment) ▸ Community member (farmer)	▸ Both irrigation and power are needed ▸ Local communities should be able to benefit from power ▸ The relevant local authorities should be involved in the projects (agriculture, energy) ▸ Monitoring stations should be established soon after site selection, to confirm hydrology, sedimentation ▸ Potential Katiguma site is in a water stressed area ▸ Floods are a problem in the rainy seasons – the projects should look at flood control ▸ Accacia lining the river in spots is important for conservation ▸ Dam safety should be adequately examined ▸ Coordination of planning/management of development are critical, especially in the Muvumba area ▸ The above comments of stakeholders were considered by the consultant, although they will be better elaborated during the planned feasibility and detailed design studies
4.	Consultations with stakeholders whoreviewed and approved the final study reports, and	November 2012 Kampala, Uganda	▸ Ministry of Natural Resources (MINIRENA) ▸ Rwanda Natural Resources Authority (RNRA, MINIRENA) ▸ Ministry of Agriculture and	▸ In the final report stakeholder review workshop, the project was found to have significant benefits, after assessment of its technical, social, environmental, financial and economic aspects. Stakeholders recommended that the project should be

	confirmation of the need for the project.		Animal Resources (MINAGRI) ▸ Electricity, Water and Sanitation Authority, Ministry of Infrastructure (EWSA, MININFRA) ▸ Nyagatare District Local Government ▸ Rwanda NELTAC and RPSC members	studied at feasibility level
5.	Consultations with the RwandanGovernment to agree on the scope and scale of the Muvumba project	August 2013 – Kigali	▸ Rwanda Natural Resources Authority (RNRA, MINIRENA) ▸ Ministry of Agriculture and Animal Resources (MINAGRI) ▸ Electricity, Water and Sanitation Authority, Ministry of Infrastructure (EWSA, MININFRA) ▸ Nyagatare District Local Government ▸ Rwanda NELTAC and RPSC members	▸ Meeting discussed and agreed that the project should explore development of all the potential water uses, of irrigation, hydropower, potable and livestock water supply, fish farming, as well as including a component of designing rehabilitation measures for critically degraded parts of its upstream watershed

	RUVYIRONZA PROJECT (BURUNDI)			
	CONSULTATIONS MEETING CONDUCTED/PLANNED	**DATE**	**STAKEHOLDERS**	**Decisions/discussion points**
1.	Consultations with stakeholders for the compilation and review of the project identification reports.	February – May 2012 Bujumbura City&Gitega Province	▸ Ministry of Water, Environment, Land and Urban Development (MEEATU) ▸ Burundi Geographic Institute (IGEBU) ▸ Ministry of Agriculture and Livestock (MINAGRIE) ▸ Ministry of Energy and Mines (MEM) ▸ REDIGESO (the national water & power utility) ▸ Burundi Rural Electrification Agency (ABER) ▸ Gitega Province officials ▸ Burundi NELTAC and RPSC members	▸ Such projects need to consult sectors and the communities ▸ The project needs to harmonize its plans with similar and related projects being planned for the Kagera Basin under different study components ▸ The study should ensure the ToRs for detailed ESIA are responsive to concerns of the communities in the project areas; ▸ Measures to reduce impacts on the communities using the marshlands should be minimized if not, the project increases peoples vulnerability even after the project. ▸ The study process should link with provisional and district agencies so that, the projects are consistent with priorities and acceptable from their start. ▸ The above comments of stakeholders were considered by the consultant, although they will be further elaborated during the planned feasibility and detailed design studies
2.	Consultations with the Burundian Government to address issues related to the potential	July – August 2013 Bujumbura	▸ Ministry of Water, Environment, Land and Urban Development (MEEATU)	▸ A team of the Kagera RBM Project and relevant national stakeholders visited the potential Ruvyironza project area, and the Government has prioritized the project for

	inundation by the Ruvyironza dam of 10km of the planned Gitega-Ngozi highwayand level of people affected by the project.	City, Gitega Province	▸ Ministry of Agriculture and Livestock (MINAGRIE) ▸ Ministry of Energy and Mines (MEM) ▸ REDIGESO (the national water & power utility) ▸ Burundi Rural Electrification Agency (ABER) ▸ Vice President's Office	further preparatory studies and sent a confirmation letter to the Kagera RBM Project. Regarding the inundation of part of the Gitega-Ngozi highway, the representative of the Ministry of Public Works informed the participants that donor (The EU) for the road had been consulted and has agreed to relocate/re-route the affected road section around the extents of the planned multipurpose dam project. In addition, the Government through the Ministry of Finance also committed to support the additional costs related to this road relocation. The additional studies for the 14km road relocation will be conducted by the Firm implementing the project. ▸ In regard to minimizing the relocation of households from the planned reservoir, the stakeholders recommended a reduction of the Dam height from 59m to 50m in order to reduce the negative impacts related to the reservoir inundation area.

KABUYANDA PROJECT (UGANDA)				
	CONSULTATIONS MEETING CONDUCTED/PLANNED	**DATE**	**STAKEHOLDERS**	**Decisions/discussion points**
1.	Consultations with stakeholders for the site identification, and reviewof identification study reports, and confirmation of the need for the project.	February – May 2012 Kampala, Isingiro Districts,Uganda	▸ Water for Production Department, Ministry of Water and Environment (WfP, MWE) ▸ Directorate of Water Resources Management, Ministry of Water and Environment (DWRM, MWE) ▸ Ministry of Agriculture Animal Industry and Fisheries (MAAIF) ▸ Ministry of Energy and Mineral Development (MEMD) ▸ Isingiro District Local Government ▸ Uganda RPSC members	▸ Details of the project should be availed to National Forestry Authority so that, the Authority will be in a better position to know the extent of the project and its implication on the Clean Development Mechanism (CDM) site in Rwoho Central Forest Reserve ▸ The project should have enough planning period so that, communities get well mobilized to be part of the project. ▸ The ESIA should look more on multi-purpose uses of the planned dam project because the District is water stressed. ▸ Need to consult exhaustively on matters of land uptake to avoid community wrangles over land. ▸ The ESIA should be careful to critically look at the issues of ethnicity in the project area. There can be complaints that some group is favoured in payments of compensations packages; ▸ Issues of water use conflicts due to multiple uses (irrigation vs power generation); ▸ Conflicts over resources between migrant workers then and the resident communities; and

				▸ Watershed considerations during the ESIA rather than focus on the dam site alone. ▸ The above comments of stakeholders were considered by the consultant, although they will be further elaborated during the planned feasibility and detailed design studies
2.	Consultations with the UgandanGovernment to address issues related to the potential inundation by the Kabuyanda dam of the Rwoho Central Forest Reserve(CDM project area)	2013 Isingiro District	▸ Water for Production Department, Ministry of Water and Environment (WfP, MWE) ▸ National Forestry Authority, Ministry of Water and Environment (NFA, MWE) ▸ Isingiro District Local Government	▸ The Government of Uganda prioritized the Kabuyanda project for further preparatory studies, and sent a commitment letter to the Kagera RBM Project. ▸ The dam is expected to inundate about 157 ha of land part of which falls under the Carbon Credit Project area of Rwoho Forest Reserve. ▸ The Government committed to undertake the relocation process for the affected area as soon as the EIA process is completed. ▸ On the basis of the EIA, the Ministry of Water and Environment (MWE) will engage the International Bank for Reconstruction and Development (IBRD) in its capacity as Trustees for the Bio-carbon funds for Carbon Credit and the UNFCCC where the project is registered as Uganda Nile Basin Reforestation Project N03. ▸ The farmers who might be affected under this project should be compensated.

Planned Consultations			
	CONSULTATIONS MEETING PLANNED	**DATE**	**STAKEHOLDERS**
1.	Early information of stakeholders on possible safeguards measures in preparation on the feasibility studies	July- August 2014 Gitega, Cankuzo, Karuzi, Muyinga and Ruyigi Provinces (Burundi), Bukoba, Missenyi and Serengeti Districts (Tanzania), Isingiro and Tororo Districts (Uganda), Nyagatare District (Rwanda), and Sio District (Kenya)	▸ RPSC members; representatives of relevant ministries of water, agriculture, energy, infrastructure development, environment, local government; District Officials; key representatives of local NGOs and civil society
2.	Extensive consultations during the feasibility studies and detailed design as well as independent ESIA and RAP studies for the Sio- Sango and Nyabanja Projects	Dec 2014 Tororo and Sio Districts	▸ RPSC members, Ministry of Water & Environment Staff, District Officials, NEMA, ▸ National irrigation Board, Water for Production Staff, Ministry of Agriculture, Ministry of Energy, MEWNR
3.	Extensive consultations during the feasibility studies and detailed design as well as independent ESIA and RAP studies	2015 Tororo and Sio Districts	▸ RPSC members, Ministry of Water & Environment Staff, District Officials, NEMA, ▸ National Irrigation Board, Water for Production

	for the Sio- Sango and Nyabanja Projects		Staff, Ministry of Agriculture, Ministry of Energy, MEWNR
4.	Extensive consultations during the feasibility studies and detailed design as well as independent ESIA and RAP studies for the Muvumba Project	Dec 2014 Nyagatare District	▸ Nyagatare District, Sector and Cell officers ▸ Target project beneficiaries and PAPs ▸ Key representatives of relevant ministries and agencies in water, agriculture, energy, infrastructure development, environment, local government ▸ Relevant CBOs, NGOs, etc
5.	Extensive consultations during the feasibility studies and detailed design as well as independent ESIA and RAP studies for the Muvumba Project	2015 Nyagatare District	▸ Nyagatare District, Sector and Cell officers ▸ Target project beneficiaries and PAPs ▸ Key representatives of relevant ministries and agencies in water, agriculture, energy, infrastructure development, environment, local government Relevant CBOs, NGOs, etc
6.	Extensive consultations during the feasibility studies and detailed design as well as independent ESIA and RAP studies for the Ruvyironza Project	Dec 2014 Gitega, Cankuzo, Karuzi, Muyinga and Ruyigi Provinces	▸ Provincial and Commune officers ▸ Target project beneficiaries and PAPs ▸ Key national ministries and agencies ▸ Relevant CBOs, NGOs, etc
7.	Extensive consultations during the feasibility studies and detailed design as well as independent ESIA and RAP studies for the Ruvyironza Project	2015 Gitega, Cankuzo, Karuzi, Muyinga and Ruyigi Provinces	▸ Provincial and Commune officers ▸ Target project beneficiaries and PAPs ▸ Key representatives of relevant ministries and agencies in water, agriculture, energy, infrastructure development, environment, local governmentRelevant CBOs, NGOs, etc
8.	Extensive consultations during the feasibility studies and detailed design as well as independent ESIA and RAP studies for the Kabuyanda Project	Dec 2014 Isingiro District	▸ Isingiro District, County, Sub-county and Parish officers ▸ Target project beneficiaries and PAPs ▸ Key representatives of relevant ministries and agencies in water, agriculture, energy, infrastructure development, environment, local government ▸ Relevant local CBOs, NGOs, etc
9.	Extensive consultations during the feasibility studies and detailed design as well as independent ESIA and RAP studies for the Kabuyanda Project	2015 Isingiro District	▸ Isingiro District, County, Sub-county and Parish officers ▸ Target project beneficiaries and PAPs ▸ Key representatives of relevant ministries and agencies in water, agriculture, energy, infrastructure development, environment, local government ▸ Relevant CBOs, NGOs, etc
10.	Extensive consultations during the feasibility studies and detailed design as well as independent ESIA and RAP studies for the Ngono Project	Dec 2014 Bukoba District	▸ Kagera Regional Officers ▸ Bukoba Sub-basin Water Office ▸ District officers ▸ Target project beneficiaries and PAPs ▸ Key representatives of relevant ministries and agencies in water, agriculture, energy, infrastructure development, environment, local government ▸ ▸ Relevant CBOs, NGOs, etc
11.	Extensive consultations during the feasibility studies and detailed design as	2015	▸ Kagera Regional Officers ▸ Bukoba Sub-basin Water Office

	well as independent ESIA and RAP studies for the Ngono irrigation Project	Bukoba District	▸ District officers ▸ Target project beneficiaries and PAPs ▸ Key representatives of relevant ministries and agencies in water, agriculture, energy, infrastructure development, environment, local government ▸ Relevant CBOs, NGOs, etc
12.	Extensive consultations during the feasibility studies and detailed design as well as independent ESIA and RAP studies for the Mara irrigation Project	Dec 2014	▸ Mara Regional Officers ▸ District officers ▸ Target project beneficiaries and PAPs ▸ Key representatives of relevant ministries and agencies in water, agriculture, energy, infrastructure development, environment, local government ▸ Relevant CBOs, NGOs, etc
13.	Extensive consultations during the feasibility studies and detailed design as well as independent ESIA and RAP studies for the Mara irrigation Project	2015	▸ Mara Regional Officers ▸ District officers ▸ Target project beneficiaries and PAPs ▸ Key representatives of relevant ministries and agencies in water, agriculture, energy, infrastructure development, environment, local government ▸ Relevant CBOs, NGOs, etc

Component 3. Eastern Nile Technical Regional Office

	CONSULTATIONS MEETING CONDUCTED/PLANNED	DATE	STAKEHOLDERS	Major Discussions/Issues
1	NCORE Launch Workshop – Eastern Nile – Addis Ababa, Ethiopia	February 2013	Eastern Nile governmental officials, Eastern Nile Universities, CSOs, media	--Overview of knowledge base and models available at ENTRO --Discussion of continuation of university networks and activities under the NCORE project --Request from countries and universities to resume the ENTRO internship program --Feedback gathered on how to mainstream work from the ENTRO ENPM and JMP project outputs into new work at ENTRO --Request from governments for ENTRO to continue its regional flood forecasts during the rainy season --Modelling tools and licenses shared with universities --South Sudan requested special support, given its status as a new nation.
2	NCORE Modelling Forum – Bahir Dar, Ethiopia	September 2013	Eastern Nile governmental officials, Eastern Nile Universities, CSOs, Media	--Update on progress of analytical work under the NCORE project --Agreement to work on special studies on water resource issues, to be conducted by regional grouping of universities – with one university/country taking the lead on each study (sedimentation, ground water, recession agriculture) --Break out discussion to give feedback to ENTRO on projects – which to expand, etc.
3	Dam Safety training and inception review workshop/consultation – Nazareth Ethiopia	October 7-9, 2013	Eastern Nile national authorities	--Kick off and planning for NCORE dam safety activities, including plans for developing and consulting a regional dam safety framework and guidelines

	CONSULTATIONS MEETING CONDUCTED/PLANNED	DATE	STAKEHOLDERS	Major Discussions/Issues
				--Ethiopia and Sudan both offered to host participants to hold dam safety training activities
4	Eastern Nile Flood Forum – Khartoum, Sudan	November 2013	Eastern Nile governments, Eastern Nile Universities, CSOs, media	--ENTRO presented preliminary research on the causes of flash flooding in Sudan, its rainfall and riverine flood forecasting and communications --ENTRO and technical professionals discussed Earth Based Monitoring for weather, hydrologic and flood inundation forecasting, as well as for seasonal forecasts based on global sources --ENTRO shared its early work to develop additional flood routing and inundation models for the Baro-Ahobo-Sobat sub basin in Ethiopia and South Sudan --ENTRO was asked to increase its work on flash flood modelling in Sudan, to strengthen its work related to seasonal and real time flood forecasting, and to procure additional equipment (GeoNetCas) from the European Met authorities.
5	Dam Safety PFMA technical training and consultation– Bahir Dar, Ethiopia	January 2014	Eastern Nile Ministry officials – Ministries of Power, Water, Environment, Power Utilities. ENTRO interns.	--Trainees were led through a case study analysis of a Potential Failure Mode Analysis of Koga Irrigation Dam --Request from countries for more training in dam safety for dam operators, and in planning of new dams -Participants discussed the need to establish national level authorities tasked with dam safety monitoring
6	NCORE Eastern Nile consultation workshop, Nazareth, Ethiopia	February 2014	National government authorities, universities, CSOs, media	--Presentation and discussion of progress of ENTRO analytical work, including a multi sector investment opportunity analysis, and commodity trade models, in addition to work to consolidate ENTRO's knowledge database, with a view of making some aspects available to the public.
7	ENCOM and ENSAPT meetings	*June 2013 - planned*	National government authorities	--South Sudan was admitted as a formal member of ENTRO. --ENTRO was asked to use its modelling tools (such as the MSIOA) to helpl countries identify new potential regional investments --ENTRO was tasked with updating the ENTRO Strategic Plan, to include more development projects --ENTRO was praised for its analytical work. -Ministers committed to work towards an all-inclusive cooperation, with all Eastern Nile countries actively participating.
8	Eastern Nile consultation on dam safety guidelines	*July 2014 - planned*	Eastern Nile national governmental authorities	-Planned review of training PFMA exercises carried out in the Eastern Nile countries. -Consultation on a potential dam safety framework and guideline.
9	Inception review for Eastern Nile Multi-Sectoral Investment Opportunity Analysis	*July 2014 - planned*	Eastern Nile national governmental authorities, CSOs, media	--Review of plans for multi-sector investment opportunity analysis. --Request for feedback on methodology, data. --Selection and agreement on indicators to be used in the analysis.
10	Review of Eastern Nile Multi-Sectoral Investment Opportunity Analysis	*September 2014 - planned*	Eastern Nile national governmental authorities, CSOs, media	--Review of modelling. --Discussion of process and outputs. --Potential selection of a development scenario.

	CONSULTATIONS MEETING CONDUCTED/PLANNED	DATE	STAKEHOLDERS	Major Discussions/Issues
	EASTERN NILE WATERSHED MANAGEMENT PROJECT PREPARATION			
	CONSULTATIONS MEETING CONDUCTED/PLANNED	DATE AND LOCATION	STAKEHOLDERS	Major Discussions, Issues
1	Consultations in assembling the Cooperative Regional Assessment	2005 – 2007; approval of hotspots – August 2008	Regional, national and local governments, community members, CSOs	--Identification of "hot spots" of significant watershed degradation in the Eastern Nile --Study tours and sensitization, capacity building on causes and possible solutions to address watershed management. --Review and discussion of economic modelling exercise showing that the cost of watershed degradation in the Eastern Nile is multiple billions of dollars – and that coordinated community projects to reverse the degradation have large ERRS and positive regional impacts.
2	Consultations for the delineation and prioritization of watershed management sites (for project selection)	Tekeze, BAS, main Nile - 2010 Abbay/Blue Nile- 2011	Regional, national and local governments, community members, CSOs	--Work in the "hot spot" areas to better define the geographic location of the degradation, drivers, and possible solutions --Regional meeting to discuss findings, select the spots for next round of project preparation. Areas in Sudan and Ethiopia identified and agreed. In Ethiopia projects are to be located on the Blue Nile, in the Fincha'a watershed (which includes the Fincha'a, Nedi and Mita sub-watersheds), and the Chemoga watershed (which includes the Chemoga, Tesher and Yeda tributaries). --In Sudan, ENTRO will be working with the government to design and prepare new watershed management interventions in Kassala State in the Northern part of the Telkuk locality; and in the Karib lands in Gedaref State, along the upper Atbara River.
3	National level consultations on preparation of new projects – Sudan and Ethiopia	January – February 2013	Technical officials from Sudan and Ethiopia	--Meetings between National and regional authorities to ensure that the sites previously identified (listed above) for project preparation are still priorities for the government, and are prioritized in national level development frameworks. --Discussion of the level of effort that will be required from national and local authorities in preparing new watershed management projects, as the national and local authorities will be trained in project preparation through the course of preparation.
4	Launch of watershed project preparation – Bahir Dar, Ethiopia	September 2013	National and local authorities responsible for project areas, CSOs	--Overview, discussion and planning of upcoming watershed management preparation. --Field visit to Tana and Beles watershed management project sites.
5	Capacity building workshop on scaling up – Nazareth, Ethiopia	February 2014	Technical representatives from Ethiopia, Sudan and South Sudan, universities	--Training of national and local authorities on good practices in watershed project design. --Discussion of watershed management challenges in each country. --Brainstorming and team work to discuss how best practices can be integrated into the project preparation in each country, through the upcoming

	CONSULTATIONS MEETING CONDUCTED/PLANNED	DATE	STAKEHOLDERS	Major Discussions/Issues
				NCORE project preparation work.
6	National level and local level consultations in the course of project preparation	*-Local consultations March – August 2014; --Interim review workshop – May 2014; --Final report review – September 2014.*	National, local and community authorities, community members, CSOs	*Planned.*