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The Republic of Uganda

MINISTRY OF HEALTH

Environmental and Social Management Framework

for

UGANDA REPRODUCTIVE, MATERNAL, NEONATAL AND CHILD HEALTH IMPROVEMENT PROJECT

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Acronyms

BDR	Births and Deaths Registration
CAS	Country Assistance Strategy
CHEW	Community Health Extension Workers
CRVS	Civil Registration and Vital Statistics
DHT	District Health Team
DLI	Disbursement Linked Indicators
EEP	Eligible Expenditure Programs
EMP	Environmental Management Plan
EDHMTs	Expanded District Health Management Team
eMTCT	Elimination of Mother-to-Child-Transmission of HIV
ESIA	Environmental and Social Impact Assessment
GDP	Gross Domestic Product
GOU	Government of Uganda
HCIV	Health Center Type Four
HCW	Health Care Waste
HCWM	Health Care Waste Management
IDA	International Development Association
IMR	Infant Mortality Rate
IPT	Intermittent Preventive Treatment
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HNP	Health Nutrition and Population
HPAC	Health Policy Advisory Committee
HRH	Human Resources for Health
HRHMIS	Human Resources for Health Management Information System
HSDP	Health Sector Development Plan
ICD	International Classification of Diseases
ICT	Information, Communication, and Technology
IPD	In-Patient Department
IDA	International Development Association
MoH	Ministry of Health
NIRA	National Identification and Registration Authority
PIM	Project Implementation Manual
PHC	Primary Healthcare
RBF	Result Based Financing
RMNCAH	Reproductive, Maternal, Neonatal and Child Health Improvement Project
URSB	Uganda Registration Services Bureau
VHT	Village Health Teams
WB	World Bank

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EXECUTIVE SUMMARY

Government of Uganda (GoU) will obtain financing from the World Bank (The Bank) for the *Uganda Reproductive, Maternal, Neonatal and Child Health Improvement Project* (RMNCAH Project). The project will support the national efforts to scale up delivery of essential RMNCAH services described in the RMNCAH Sharpened Plan. The project will assist Uganda's Ministry of Health (MoH) to address critical health systems bottlenecks constraining RMNCAH service delivery, including strengthening supervisory functions and improving the quality of care. In addition, the project will support efforts to strengthen institutional capacity for Civil Registration and Vital Statistics (CRVS) to scale up provision and utilization of Birth and Death Registration (BDR) services. The project targets districts with high RMNCAH disease burden and low RMNCAH service coverage and utilization and will be implemented in close collaboration and coordination with other RMNCAH programs to ensure alignment of the programs to the RMNCAH Sharpened Plan.

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The project has four components listed below and described in detail in Chapter 2.

- Component 1: Results-Based Financing for Primary Health Care Services
- Component 2: Strengthen Health Systems to Deliver RMNCAH Services
- Component 3: Strengthen Capacity to Scale-up Delivery of Births and Deaths Registration Services
- Component 4: Enhance Institutional Capacity to Manage Project Supported Activities

Component 1 will support implementation of RBF activities in a phased manner to ultimately cover 60 districts in Uganda. Activities for Components 2 and 3 are mainly national-level activities, and will accord priority to low capacity and remote districts. The interventions under the project involve improvement in provision of health services to communities, including those that are vulnerable. The project will contribute to improved health services and the treatment of more people and consequently there will be increased generation of medical waste in the health facilities, and the need for appropriate controls to minimize the associated risk of spread of disease. Component 2 will involve small scale repairs, renovations, and construction of maternity wards and appropriate environmental and social controls will be needed in respect to any land acquisition and construction activity. The environmental and social impacts that could arise from the project have been predicted.

In order to comply with GoU & WB's environmental requirements and to aid various stakeholders to identify and effectively manage potential environmental and social impacts of the proposed project, this Environmental and Social Management Framework (ESMF) was prepared, along with a Resettlement Policy Framework (RPF), an Indigenous Peoples Policy Framework (IPPF) and Indigenous Peoples Plan (IPP). This ESMF outlines the framework and mechanisms for environmental and social impact screening, determining extent of required environmental assessment and assessment of environmental and social impacts arising from proposed project implementation, and gives generic guidance on appropriate mitigation measures, and institutional arrangements for monitoring.

This framework is needed since specific project locations under the proposed project are yet to be determined. Where necessary, site specific Environmental and Social Management Plans shall be prepared during project implementation.

Key stakeholders who among others will be involved with implementation or monitoring this project are:

- Ministry of Health
- District Environment Officers
- District Health Officers
- Health workers in the facilities

- Indigenous peoples at the respective areas/districts
- Village Health Teams
- NGOs working in health sector

Capacity building will be essential for effective implementation of the ESMF. MoH will hire Environmental Health Specialist to undertake implementation of environmental aspects of the project as outlined in this ESMF. In order to ensure they are effective in monitoring not only construction activities but also associated operation phase socio-environmental impacts as provided in this ESMF, capacity enhancement is recommended for the Environmental Health Division of MoH, the District, Health Center staff and Village Health Teams in areas of:

- EIA process in Uganda
- Environmental Health-impact relationship
- Impact assessment
- World Bank Safeguards
- Environmental monitoring
- Stakeholder engagement
- Grievance management
- Capacity building of local medical staff in health waste management

Main generic impacts associated with the project are outlined in table ES 1 below:

Table ES1: Key potential impacts of each project phase

	Phase and sense of impacts	**Impacts**
1	CONSTRUCTION-PHASE	
i)	***Positive social impacts***	Income to material/ equipment suppliers and contractors
ii)	***Negative social impacts***	a) Occupational health safety (OHS) Risks for Contractors b) Injury to patients or healthcare staff by construction activities c) Traffic accidents d) Temporary disruption of healthcare services e) Social misdemeanour by construction workers f) Social impact of material transport g) Temporary scenic blight h) Non compensation of PAPs
iii)	***Negative environmental impacts***	a) air quality deterioration due to dust b) Improper management of construction waste and debris. c) Improper management of construction site and surrounding environment, e.g. loss of vegetation cover, poor sanitation practices.
2	OPERATION-PHASE	
i)	***Positives social impacts***	a) Improved medical services at healthcare facilities b) Employment opportunities c) Reduced public risks due to improvement in healthcare waste management d) Improved aesthetics and life of healthcare facilities

	Phase and sense of impacts	Impacts
ii)	***Negative social impacts***	a) Community health risk due to improper waste management b) Occupational health and safety risks c) Fire risk d) Misuse or inability to use installed healthcare equipment e) Lack of sustainability
iii)	***Negative environmental impacts***	a) Air pollution from onsite medical waste incinerators b) Improper medical waste management

Mitigation measures for potential negative impacts have been discussed in Section 7. Clauses for construction work contracts on environmental compliance are provided in Annex 4 while Code of Practice for Construction Workers is outlined in Annex 10. Healthcare waste management procedure in line with national requirements, and training in the implementation of the procedure including Guidance on healthcare waste management in line with national requirements is provided in Annexe 8 and 9 provides a checklist for HCWM.

It is estimated that budget for implementing this ESMF including costs of monitoring and capacity building is USD 1,640,000 throughout the 5 year project life as shown in table below.

Table ES2: Budget estimate for guidance in implementing the ESMF

	Item	Cost Estimate (US $)	Notes
1	Renovations/repairs/ construction of new health centers	400,000	Control of erosion, dust, drainage impacts and construction waste management
2	Budget for position of Environmental Health Specialist	180,000	Budgeted at USD3000 gross monthly salary for 5 years
3	Improvement of HCW management through support to implementation of the national health care waste plan (including training, preparation of the HF HCWM plans)	200,000	Lumpsum cost for entire project
4	Supervision and monitoring by district officers (responsible for social and environment affairs)	200,000	Budget based on monitoring plan below: ▪ 10 Districts sampled per monitoring quarter ▪ USD 1000 per district per quarter as total expenses for all staff involved. ▪ 20 Quarters in 5 years (hence total: 10 Districts x 20 Quarters x USD1000)
5	Training of health workers on HCWM and strengthening infection control at health facilities	320,000	Training of Health Workers in proper HCWM and World Bank Safeguards (assuming an average of USD80,000 per region)
6	Renovation of existing healthcare waste facilities		To be part of contractors' assessment and price quote
7	Lumpsum support for purchase of HCW containers	400,000	Cost for all four regions
	TOTAL (US$)	**1,700,000**	

1 INTRODUCTION

1. Government of Uganda (GoU) has obtained financing from the World Bank (The Bank) for the *Uganda Reproductive, Maternal, Neonatal and Child Health Improvement Project* (RMNCAH Project). The project will support the national efforts to scale up delivery of essential RMNCAH services described in the RMNCAH Sharpened Plan. The project will assist Uganda's Ministry of Health (MoH) to address critical health systems bottlenecks constraining RMNCAH service delivery, including strengthening supervisory functions and improving the quality of care. In addition, the project will support efforts to strengthen institutional capacity for Civil Registration and Vital Statistics (CRVS) to scale up provision and utilization of Birth and Death Registration (BDR) services. The project targets districts with high RMNCAH disease burden and low RMNCAH service coverage and utilization and will be implemented in close collaboration and coordination with other RMNCAH programs to ensure alignment of the programs to the RMNCAH Sharpened Plan.

1.5 Project Development Objective

The Project Development Objectives (PDOs) are to: (a) improve utilization of essential health services with a focus on reproductive, maternal, newborn, child and adolescent health services in target districts; and (b) scale up birth and death registration services.

1.6 Project Beneficiaries

The primary project beneficiaries are women of childbearing age, adolescents, and children under-five (including newborns and infants) from selected districts in the country with a high disease burden. The beneficiaries will benefit from a package of high impact quality and cost-effective RMNCAH interventions. In addition, communities will benefit from enhanced BDR services.

2 PROJECT DESCRIPTION

This chapter outlines components of the proposed project and financing arrangements.

2.1 Project Components

The project comprises four components, namely:

- Component 1: Results-Based Financing for Primary Health Care Services
- Component 2: Strengthen Health Systems to Deliver RMNCAH Services
- Component 3: Strengthen Capacity to Scale-up Delivery of Births and Deaths Registration Services
- Component 4: Enhance Institutional Capacity to Manage Project Supported Activities

Component 1 will support implementation of RBF activities in a phased manner to ultimately cover 60 districts in Uganda. Activities for Components 2 and 3 are mainly national-level activities, and will accord priority to low capacity and remote districts.

2.1.1 Component 1: Results-Based Financing for Primary Health Care Services

The objective of this component is to institutionalize and scale-up RBF with a focus on RMNCAH services. The RBF design for the project draws on the National RBF Framework, and aims at incentivizing selected District Health Teams (DHTs) and HC III and IV to expand provision of quality and cost-effective RMNCAH services. Under this, the health centres will support the VHTs in their catchment areas to promote community based RMNCAH services, including nutrition.[1] The district selection was based on a predefined criteria, which included: district poverty levels, access/coverage of RMNCAH services, disease burden, and presence/absence of other RBF schemes.[2] The selection of health facilities in the designated districts will be based on their readiness to provide RMNCAH services using a RBF readiness assessment tool adapted from the health facility quality of care program. To further strengthen the referral system, strategically located hospitals with capacity to provide ambulance and RMNCAH referral services will be selected based on criteria outlined in the Project Implementation Manual (PIM). As part of the RBF institutionalization, government will establish an RBF unit in the Health Planning Department to oversee RBF operations. The unit will also serve as the secretariat for the Interagency RBF Coordination Committee to promote coordination, alignment and harmonization of RBF programs. Implementing the various RBF programs together, within a common framework is expected to promote RBF sustainability.

The RBF package of high-impact interventions were selected from the RMNCAH Sharpened Plan. The RMNCAH package comprises interventions at health facilities and the community level, and includes: (a) ANC, (b) safe delivery; (iii) comprehensive emergency obstetric care; (iv) essential newborn and postnatal care services; (v) post-abortal care; (vi) family planning; and (vii) community-based RMNCAH services including nutrition, prevention and treatment of common childhood diseases and provision adolescent health services. HCs on the RBF scheme will be rewarded for performance based on key quantity and quality indicators using a fee-for-service provider payment mechanism embedded with a quality enhancing score. DHTs will be rewarded to supervise RBF facilities on key health systems governance indicators on a quarterly basis. The RBF payment framework will embrace an equity dimension to cater for districts in remote or hard-to-reach areas. The project will ensure that the services are provided equitably and in a

[1] The government is considering adopting CHEWs. The project will support the CHEWs when the change takes effect.

[2] Reproductive health voucher schemes are currently under implementation in 50 districts (26 under the Bank financed project (P144102) and 24 under the USAID-funded project. In addition, the BTC is implementing a supply-side RBF in 10 districts and CORDAID in the Busoga Region. These excludes small schemes by partners in the districts.

way that all aspects of the community can use, irrespective of whether they are Indigenous Peoples, vulnerable/ marginalized groups, etc.

The project under this component will finance: (a) selection process and training of RBF health providers; (b) performance-based payments to health facilities, hospitals and the DHTs based on verified results; (c) RBF supervision and capacity building; and (d) external verification/counter-verification.

2.1.2 Component 2: Strengthen Health Systems to Deliver RMNCAH Services

The objective of this component is to strengthen institutional capacity to deliver RMNCAH services. The project will support the MoH to implement priority health systems strengthening actions to enhance capacity to deliver RMNCAH services. The selected priority actions from the RMNCAH Sharpened Plan address the most critical health systems bottlenecks to RMNCAH service delivery, and include improving: (a) availability of essential drugs and supplies; (b) availability and management of the health workforce; (c) availability and functionality of medical equipment in health facilities; (d) health infrastructure for Primary Healthcare (PHC) services; (e) quality of care and supervision. The actions will be included in the annual plans and budgets of the MoH.

(a) *Improved availability of essential drugs and supplies* (US$10 million): The MoH will (i) procure and distribute essential RMNCAH commodities, including mama kits, manual vacuum aspiration kits, and contraceptives and (ii) upgrade the warehousing system in National Medical Stores (NMS). In order to strengthen district capacity to quantify drug needs, the MoH will support the districts to assign medicines management supervisors to the DHTs and complete the roll out the electronic logistics management system in the remaining districts.

(b) *Improved availability and management of the health workforce* (US$5 million): The MoH will support districts to (i) recruit staff and fill vacancies within the available annual wage bill allocation in a timely manner; (ii) train RMNCAH cadres in short supply (midwives, anaesthetists and laboratory technicians); and (iii) support in-service training and mentorship programs targeting RMNCAH services.[3]

(c) *Improved availability and functionality of medical equipment in health facilities* (US$10 million): The project will support the MoH to: (i) procure and distribute critical RMNCAH equipment to selected facilities; (ii) redistribute basic medical equipment from districts/health facilities where they are not in use; and (iii) strengthen the inventory management system for equipment.

(d) *Improved health infrastructure for PHC health facilities* (US$17 million): The project will support the MoH to: (i) construct maternity units in 40 HC IIIs (in non RBF districts) after establishing a clear justification and rationale and (ii) develop guidelines for RBF health facilities to perform simple renovation of health facilities to enhance their functionality.

(e) *Improved quality of care and supervision* (US$10 million): The project will support the MoH to: (i) effectively supervise and support DHTs in a coordinated and systematic manner through the area supervision teams;[4] (ii) roll out the HFQCAP; (iii) issue service standards/protocols including maternal and perinatal death audits, health care waste management (HCWM); and client charters; (iv) develop and issue guidelines to the districts to contract eligible hospitals to provide ambulance and referral services on a fee-for-service basis; (v) support DHTs to strengthen their community health outreach programs through properly trained, equipped, motivated and supervised VHTs; and (vi) strengthen citizen engagement through the Health Unit Management Committees (HUMCs), constituency task forces and client charters.[5]

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[3] Using Association of Gynecologists, Pediatricians, Private Midwives and RMNCAH community service organizations

[4] Area Teams comprise central level staff and are responsible for the quarterly supervision of the districts. The Resource Centre is responsible for managing the HMIS.

[5] These citizen engagement tools are already in use. The project will support expansion of their implementation.

2.1.3 Component 3: Strengthen Capacity to Scale-up Delivery of Births and Deaths Registration Services

The objective of the component is to strengthen institutional capacity for CRVS and scale-up BDR services. The project will support government efforts to strengthen capacity of the principle CRVS institutions at central and subnational levels to carry out their mandate to provide BDR services and to scale-up BDR services countrywide.

Sub-component 3.1: Strengthen Institutional Capacity to Deliver BDR Services (US$2 million).

The key objective of the sub-component is to strengthen the principle CRVS institutions to carry out their mandates of BDR. The project will support NIRA at the national level to enhance its oversight and coordination function and its affiliate offices at subnational level (district and sub-county) to provide BDR services, giving priority to:

- development and dissemination of a national CRVS policy, strategy and communication strategy;
- development and training of staff on the BDR protocols and manuals; and
- establishment and operationalization of a CRVS monitoring and evaluation (M&E) system, and use of CRVS data for planning and accountability purposes.

Sub-component 3.2: Scale-up Birth and Death Registration Services (US$8 million)

The objective of the sub-component is to support NIRA to scale-up BDR services at the health facilities and the communities. The project will support NIRA to (a) establish BDR mobile outreach services for effective coverage within 63 districts; (b) scale-up the Mobile Vital Records System (MVRS) for birth registration to an additional 54 districts; (c) expand birth registration to 218 HC IVs, and 1,300 HC IIIs; (d) expand mobile/outreach birth registration services to remote and underserved communities; (e) train facility and community-based registration personnel on BDR; (f) design the death registration module within the existing MVRS; (g) train clinical staff and Maternal and Perinatal Death Audit Committees on cause-of-death reporting according to International Classification of Diseases (ICD) guidelines; (h) develop a customized DHIS2[6] module for reporting cause of death and ICD coding; and (viii) acquire the necessary materials, tools and equipment for BDR (office equipment, IT equipment - computers and mobile phones - and BDR registers).

2.1.4 Component 4: Enhance Institutional Capacity to Manage Project Supported Activities

This objective of the component is to enhance institutional capacity for management of project supported activities. This component will support costs related to overall project management, training, and project operations (safeguards, M&E, citizen engagement) in order to ensure the intended objectives are achieved in a sustainable manner. The project will address the skills gaps in project management and build institutional capacity of the relevant units for efficient and effective project implementation. This will include the following:

(a) *Strengthen project management, including fiduciary capacity*. This will entail enhancing capacity for project management, financial management, procurement, and both internal and external audit functions. This component of the project will additionally ensure that the required tools and equipment are available for project operations (such as office equipment and motor vehicles).

(b) *Strengthen capacity to implement RBF programs*. Special attention will be paid towards training key staff in RBF design and implementation, as well as national coordination of the various RBF programs/schemes in the country.

(c) *Strengthen capacity for management of environmental and social safeguards related activities*. This is to enable the MoH to plan, coordinate, monitor, and report on implementation of the relevant mitigation activities.

[6] *DHIS2 is a health management information system used 47 countries including Uganda, and used by 23 organizations*

(d) *Enhance monitoring and evaluation functions*. The project will support the resource center to generate reliable data to facilitate routine project monitoring, verification of RBF outputs, and coordination and implementation of the mid-term and end-of-project evaluation.

(e) *Support information, education and communication and citizen engagement*. This will involve engaging the media, revision and dissemination of appropriate tools, and materials on citizen engagement, and monitoring of citizen engagement related activities.

2.2 Project Financing

The project is financed through an Investment Project Financing (IPF) instrument. Out of the total project cost of US$140 million, US$110 million is financed under the IDA Credit, and US$30 million from the Global Financing Facility (GFF) grant.

2.3 Anticipated Social and Environmental Impacts

The project involves minor civil works that include the construction of 40 maternity units in existing HC IIIs as well as minor renovations. While the probability of land acquisition under the project is quite limited, since the exact sites and land take needs are uncertain, the project may have resettlement and land acquisition impacts and triggers the social safeguards policy OP/BP 4.12. To mitigate any possible impacts, a Resettlement Policy Framework (RPF) has been prepared to guide resettlement and compensation of project affected persons in a sustainable manner. The resettlement policy framework will apply to components 1 and 2 of the project whether or not they are directly funded in whole or in part by the Bank; and compensation will be a prerequisite for implementation to begin.

The project's geographical coverage includes among others some districts traditionally occupied by indigenous people (IPs): the IK in Kaabong District and the Batwa in some districts in western Uganda. To ensure that social development outcomes of inclusion are achieved, the project triggers safeguards policy OP/BP 4.10. An Indigenous People's Plan (IPP) and an Indigenous People's Policy Framework (IPPF) have been prepared for the IK and Batwa, respectively. Free, prior and informed consultation (FPIC) with indigenous peoples' communities was carried out with the Ik and the Batwa communities. Some of the identified potential positive effects on Indigenous Peoples from project implementation include increased use of available health care services, delivery of culturally appropriate services including nutrition related interventions, and improved access to health services through outreach services. The project will promote socio-cultural interaction, coordination and consultation with traditional leaders prior and during project implementation. For this, it is essential that districts employ staff in the health facilities who speak the local dialects and are compliant with local socio-cultural interaction norms and belief systems of the IPs.

The interventions under the project involve improvement in provision of health services, construction and renovation of health facilities, as well as handling of medical products. These activities will contribute to improved health services and subsequently to increased generation of medical waste in the health facilities. Component 1 and Component 2 involve, *inter-alia*, small scale infrastructure works, renovations/expansion, electric power extension, water supply, fencing, and health care waste management (HCWM). The project expects to construct 40 maternity units at HC-IIIs. The civil works will pose health and safety issues, including construction waste aspects, while the health care waste will pose health risks to the patients, attendants, health workers and the public in the event of poor management practices. The potential environmental impacts can be adequately managed by integrating environmental due diligence into the sub-project cycle. Consequently the project triggers the following Environmental Safeguards Policies: Environmental Assessment OP/BP 4.01, and Physical Cultural Resources (PCRs) OP/BP 4.11 because of the civil works that may encounter unknown physical and cultural resources. Owing to the overall limited likely environmental and social impacts, the project is rated as EA category B.

Because the exact participating facilities and their location are not yet known, and it is not clear whether or not the project could lead to acquisition of additional land and or loss of livelihoods of some individuals or communities, an Environmental and Social Management Framework (ESMF) have been prepared through a consultative process to guide handling of project environmental and social aspects during implementation. The ESMF includes environmental and social management tools such as screening procedures for sub projects, determining extent of required environmental assessment and assessment of environmental and social impacts that may arise from the construction of the new maternity wards, assessment checklists, environmental and social management plans, simplified/practical health facility (HC-III/IV) health care waste management guidelines, chance finds procedure, environmental and social reporting formats, stakeholder and community engagement plan, HIV/AIDS management plans, child protection and gender responsive plan, and grievance redress mechanism to handle complaints raised by project workers and/or project affected persons. This ESMF sets out how the environmental and social impacts will be considered in the sub-project cycle. Given that the project may involve construction and labor concentrations and movement, the ESMF provides guidance that is in line with the National Labor laws and management of workers, including a Code of Conduct. Upon identification of the participating health facilities, site specific environmental assessments and respective Environmental and Social Management Plans (ESMPs) shall be prepared during project implementation.

In addition to the National Health Care Waste Management Plan (2009/2010 – 2011/2012) prepared and disclosed under the previous IDA projects, the MoH has the following documents on health care waste management and infection control: Approaches to Health Care Waste Management (HCWM), Health Workers Guide, Second Edition (2013); Uganda National Infection Prevention and Control Guidelines (December 2013); and the National Policy on Injection Safety and Health Care Waste Management (2014). These documents shall guide management of HCW and shall form part of the project ESMF. The listed guidelines shall be harmonized into one basic practical guide in the Project Implementation Manual used at both HC-IIIs and HC-IVs to manage HCW. HCWM shall be part of the assessment criteria for participating health facilities including development of a site specific HCWM-Plan.

Environmental compliance is the responsibility of the Environmental Health Division (EHD) of the MoH which is charged with coordination of health care waste management activities under the overall policy guidance of the National Environment Management Authority. However, the EHD has not fully participated in the implementation of Uganda Health Systems Strengthening Project (P115563). Their functionality and capacity to handle environmental and social Safeguards requirements was assessed during preparation of the ESMF and appropriate remedial measures were suggested to address the gaps that were found. In order to ensure proper implementation and management of the environmental and social aspects of the project, the MoH will hire an Environmental Health Specialist as part of the project coordination team. The specialist shall closely work and coordinate with the District Environment Officers and Community Development Officers and related partners on a day to day basis. Relevant safeguards training of project staff, participating health facilities & Local Governments shall be undertaken early enough at the start of the project. During project implementation the MoH shall ensure clear coordination between the MoH and relevant national and/or local government agencies.

Climate change and disaster risk screening. The project was screened for short and long-term climate change and disaster risks. The results indicate Uganda may be slightly exposed to climate risks with regards to drought, flooding and precipitation, and landslides; however, the overall risk is low with low potential impact. Therefore, no regular assessments of potential climate change impacts will be carried out during the project period.

3 UGANDA's BIOPHYSICAL AND SOCIO-ECONOMIC ENVIRONMENT

Existing environmental and socio-economic conditions in Uganda are discussed in sections below and will, in many cases, provide a basis for predicting impacts of the project.

3.1 Location

Uganda (located in East Africa) has an area of 241,500 km² and is bordered by Sudan to the North, the Democratic Republic of the Congo to the west, Tanzania and Rwanda to the South and Kenya to the East.

Source: UBOS, 2012

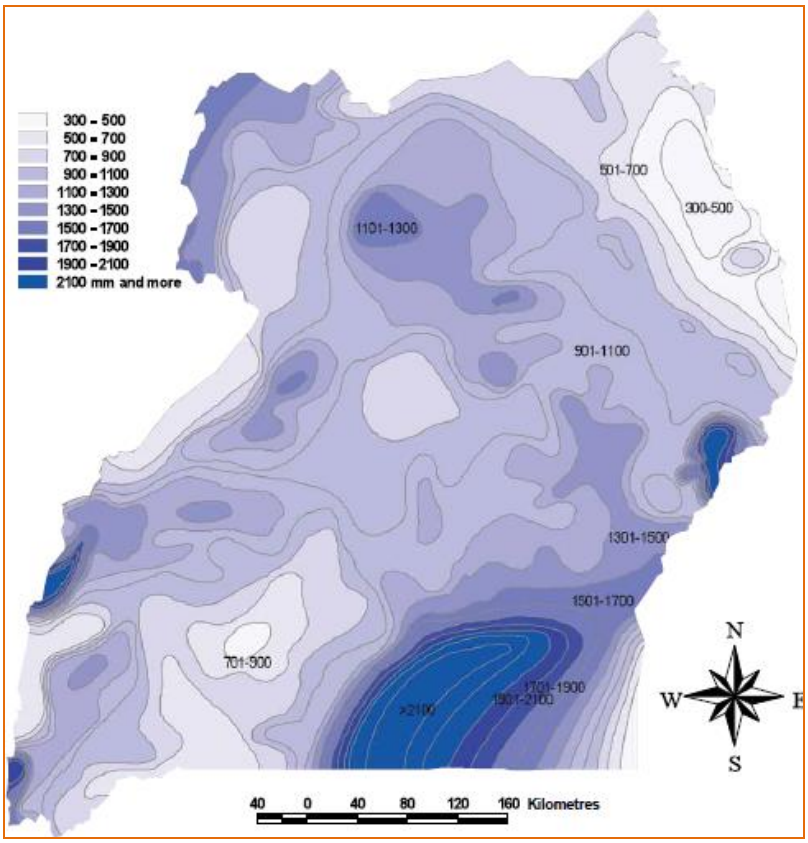
Figure 1: Regions in Uganda

3.2 Climate

Climatic conditions in Uganda are discussed below.

a) Uganda is characterized by equatorial climate with plenty of rain and sunshine moderated by the relatively high altitude. In most parts of the country, the mean annual temperatures range from 16^0C to 30^0C.

Nevertheless, the Northern and Eastern regions sometimes experience relatively high temperatures exceeding 30^{0}C and the South Western region sometimes has temperatures below 16^{0}C. The Central, Western and Eastern regions have two rainy seasons, from March to May for the first rains, and the second rains from September to November. The Northern region receives one rainy season from April to October, and the period from November to March has minimal rain. Most of the country receives between 750 mm and 2100 mm of rain annually.



Source: NEMA (2009)

Figure 2: Uganda rainfall map

b) Uganda's climate is naturally variable and susceptible to flood and drought events which have had negative socio-economic impacts in the past. Human induced climate change is likely to increase average temperatures in Uganda by up to 1.5 ºC in the next 20 years and by up to 4.3 ºC by the 2080s. Such rates of increase are unprecedented. Changes in rainfall patterns and total annual rainfall amounts are also expected but these are less certain than changes in temperature. The climate of Uganda may become wetter on average and the increase in rainfall may be unevenly distributed and occur as more extreme or more frequent periods of intense rainfall. Regardless of changes in rainfall, changes in temperature are likely to have significant implications for water resources, food security, natural resource management, human health, settlements and infrastructure. In Uganda, as for the rest of the world, there are likely to be changes in the frequency or severity of extreme climate events, such as heat waves, droughts and floods.

Relation to the project: *Climatic conditions can influence rain received in a given project area, sunshine hours, flood levels and winds all of which could affect, in various ways, the proposed project such as construction schedules or inability to deliver construction materials and healthcare supplies (during project implementation) when roads are cut off by floods, particularly in Eastern Uganda.*

3.3 People and Cultures

An outline of the people of Uganda is provided below.

3.3.1 The People

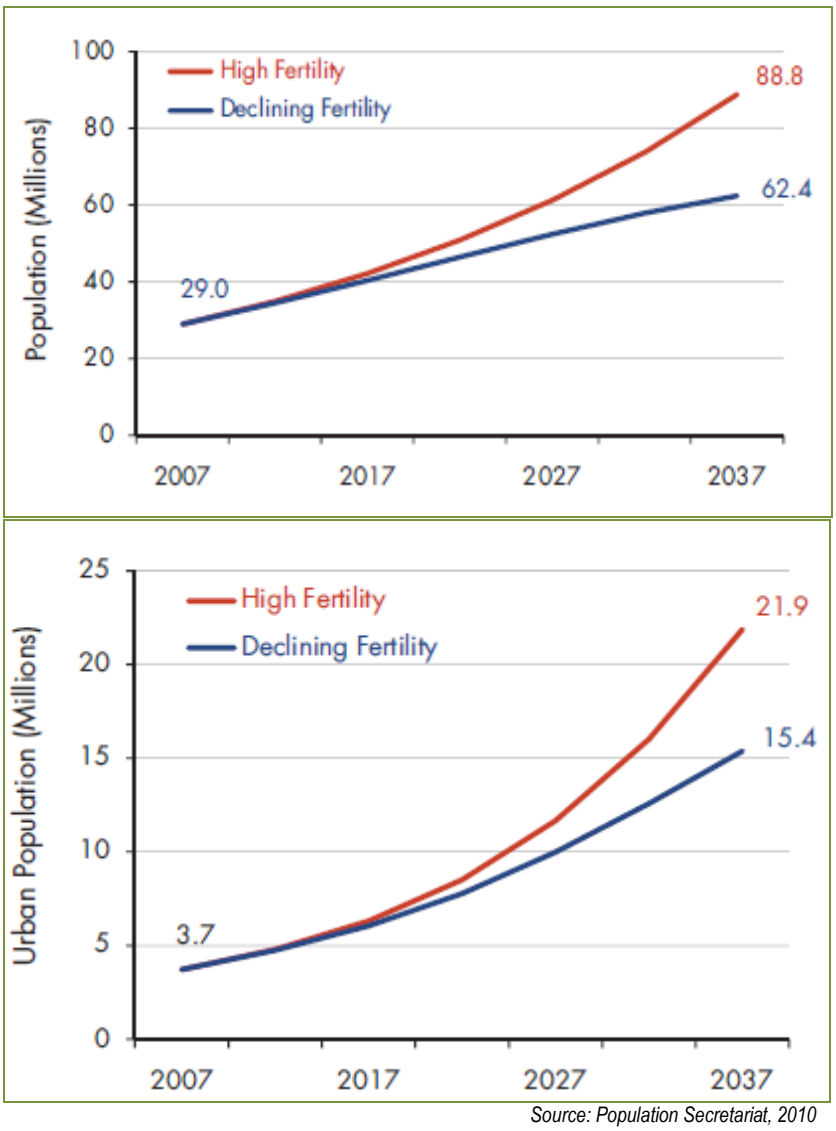
The Uganda constitution 1995 recognizes 46 tribes (GoU 1995) with varying production and consumption patterns. Modes of production and the rural livelihood coping strategies range from mainly cultivators (e.g. Baganda, Bakiga, Bagisu and Basoga) to pastoralists (e.g. the Karamojong and the Bahima) the rest of the people derive their livelihoods from a mix of livestock keeping and cultivation or agro- pastoralism. In addition, Uganda has been and still is, home to several thousand refugees from neighboring countries. There are also other non-citizens residing in Uganda as a preferred place for home or where they are engaged in various economic activities. This mosaic provides Uganda with a rich cultural base and opportunities for modernization. However, there are also challenges the people of Uganda face, among others are: (i) rapid population growth and the ensuing pressures on the country's natural capital; (ii) inadequate provision of, and demand for, social services and infrastructure; and (iii) poor environmental conditions.

Relation to the project: *Health attributions influence health beliefs and health behaviours. Health attributions are partly shaped by culture. In turn, cultural health attributions affect beliefs about disease, treatment, and health practices. Likewise, culture influences health and healing practices. Certain cultures have culture-bound syndromes about which medical practitioners should know. Culturally diverse patient populations and indigenous peoples (such as Ike in Kaabong and Batwa in South-Western Uganda) require that medical practitioners are aware of potentially unique needs, attitudes, cultural practices and behaviour of local communities that will receive healthcare services under this project.*

3.3.2 Population Dynamics

In Uganda, the 20th century marked an unprecedented population growth and economic development as well as environmental change. The Census report of 2002 put the country's population at 24.7 million people in 2003. The current growth rate of 3.4% per year is higher than the 2.9% that was envisaged for the period 1991 – 2002. Currently standing at 34 million, population of Uganda is likely to hit 50 million by 2025. Population is a key determinant of economic and social wellbeing and environmental degradation.

The projected mid-year population size in millions for each year from 2003 to 2017 is given in figure below. The population of Uganda is estimated to increase from 28.6 million in 2007 to 40.6 million in 2017 in the *Low Variant*, while in the *High Variant* it is estimated to increase from 30.2 million in 2007 to 43.4 million in 2017.



Source: Population Secretariat, 2010

Figure 3: Population projections for Uganda (for high and low fertility rates)

Figure 4 below shows population distribution by district in Uganda.

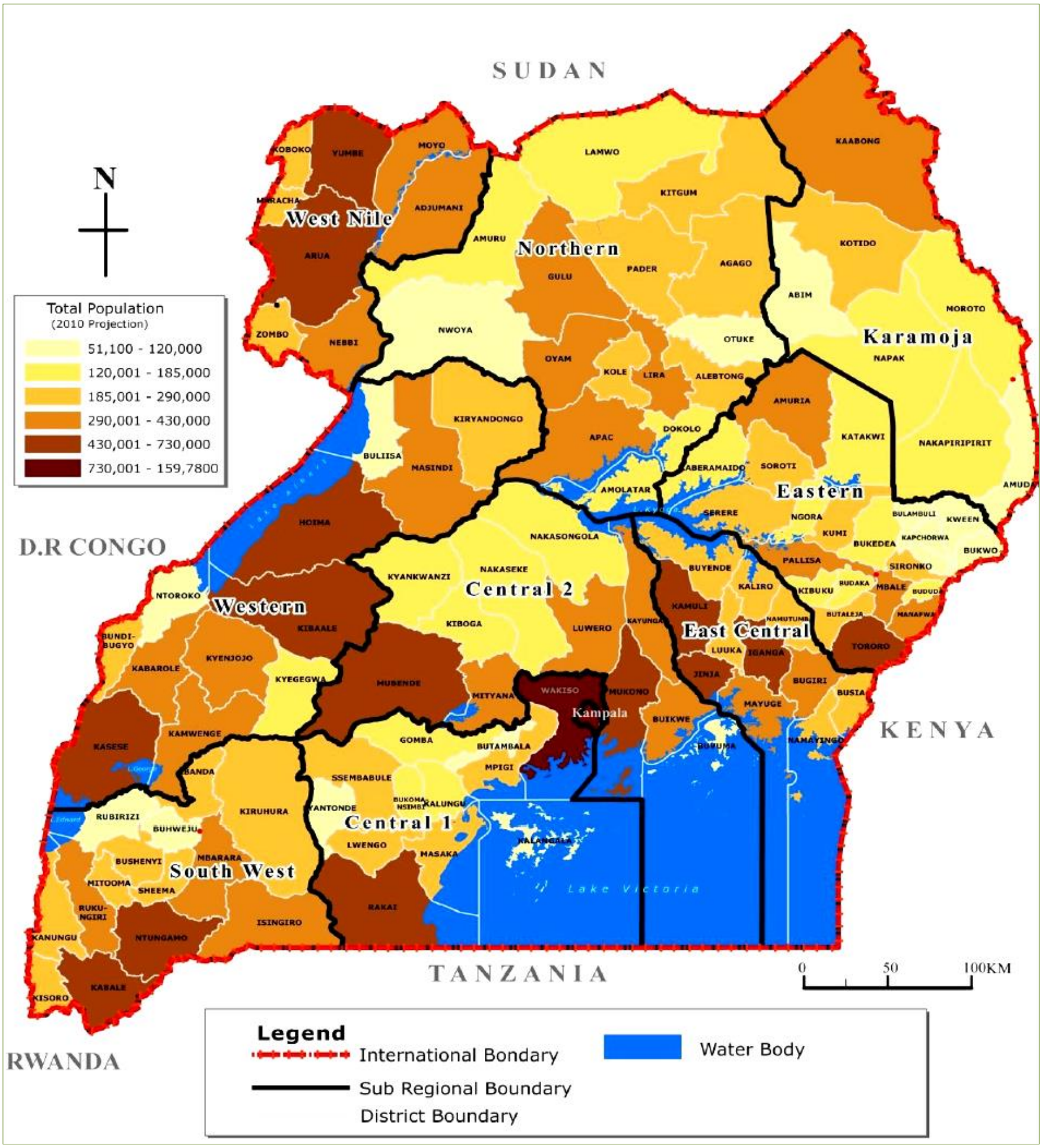


Figure 4: Population distribution in Uganda

Relation to the project: *With its high fertility levels and youthful age structure, Uganda is currently a pre-demographic dividend country. Even if fertility rates were to reach replacement level immediately, Uganda will continue to experience significant population growth, as relatively large population of children enter their reproductive years and bear children. The demographic transition (i.e. transition from high birth and death rates to low birth and death rates) remains sluggish and undermines Uganda's growth prospects as population growth strains the supply and access to social services including healthcare.*

3.4 Natural Resources

3.4.1 Atmospheric Resources

In Ugandan climate change and climate variability impose adverse impacts on livelihoods, especially of the rural poor. The country is a net sink for greenhouse gases but global climate has no physical borders, hence Uganda is also impacted by increase and fluctuation in the earth's temperature. Increased frequencies of floods and droughts are manifestations of climate change. These effects invariably have public health impacts.

3.4.2 Land as a Terrestrial Resources and its relation to the project

Due to a high rate of population growth, land continues to be increasingly scarce in urban and peri-urban areas where, incidentally, many healthcare facilities are located.

Relation to the project: *In many cases this has led to encroachment of land belonging to the healthcare facilities.*

3.4.3 Energy as a Cross-Sectoral Resources

The dominant source of energy in Uganda is biomass and this is expected to remain so in the foreseeable future in spite of government's intensified effort to increase investment in energy generation and distribution.

Relation to the project: *Access to power supply has a direct correlation with capacity of a given healthcare facility to provide specific services reproductive, maternal, neonatal and child health medical services. For example health centers without reliable power supply cannot carryout emergency medical operations including caesarean births.*

3.5 Socio-Economic and Cultural Environment

3.5.1 Human settlements, housing and urbanizations

In general and particularly in rural areas, settlement patterns are wasteful of land and increase the cost of providing services to the areas. The settlements are also largely unplanned; and where plans exist they are often not adhered to. The quality of Ugandans' housing has improved over the years. When compared to the situation in 1991 where over 85% of the households in both urban and rural areas has rammed earthen floors, by 2002 only 29% urban and 77% rural households had them.

Although Uganda is one of the least urbanized countries in the world in absolute terms, the urban population is growing. Beginning from about 635 00 in 1969, the urban population increased to 938 00 in 1980, 1,890,000 in 1991 and 292,200 in 2002. The urban population is also growing faster (3.7%) than the national average (3.4%). The growth in the urban population means that pollution issues such as solid wastes management, and the provision of adequate safe water and acceptable level of sanitation coverage will have to be addressed.

Relation to the project: *Increasingly, unplanned settlements and weak (or lack of) enforcement of physical planning guidelines in many fast growing and sprawling urban and peri urban areas has led to prevalent encroachment of land owned by medical facilities.*

3.5.2 Safe water and sanitation

Access to safe water and sanitation in both urban and rural areas has increased compared to the situation 10 years ago. For example in 1991, only 11 towns had the services of the National Water and Sewage Cooperation (NWSC) but now the corporation covers 19 towns. By 2004, rural access to safe drinking water had increased to 57% while the urban one was at 67%. If current trends continue, and incremental investment funds are procured, Uganda should meet its Millennium Development Goal on water supply. While safe water access per se has improved, functionality of water points is another key issue. Also, the costs of water in urban areas and the distance travelled to and queuing at water points in rural areas easily undermine accessibility. As far as sanitation is concerned, latrines coverage, the board indicator (as a measure) of environmental health had improved from 41.7% in 1999 to in 2002.

Relation to the project: *Availability of adequate water for drinking and sanitation is still a challenge in areas in the country. There is a direct relationship between lack of access to safe drinking water and sanitation facilities and disease burden in communities.*

3.5.3 Environmental pollution

As Uganda's urban areas increases in number and the urban population grows, pollution of air, noise and water are emerging as significant issues in socio-environmental challenges with significant health implications. Standards have been established for noise, air quality and wastewater discharge but enforcement is low.

Relation to the project: *Research done in Uganda showed a direct relationship between air pollution and acute respiratory infections among children (Sansa, 2005).*

3.5.4 Poverty

A May 2013 Poverty Status Report released by Uganda's Ministry of Finance Planning and Economic Development (MFPED) indicates that poverty levels among Ugandans have continued to decline, a trend that gives hope that the country's economy will continue to grow. According to the study report, the country's poverty levels have been on the downward trend since 1992 except in 2002/03 when a survey indicated that poverty levels had gone up. The number of people who are absolutely poor was 9.9 million (56.4%) in 1992/93 and reduced to 7.4 million (33.8%). Uganda has surpassed the Millennium Development Goals (MDGs), target on halving poverty by 2015, and made significant progress in reducing the population that suffers from hunger, promoting gender equality and empowering women. However, according to the World Bank[7] the risks to Uganda's economic prospects are significant and mainly relate to poor performance in the area of domestic revenue mobilization, low levels of productivity of both agricultural and non-agricultural sectors; inappropriate urban development; the slow development of infrastructure; and the limited availability of credit.

Relation to the project: *Declining poverty levels mean that even more people will afford not only afford access to healthcare services but can also educate their children with the resultant effect of reduced household disease burden. Reducing poverty even in rural areas means that people prefer to travel on commuter motorcycles ("boda-boda") instead of walking long distances. This coupled with changing household food consumption trends may lead to increasingly prevalent incidence of lifestyle diseases*.

[7] *http://www.worldbank.org/en/country/uganda/overview (accessed 4 April 2016)*

Plate 1: Passengers on a commuter motorcycle (or "boda-boda")

3.5.5 Health

Key health statistics in Uganda are outlined below[8]:

- In 2011, Uganda Government owned the highest percentage (46%) of hospitals in the country followed by private Not-For-Profit entities at 43% while private For-Profit organizations owned 11%.
- In 2011, polio immunization coverage was 95 % among the children below 5 years of age.
- In 2010/11, there were 34.9 million Out Patients Department (OPD) visits as compared to 36.8 million visits in 2009/10 in government and private Not-For-Profit healthcare facilities.
- Latrine coverage at national level has continued to improve for the last five years, standing at 71 % in 2010/11 from 69 percent in 2009/10.
- Malaria remains the highest cause of both morbidity and mortality among the children below 5 years of age. This is the age at the bottom of the primary school-going children and prevalence is higher in rural areas.

Relation to the project: *High malaria prevalence in the country is a key concern for healthcare providers not only for infants but also pregnant mothers. Therefore project intervention to provide malaria control treatment or mosquito nets are significantly important.*

[8] *UBOS 2012, Statistical Abstract*

4 PREPARATION AND OBJECTIVES OF THE ESMF

4.1 Objective of this ESMF

Key objectives of the ESMF are to:

- Provide a framework for integration of social and environmental aspects at all stages of planning, design, execution and operation of the project.
- Enhance positive social and environmental impacts of the project and avoid/minimize or manage any potential adverse impacts.

Project implementation will follow environmental requirements of Government of Uganda and the World Bank environmental and social safeguards policies. The ESMF provides procedures and methodologies for identifying potential environmental and social impacts during project planning, design and implementation and outlines generic management instruments required to effectively address them. Appropriate institutional arrangements towards implementing the ESMF and capacity building efforts required have been provided in the framework. The ESMF also provides guidance in cases where screening indicates that a separate Environmental Impact Assessment (EIA) is required. The ESMF includes an Environmental Management Plan (EMP) for the project's implementation, which outlines institutional arrangements necessary for implementation of mitigation and monitoring measures, timeline, capacity building and training measures, and cost estimates for these activities under the proposed program. The screening process outlined in this ESMF is consistent with GoU's National Environment Act Cap. Cap.153, EIA Regulations and the Bank's Operational Policy OP 4.01 Environmental Assessment.

4.2 Methodology used to prepare the ESMF

The ESMF was prepared based on the following methodology

a) Document review including the following:

- Uganda Statistical Abstract 2014,
- The National Environment Act 1995,
- Environment Checklist of the Ministry of Local Government,
- World Bank Safeguard Policies,
- Approaches to health care waste management health workers guide 2nd Edition (USAID, 2013)

b) Stakeholder consultations: These are described in Annex 5

5 POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

In this section the policies, legal and institutional frameworks for environmental management in Uganda are discussed.

5.1 Policy Framework

5.1.1 The National Environment Management Policy, 1994

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

Relation to the project: *This policy is the foundation of all laws and regulations associated with environmental management in Uganda*

5.1.2 The National Health Policy, 1999

The overall objective of health sector policy is to reduce mortality, morbidity and fertility, and the disparities therein. Ensuring access to the minimum health care package is a central strategy to this goal.

Relation to the project: *This policy is the foundation of health laws in Uganda*

5.1.3 The National Medical Equipment Policy, 2009

The objective of the policy is to ensure equipment and furniture are managed economically, efficiently, effectively and sustainably through guided;

- acquisition of medical equipment and furniture,
- utilization, regulation and quality assurance of medical equipment and furniture,
- maintenance of medical equipment and furniture,
- monitoring and evaluation of performance of medical equipment and furniture and
- disposal of medical equipment and furniture.

Relation to the project: *This policy guides acquisition, utilization, maintenance monitoring and disposal of medical equipment and furniture*

5.1.4 National Health Care Waste Management Plan (2009/2010–2011/2012)

The National Health Care Waste Management Plan (NHCWMP) was prepared and disclosed under previous IDA projects to guide healthcare facilities and personnel in safe and proper management of healthcare waste.

In addition to NHCWMP, MoH developed the following documents to guide proper healthcare waste management and infection control:

i) Approaches to Health Care Waste Management (HCWM), Health Workers Guide, Second Edition (2013);
ii) Uganda National Infection Prevention and Control Guidelines (December 2013);
iii) National Policy on Injection Safety and Health Care Waste Management (2014).

Relation to the project: *The NHCWMP and other guidebooks listed above were prepared to enhance capacity of healthcare facilities and personnel in safe and proper management of healthcare waste.*

5.2 Legal Framework

5.2.1 Constitution of the Republic of Uganda, 1995

The 1995 Uganda Constitution provides that every person has a right to own property [Section 26.1] and that no person shall be deprived of property or any interest in or right over property without payment of fair and adequate compensation. The same constitution gives government powers to acquire land (compulsory acquisition) in public interest [Article 273(a)]. The Constitution [Chapter 3, Article 17J] entrusts Government with the duty of ensuring that Ugandans enjoy a healthy environment.

Relation to the project: *The Constitution is the cardinal law onto which the National Environment Act Cap 153 is based.*

5.2.2 National Environment Act, Cap 153

The National Environment Act (Chapter 153 of Laws of Uganda) establishes and defines functions of NEMA as a body responsible for management, monitoring and supervision of all environmental conservation activities (Section 4). This act provides for various strategies and tools for environment management, which also includes the EIA (Section 19) for projects likely to have significant environmental impacts. The Act also mandates NEMA with a leading role to review environmental impact statements. NEMA sets multimedia environmental standards (Sections 24-32) to prevent contamination of air, water and soil resources. The Act also mandates NEMA with responsibility for *in-situ* and *ex-situ* conservation of biological fauna and flora resources either on land or in water (Sections 42 and 43). Section 48 empowers NEMA, district environment committees and local environment committees to be responsible for monitoring of local land-use plans, which should be in conformity with national land-use plan.

Third Schedule of National Environment Act (Cap 153) does not specifically list healthcare facilities under scheduled projects, nonetheless, two sections thereof related to function or waste management mean that these facilities are not exonerated from the general EIA process. Section 1 General (a) an activity out of character with its surroundings; Section 12 on the Schedule requires that projects related to:

a) sites solid waste disposal
b) sites for hazardous waste disposal
c) sewage disposal
d) atmospheric emissions
e) offensive odors

should undertake EIA.

Relation to the project: *This Act formed the basis for enactment of the Environmental Impact Assessment Guidelines, 1997 and Environmental Impact Assessment Regulations, 1998 which together prescribe the EIA process in Uganda.*

5.2.3 Land Act, Cap 227

The Land Act provides for tenure, ownership and management of land. Land is to be used in compliance with relevant national laws such as listed in Section 43 including the Water Act and National Environment Act. Section 44 reiterates the constitutional mandate for government or a local government to protect environmentally-sensitive areas for the common good of the people in Uganda. The Act describes land ownership types of tenure and echoes requirement of the Constitution to equitably compensate persons losing land to a given development.

Relation to the project: *This Act guides about landownership under various tenure systems, namely: mailo, lease, customary and freehold. It also the legal instrument that governs any land acquisition process, compensation and conflict redress between a rightful owner and encroachers.*

5.2.4 Local Governments Act, Cap 243

This Act provides for decentralized governance and devolution of central government functions, powers and services to local governments that have own political and administrative set-ups. According to Section 9 of the Act, a local government is the highest political and administrative authority in its area of jurisdiction and shall exercise both legislative and executive powers in accordance with the Constitution.

Relation to the project: *This Act means that local governments have administrative authority over projects implemented in areas of their jurisdiction.*

5.2.5 Public Health Act, Cap 281

Section 105 of the Public Health Act, 1964 requires local authorities to take measures to prevent pollution of public water resources. This Act aims at avoiding pollution of environmental resources that support health and livelihoods of communities.

Relation to the project: *In respect to this project this Act best relates to management of construction waste and healthcare waste in the post-construction phase.*

5.2.6 National Environment (Standards for Discharge of Effluent into Water or on Land) Regulations, 1999

Section 6 (2) details maximum permissible limits for 54 regulated contaminants which must not be exceeded before effluent is discharged into water or on land. For this project, this standard is applicable to sewage disposal from healthcare facilities.

Relation to the project: *In respect to this project this Act best relates to management of construction waste and healthcare waste in the post-construction phase.*

5.2.7 National Environment (Waste Management) Regulations, 1999

These regulations require waste disposal in a way that would not contaminate water, soil, and air or impact public health. According to the regulations, waste haulage and disposal should be done by licensed entities.

Relation to the project: *Same as for Section 5.2.6*

5.2.10 Employment Act, 2006

Employment Act, 2006 repeals Employment Act (Cap 219) enacted in 2000. This Act is the principal legislation that seeks to harmonize relationships between employees and employers, protect workers interests and welfare and safeguard their occupational health and safety through:

i) Prohibiting forced labor, discrimination and sexual harassment at workplaces (Part II; Part IV).
ii) Providing for labor inspection by the relevant ministry (Part III).
iii) Stipulating rights and duties in employment (weekly rest, working hours, annual leave, maternity and paternity leaves, sick pay, etc. (Part VI).
iv) Continuity of employment (continuous service, seasonal employment, etc. (Part VIII).

Relation to the project: *In the construction phase this Act guides the relationship between contractors and construction workers while in the operation phase it manages the legal relationship between medical facilities and healthcare workers.*

5.2.12 Occupational Safety and Health Act (2006)

The Act replaces the Factories Act (1964). It departs from the original listing of "don'ts" and adopts a scientific approach in which technical measures required for protection of workers are prescribed, hence taking on a "preventive approach". The Act provides for prevention and protection of persons at all workplaces from injuries, diseases, death and damage to property. It covers not just the "factory" (as did the Factories Act) but also any workplace where persons are employed and its provisions extend not just to employees but to any other persons that may be legitimately present in a workplace and are at risk of injury or disease. Employers must protect workers from adverse weather and provide clean and healthy work environment, sanitary conveniences, sanitary and protective gear.

Relation to the project: *For this project this Act is applicable in relation to protection of health workers (and medical waste collectors) against secondary injuries during execution of their work.*

5.3 Institutional Framework

5.3.1 National Environment Management Authority (NEMA)

The National Environment Act, Cap 153 establishes NEMA as the principal agency responsible for coordination, monitoring and supervision of environmental conservation activities. NEMA is under the Ministry of Water and Environment (MoWE) but has a cross-sectoral and regulatory mandate for overall environmental management in the country including overseeing the conduct of EIAs through issuance of guidelines, regulations and registration of practitioners. It reviews and approves environmental assessments in consultation with any relevant lead agencies. It undertakes follow up monitoring to ensure implementation of mitigation measures for projects.

NEMA works with District Environment Officers and local environment committees at local government levels who also undertake inspection, monitoring and enforce compliance on its behalf. In Government ministries, NEMA works with *Environmental Liaison Units* to ensure incorporation of environmental issues in their activities, policies and programs.

Relation to the project: *NEMA is the national agency responsible for setting environmental laws, regulations, managing and monitoring environmental performance in Uganda.*

5.3.2 Ministry of Health (MoH)

This project will be executed by MoH which is to undertake policy formulation, quality assurance, coordination, monitoring and evaluation of health service delivery in Uganda.

Relation to the project: *Ministry of Health as a project developer responsible for its implementation.*

5.3.3 Ministry of Gender, Labor & Social Development

This ministry sets policy direction and monitoring functions related to labor, gender and general social development. The OHS unit in the ministry is responsible for inspection and mentoring of occupational safety in workplaces and this could be during project construction and operation of the healthcare facilities.

Relation to the project: *The OHS in Ministry of Gender, Labor and Social Development is mandated to supervise all workplaces for safety of workers both during construction and operation.*

5.3.4 District Local Administration Structures

The proposed project is within a number of jurisdictions of a number of Districts headed by a Local Council 5 (LC5) Chairman and Chief Administration Officer (CAO) who are the political head and technical head respectively. Various district offices whose functions would be relevant to the project include offices of Natural Resources/Environment, District Health Officer, District health inspector/educator, District Planner, Community Development Officer, , Wetlands Officer, Land Office, District Water Officer, Town Council and District Engineer. Equally important are village-level local council administration (LC I and LC III). Leaders at these levels of local administration are closer to residents and therefore important in effective community mobilization, sensitization and dispute resolution. The District and Local/Health Unit Health Teams will also be involved in project implementation.

Relation to the project: *Local governments have administrative authority over projects implemented in respective areas of their jurisdiction and are expected to participate in supervision and monitoring project implementation and operation.*

6 OVERVIEW OF THE WORLD BANK'S SAFEGUARD POLICIES

6.1 Operational Policies

The World Bank's ten safeguard policies are designed to help ensure that programs proposed for Bank financing are environmentally and socially sustainable, and thus improve decision-making. These operational policies are outlined below and ones to be triggered by the project indicated:

Table 1: World Bank policies showing those to be triggered

Safeguard Policies	Triggered?		Reason
	Yes	No	
OP 4.01 Environmental Assessment	x		The interventions under the project involve improvement in provision of health services and construction works. Civil works will pose health and safety risks besides generating construction waste. Therefore OP/BP 4.01 is triggered. Since the participating health facilities are not yet determined or known, Environmental and Social Management Framework has been prepared to guide management of environmental and social aspects. Once the specific sites and respective activities have been identified, ESIA shall be undertaken and ESMPs developed before start of any works.
OP 4.04 Natural Habitats		x	The project will have no adverse impact on natural habitats.
OP 4.09 Pest Management		x	The project will not entail use of pesticides.
OP 4.11 Physical Cultural Resources	x		This is triggered because project investments involve civil works and may affect physical cultural resources. At this stage, the project ESMF will includes provisions for chance finds management. The respective ESIAs to be undertaken (compilation of Project Briefs & ESMPs) will include PCRs investigation, assessment and management measures.
OP 4.12 Involuntary Resettlement,	x		A resettlement policy framework (RPF) has been prepared separately for this project. The RPF will guide landownership relationships between the healthcare facilities any person who lays claim to their land. The project interventions under Component 2 will be undertaken in existing health facilities and therefore there is likely no land-take/acquisition or loss of livelihoods. However, since the specific facilities (hospitals and HCIVs) and scope of activities are not known at this point, additional land may be required in cases where expansion of the health facility may be required. RPF has been prepared in a consultative manner and disclosed both in-country by the client and at Infoshop by IDA before project appraisal.
OP 4.10 Indigenous People	x		This policy will be triggered because some project

			healthcare facilities will be in indigenous people areas: such as *Ik* people in Kaabong District, and *Batwa* in Districts of Kisoro, Bundibugyo, Kasese and Kanungu. Therefore, an *Indigenous Peoples Planning Framework (IPPF)* has been prepared for Batwa while an *Indigenous Peoples Action Plan (IPAP)* will be written for Ik people.
OP 4.36 Forests		x	The project is not expected to affect the management of forests and neither will it support forest nor logging operations.
OP 4.37 Safety of Dams		x	The project will not support or depend on dams.
OP 7.50 Projects on International Waterways		x	This does not apply to the project.
OP 7.60 Projects in Disputed Areas.		x	The project will not be implemented in disputed areas.

6.2 World Bank Group Guidelines

The World Bank has several guidelines below, many of which are applicable to various components of the proposed project namely:

i) Air emissions from onsite waste combustion units ("incinerators")
ii) Hazardous waste management
iii) Noise
iv) Occupational health and safety (against biological and radiological hazards).
v) Community health and safety including traffic safety such as during project construction or disease prevention (where incinerators emission waft into and affect not only local communities but also patients visiting healthcare facilities).
vi) Construction and decommissioning.

While most of above WBG guidelines apply to the proposed project in one way or the other, in sections below are discussed five environmental, health and safety (EHS) guidelines, namely:

i) EHS Guidelines - AIR EMISSIONS AND AMBIENT AIR QUALITY
ii) EHS Guidelines - WASTE MANAGEMENT
iii) EHS Guidelines - HEALTH CARE FACILITIES
iv) EHS Guidelines - HAZARDOUS MATERIALS MANAGEMENT
v) EHS Guidelines - CONSTRUCTION AND DECOMMISSIONING

6.2.1 WBG EHS Guidelines: "Air emissions and ambient air quality"

a) General approach

These guidelines require projects with "significant"[9] sources of air emissions, and potential for significant impacts to ambient air quality to prevent or minimize impacts by ensuring that emissions do not result in pollutant concentrations that reach or exceed relevant ambient quality guidelines and standards by applying national legislated standards (or in their absence, the current WHO Air Quality Guidelines, or other internationally recognized sources). Uganda

[9] ***Significant*** *sources of point and fugitive emissions in these (WBG) guidelines are considered to be general sources which can contribute a net emissions increase of one or more of the following pollutants within a given airshed: PM10: 50 tons per year (tpy); NOx: 500 tpy; SO2: 500 tpy; or as established through national legislation; and combustion sources with an equivalent heat input of 50 MWth or greater. The significance of emissions of inorganic and organic pollutants should be established on a project-specific basis taking into account toxic and other properties of the pollutant.*

currently has (draft) national air quality standards applicable to this project, specifically incinerator emissions. The standards however make no mention of dioxins which are potent cancer-inducing, expected in incineration emissions.

In these guidelines "significant" refers to sources which can contribute a net emissions increase of one or more of the following pollutants within a given airshed:

- Particulate matter of size 10 microns (PM_{10}): 50 tons per year (tpy);
- Oxides of nitrogen (NOx): 500 tpy;
- Sulphur dioxide (SO_2): 500 tpy; or as established through national legislation;
- Equivalent heat input of 50 MWth or greater.

Going by this classification, all onsite incineration units at existing healthcare facilities are "*non-significant*" sources since no unit at any of the project facilities had capacity to generate the foregoing levels of air pollutants. Two national documents[10] on healthcare waste indicate that healthcare facilities, depending on their service level, generate the following average quantities of medical waste:

- Hospital: 0.1 kg/bed/day (excluding pathological waste)
- Health center 4 (HC IV): 1.5 kg/day
- Health center 3 (HC III): 0.6 kg/day
- Health center 2 (HC II): 0.5 kg/day

The fact that onsite incineration units burn small waste volumes and generate low levels of emissions could be the reason such "*non-significant*" units are not provided with (and probably do not require) emissions control.

Incineration emissions from healthcare facilities may contain particulate matter, heavy metals, dioxins, furans, sulfurdioxide and hydrochloric acid. Of key concern are dioxins which are cancer-inducing compounds[11]. The temperatures needed to breakdown dioxin are typically not reached when burning waste in open air (200-400°C) causing high dioxin emissions. Dioxin can only be destroyed above 850°C, otherwise it remains in atmosphere emissions or in incineration ash where it can leach into groundwater when rain falls on ash piles.

b) Implication for this project

The guidelines discourage open-burning of solid wastes, whether hazardous or non-hazardous, is not considered good practice and should be avoided, as the generation of polluting emissions from this type of source cannot be controlled. While small onsite incineration units handling minimal healthcare waste volumes might not require emission control according to these Guidelines, the management including disposal of healthcare waste has become an issue of growing concern in many places in Uganda. Infectious medical waste has been dumped indiscriminately, burned uncontrollably and buried irresponsibly posing considerable public health risk.

Component 2 under *"Improved quality of care and supervision"* will develop various service standards/protocols on health care waste (HCWM) alongside others such as for ones for maternal and perinatal death audits. It is hoped that these standards will sustain improvement in healthcare waste management.

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[10] "National Healthcare Waste management Plan (2007/8-2009-2010)" and "Improvement of Healthcare Waste Management in Uganda (July 2005, Updated Mar 2009) by Carl Bro.

[11] Note that WBG EHS Guidelines: "Healthcare facilities" give air emission levels for hospital waste incineration facilities.

6.2.2 WBG EHS Guidelines: "Waste management"

a) General approach

Regarding the proposed project, this section considers only construction waste originating from repairs, renovations and building of healthcare facilities. The guidelines advocate for waste management planning where waste should be characterized according to composition, source, types, and generation rates.

These guidelines call for implementation of a waste management hierarchy that comprises prevention, recycling/reuse; treatment and disposal. The guidelines require segregation of *conventional* waste from *hazardous waste* streams. Examples of hazardous construction waste are waste oil from vehicles and machinery paint waste, thinners and concrete wash water (e.g. from cleaning concrete mixers).

c) Implication for this project

Improper management of construction waste would pose environmental and public health impacts. Contractors will have a contractual obligation to ensure proper construction waste management. To this end, guidelines provided in Annex 4 (Clauses for Construction Work Contracts on Environmental Compliance) and Annex 10 (Code of Practice for Construction Workers) should be utilized as vital guiding documents.

6.2.3 WBG EHS Guidelines: "Healthcare facilities"

a) Applicability

The EHS Guidelines for healthcare facilities include information relevant to management of EHS issues associated with healthcare facilities (HCF) which includes a diverse range of facilities and activities involving general hospitals and small inpatient primary care hospitals, as well as outpatient facilities. Ancillary facilities may include medical laboratories and mortuary centers.

These guidelines are applicable for planning new HCFs or renovation of existing facilities.

b) Healthcare facility design considerations[12]

These guidelines advise that design and functional layout of HCFs should ensure the following:

- Separation of clean / sterilized and dirty / contaminated materials and people flows;
- Development and inclusion of adequate disinfection / sterilization procedures and facilities;
- Adequate space for the storage of recyclable materials (e.g. cardboard and plastic) for pickup;
- Ventilation systems that provide isolation and protection from airborne infections;
- Design of water systems to provide adequate supplies of potable water to reduce risks of exposure waterborne pathogens;
- Provision of hazardous material and waste storage and handling areas;
- Selection of easily cleaned building materials that do not support microbiological growth, are slip-resistant, non-toxic, and non-allergenic, and do not include volatile organic compound (VOC)-emitting paints and sealants.

[12] Internationally recognized guidelines for design and construction of hospitals and HCFs include *American Institute of Architects (AIA)* and the *Facility Guidelines Institute (FGI)*, the *American Society for Healthcare Engineering (ASHE)* of the *American Hospital Association (AHA)*, and the *Green Guide for Healthcare*.

c) Waste management

Waste from health care facilities (HCF) can be divided into two groups:

- General waste similar in composition to domestic waste, generated during administrative, housekeeping, and maintenance functions.
- Specific categories of hazardous healthcare waste.

Health care facilities should establish, operate and maintain a health care waste management system (HWMS) adequate for the scale and type of activities and identified hazards but entailing:

i) Waste minimization, reuse, and recycling
ii) Waste segregation at the point of generation,
iii) On-site handling, collection, transport and storage based on safe practices below

- Seal and replace waste bags and containers when they are approximately three quarters full. Full bags and containers should be replaced immediately.
- Identify and label waste bags and containers properly prior to removal.
- Transport waste to storage areas on designated trolleys / carts, which should be cleaned and disinfected regularly.
- Waste storage areas should be located within the facility and sized to the quantities of waste generated.
- Unless refrigerated storage is possible, storage times between generation and treatment of waste should not exceed (in Warm climate) 48 hours during cool season, 24 hours during hot season.
- Store radioactive waste in containers to limit dispersion, and secure behind lead shields.
- Packaging containers for sharps should be puncture-proof.

These guidelines recognize incineration as a key source of air emission at healthcare facilities and pollutants emitted from incineration include:

i) Heavy metals
ii) Organics in flue gas
iii) Various organic compounds (dioxins and furans)
iv) Hydrogen chloride (HCl) and fluorides and potentially other halogens-hydrides (e.g. bromine and iodine)
v) Typical combustion products such as sulfur oxides (SOx), nitrogen oxides (NOx), volatile organic compounds, monoxide (CO), carbon dioxide (CO_2), and nitrous oxide (N_2O).
vi) Incineration residues such as fly ash and bottom ash may contain high concentrations of persistent organic pollutants (POPs).

For being ineffective in regard to emissions control, these WBG Guidelines caution against use of single-chamber and brick incinerators should be used only as a last resort option. The Guidelines advise against mixing domestic and hazardous waste. Waste should be segregated at point of generation and non-hazardous waste, such as paper and cardboard, glass, aluminum and plastic, should be collected separately for possible recycling. Food waste should be segregated and composted. Infectious and / or hazardous wastes should be identified and segregated according to its category using a color-coded system. If different types of waste are mixed accidentally, waste should be treated as hazardous.

d) Occupational health and safety

HCF health and safety hazards may affect healthcare providers, cleaning and maintenance personnel, and workers involved in waste management handling, treatment and disposal. Typical hazards which should be prevented with proper safety gear and practices include:

- Exposure to infections and diseases (blood-borne pathogens, and other potential infectious materials (OPIM)[13]
- Exposure to hazardous materials / waste
- Fire safety
- Exposure to radiation

Occupational radiation exposure may result from equipment emitting X-rays and gamma rays (e.g. CT scanners), radiotherapy machines, and equipment for nuclear medicine activities. HCF operators should develop a comprehensive plan to control radiation exposure in consultation with the affected workforce. This plan should be refined and revised as soon as practicable on the basis of assessments of actual radiation exposure conditions, and radiation control measures should be designed and implemented accordingly.

e) Air emission levels for hospital waste incineration facilities

WBG Guidelines advise the following emission levels of healthcare waste incinerators.

Table 2: Air emission levels for hospital waste incineration facilities (WBG Guidelines)

Pollutant	Unit	Guideline value
Total Particulate matter (PM)	mg/Nm^3	10
Hydrogen Chloride (HCl)	mg/Nm^3	10
Total organic carbon (TOC)	mg/Nm^3	10
Hydrogen Fluoride (HF)	mg/Nm^3	1
Sulfur dioxide (SO2)	mg/Nm^3	50
Carbon Monoxide (CO)	mg/Nm^3	50
NOX	mg/Nm^3	200-400[a]
Mercury (Hg)	mg/Nm^3	0.05
Sb, As, Pb, Cr, Co, Cu, Mn, Ni, and V	mg/Nm^3	0.05
Polychlorinated dibenzodioxin and dibenzofuran (PCDD/F)	ng/Nm^3TEQ	0.1

Notes:
a. 200 mg/m^3 for new plants or for existing incinerators with a nominal capacity exceeding 6 tonnes per hour; 400 mg/m^3 for existing incinerators with a nominal capacity of 6 tonnes per hour or less.
b. Oxygen level for incinerators is 7 percent.

The implications for the project:

During project implementation, healthcare facilities will apply the National Health Care Waste Management procedures which inherently have provisions designed to satisfy WB EHS Guidelines discussed in this section.

[13] *According to US Occupational Safety and Health Administration (OSHA), blood-borne pathogens are pathogenic microorganisms that are present in human blood and can cause disease in humans, including human immunodeficiency virus (HIV), hepatitis B virus (HIB), and hepatitis C virus (HCV). Other potentially infectious materials (OPIM) refers to (1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids; (2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and (3) HIV-containing cell or tissue cultures, organ cultures, and HIV- or hepatitis B virus (HBV) -containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.*

6.2.4 WBG EHS Guidelines: "Hazardous materials management"

a) Application and approach

These guidelines apply to projects that use, store, or handle any quantity of hazardous materials (Hazmats), defined as materials that represent a risk to human health, property, or the environment due to their physical or chemical characteristics. Hazmats can be classified according to the hazard as explosives; compressed gases, including toxic or flammable gases; flammable liquids; flammable solids; oxidizing substances; toxic materials; radioactive material; and corrosive substances.

b) General hazardous materials management

Facilities which manufacture, handle, use, or store hazardous materials should establish management programs that are commensurate with the potential risks present. The main objectives of projects involving hazardous materials should be the protection of the workforce and the prevention and control of releases and accidents. These objectives should be addressed by integrating prevention and control measures, management actions, and procedures into day-to-day business activities.

6.2.5 WBG EHS Guidelines: "Construction and decommissioning"

These provide guidance, specific guidance on prevention and control of community health and safety impacts that may occur during new project development or due to expansion or modification of existing facilities. By thematic categories, they address three major aspects (environment, OHS and community health and safety) below.

i) *Environment:*

- Noise and Vibration: During construction and decommissioning activities, noise and vibration may be caused by the operation of pile drivers, earth moving and excavation equipment, concrete mixers, cranes and the transportation of equipment, materials and people.
- Air Quality: Project will involve demolition of walls inside existing healthcare facilities and this could generate fugitive dust affecting adjoining rooms or service areas. A secondary source of emissions may include exhaust from diesel engines of earth moving equipment, as well as from open burning of construction and demolition waste on-site.
- Solid Waste: During project implementation, non-hazardous solid waste generated at construction sites would include, scrap wood, glass cullet and metal and demolition rubble.
- Hazardous Materials: Asbestos might be encountered where entire buildings will be demolished and rebuilt. In case of this encounter, NEMA shall provide written guidance (work procedure) on handling and disposal of asbestos materials.

ii) *Occupational Health and Safety*

Likely OHS risks during proposed renovation of HCFs include over-exertion, slips and falls, work at heights, hotworks (welding), electrocution, being struck by objects, injury by moving machinery and dust from demolition activities.

iii) *Community Health and Safety:*

The guidelines recommend implementation of risk management strategies to protect general community from physical, chemical, or other hazards associated with sites under construction and decommissioning. Key areas to consider are:

- *General site hazards*: where renovation activities can injure people in or near buildings under renovation or construction.
- *Disease Prevention*: ensuring that risk of disease from construction-related activities (e.g. from water ponding).
- *Traffic Safety:* Construction activities may result in a significant increase in movement of heavy vehicles for the transport of construction materials and equipment increasing the risk of traffic-related accidents and injuries to workers and local communities.

7 GENERIC PROJECT ENVIRONMENTAL AND SOCIAL IMPACTS

7.1 Introduction

The interventions under the project involve improvement in provision of health services, handling of medical products. Generally, these activities may result in positive and negative potential impacts as discussed in this chapter. Potential environmental and social impacts can be adequately managed by integrating environmental and social due diligence into the sub-project cycle. Since the exact participating facilities and their location are not yet known, and it is not clear whether or not the project could lead to acquisition of additional land and or loss of livelihoods of some individuals or communities, Environmental and Social Management Framework (ESMF) and a Resettlement Policy Framework (RPF) have been prepared to guide handling of project environmental and social aspects during implementation. An indigenous peoples policy framework (IPPF) has also been prepared for this project.

In addition to the National Health Care Waste Management Plan (2009/2010 – 2011/2012) prepared and disclosed under a previous IDA project, the MoH has the following documents on health care waste management and infection control: Approaches to Health Care Waste Management, Health Workers Guide, Second Edition (2013); Uganda National Infection Prevention and Control Guidelines (Dec 2013); and the National Policy on Injection Safety and Health Care Waste Management (2014). These documents shall guide management of HCW under the project.

Environmental compliance is the responsibility of the Environmental Health Division (EHD) of the MoH which is charged with coordination of health care waste management activities under the overall policy guidance of the National Environment Management Authority (NEMA). Functionality and capacity of EHD to handle environmental and social Safeguards requirements has been assessed during preparation of the ESMF and measures suggested to address gaps identified. The key action includes MoH to hire Environmental Specialist and undertake safeguards training for key project personnel at the start of project implementation.

Possible impacts of the project are discussed in sections below.

7.2 Generic Construction-Phase Impacts

Potential construction phase impacts are discussed in sections below.

7.2.1 Positive social impacts

7.2.1.1 Income to material/ equipment suppliers and contractors

Proposed renovation of and small scale construction/civil works at health centers will necessitate procurement of equipment, construction materials and service, providing income to suppliers and contractors. This is a positive but short-term and reversible impact. Considering that construction labor would be local or national but medical equipment procured internationally, this impact has local, national and international spatial extent.

This impact could be enhanced by measures proposed below.

Enhancement measure

Earth materials needed for construction e.g. murram, aggregate (stone, sand) are obtained from legitimate/ licensed quarry operations. Conscious or unwitting purchase of these materials from unlicensed operations indirectly supports, encourages and promotes environmental degradation at illegal quarry sites and can cause medium- to long-term negative impacts, that also pose reputational risks to both GoU and IDA. It should therefore be a contractual obligation for contractors to procure construction materials from legitimate or licensed sources (as advised by local authorities).

7.2.2 Negative social impacts

7.2.2.1 Occupational health safety (OHS) Risks for Contractors

Impact identification

At all sites, renovation works may have the following occupational health and safety risks with potential to cause serious injuries to workers:

- Exposure to asbestos containing materials.
- Burns from welding (hot works)
- Falls from working at heights or wet surfaces
- Electrocution
- Noise and body vibration during demolition
- Injury from falling or flying debris when demolishing walls
- Transient pools of water that may become breeding ground for mosquitoes

Impact evaluation

OHS impacts could potentially occur at every facility under renovation and while some accidents could be minor and not life threatening, others can be grave leading to permanent disability or loss of life of construction workers.

Ugandan and WBG Guidelines require that workers exposed to health and safety risks are given proper personal protection Equipment (PPE). Related OHS safeguards are comprised in (Uganda's) Occupational Safety & Health Act (2006) and Employment Act, 2006.

Impact severity

Duration of the impact will be short-term occurring only during the construction phase. Extent of the impact will be local or national depending on origin of construction workers. The likelihood of the impact occurring is *medium* considering the usually low level of safety at construction sites in Uganda. Significance of this impact is therefore predicted to be *high*.

Impact significance

Significance color code	Significance Rating	Significance level of this impact
	Very high	
	High	√
	Medium - high	
	Low- Medium	
	Low	
	Very- Low	

Impact mitigation

- Contractors should provide all workers with requisite protective gear (as a minimum as set out in Table 3).
- Contractor should provide onsite toilet and washing water for workers.
- The water storage tank should be covered and properly managed to minimise mosquitoes breeding.

Table 3: Personal protective equipment according to hazard

Objective	Workplace hazards	PPE

Objective	Workplace hazards	PPE
Eye and face protection	Flying particles	Safety glasses
Head protection	Falling objects, inadequate height clearance, and overhead power cords	Plastic hard hats with top and side impact protection
Hearing protection	Noise	Ear plugs or muffs
Foot protection	Falling or rolling objects, pointed objects	Safety shoes and boots
Hand protection	Hazardous materials, cuts or lacerations	Gloves made of rubber or synthetic materials
Respiratory protection	Dust	Facemasks filters for dust removal
Body/leg protection	Hazardous materials, biological agents, cuttings and lacerations.	Overalls
Protection against falls	Working on slippery, wet floors	Rubber boots
	Fatal falls from working at heights	Safety latches (fall arrestors)

Impact management: Project supervising engineers (of MoH) should inspect contractors' compliance with safety precautions during construction.

7.2.2.2 Injury to patients or healthcare staff by construction activities

Impact identification

Renovation works would not close off visits to healthcare facilities by patients neither would inpatients be required to vacate facilities being worked on. For facilities where renovation entails modification of internal built environment, it is planned to temporarily relocate patients and medical services to adjoining rooms to allow demolition and reconstruction. Construction work undertaken in the same buildings having patients has potential to cause injuries to patients or health workers.

Impact evaluation

Impact on patients and health workers could be due to falling debris or tripping on strewn demolition rubble. These effects might either be minor or fatal if for example fatal falls were suffered by geriatric people or pregnant women.

Construction noise and vibration from manual or motorized demolition activities could affect patients and health workers especially those with heart disorders.

Impact severity

This impact will likely occur at every facility under renovation. Duration of the impact will be short-term occurring only during the construction phase. Extent of this impact will be local limited to buildings renovated (when at the same time occupied by patients or health workers). However secondary effects of this impact could be of wider spatial extent affecting family and dependants of injured persons. Some injuries or loss of life are irreversible. The likelihood of the impact occurring is *medium* (or high) considering the usually low level of safety at most construction sites in Uganda. Significance of this impact is therefore predicted to be *high*.

Impact significance

Significance color code	Significance Rating	Significance level of this impact
	Very high	
	High	√

	Medium - high	
	Low- Medium	
	Low	
	Very- Low	

Impact mitigation

- Contractors should cordon off areas under construction and regulate access to active sites by non-construction personnel at all times.
- Ensure good housekeeping and clean operations always immediately removing rubble strewn outside construction areas, and ensuring proper site layout in materials storage including designating escape routes and fire assembly point.
- Construction workers should be aware of the sensitive nature of workplaces they are operating in and advised to limit verbal noise or other forms of noise. For example, metallic objects or tools can be passed on to a colleague below to be quietly laid down instead of dropping them on cement/ concrete floors with loud bangs.
- The contractor should ensure that noise levels emanating from machinery, vehicles and noisy construction activities are kept at a minimum for the safety, health and protection of people in buildings being renovated. All buildings under renovation shall be evacuated and re-occupied after completion of civil works.
- Contractors should use screens or nets to avoid flying debris, especially while working at heights.

Impact management

Besides supervision by MoH engineers, contractors' contracts can have a clause authorizing a senior healthcare administrator / superintendent at each facility to advise contractors against excessive noise when s(he) notices it.

Wherever space is available, instead of moving patients and service areas to rooms immediately adjoining construction areas, the ideal option should be to use free areas safely distant from construction effects. A grievance mechanism to address complaints from community shall be in place.

7.2.2.3 Traffic accidents

Impact identification

Construction activities may result in a significant increase in number of heavy vehicles during transport of construction materials and equipment, increasing community risk of traffic-related accidents or injuries to workers.

Impact evaluation

Traffic accidents would be a significant social impact and especially likely to involve children, women (who commonly cross roads slower than men), disabled and elderly people.

Impact severity

Impact duration will be short-term occurring only during the construction phase. Extent of this impact will be on all roads plied by project vehicles. The likelihood of the impact occurring is *high* when control measures are not instituted. The social cost and significance of this impact is *high* especially if it involved loss of human life which is also irreversible.

Impact significance

Significance color code	Significance Rating	Significance level of this impact
	Very high	
	High	√
	Medium - high	
	Low- Medium	
	Low	
	Very- Low	

Impact mitigation

a) Adopt best transport safety practices with the goal of preventing traffic accidents and minimizing injuries suffered by project personnel and the public, as follows:

- Emphasizing safety aspects among project drivers. Specifically ensure drivers respect speed limits through built areas and urban centers.
- Adopting limits for trip duration and arranging driver rosters to avoid overtiredness
- Avoiding dangerous routes and times of day to reduce the risk of accidents
- Position traffic guides at children crossings to control driver speeds.
- Employ safe traffic control measures, including road signs and flag persons to warn of dangerous conditions and children crossings.

b) Ensure contractors regularly maintain vehicles to minimize potentially serious accidents such as those caused by brake failure commonly associated with loaded construction trucks.

Impact management

i) Ensure contractors compile a list of scheduled service schedules of all equipment deployed on site.
ii) Pedestrian interaction with construction vehicles can be minimized by:

- Collaboration with local communities and responsible authorities (e.g. police) to improve signage, visibility and overall safety of roads particularly along stretches located near schools or through trading centers. Collaborating with local communities on education about traffic and pedestrian safety (e.g. one road safety campaign at a nearby school once a month).
- Using locally sourced materials, whenever possible, to minimize transport distances.
- Wherever they would be necessary, encourage contractors to locate associated facilities such as worker camps close to project sites.

A grievance mechanism to address complaints from community shall be instituted.

7.2.2.4 Temporary disruption of healthcare services

Impact identification

Since facilities under renovation would not be closed, modifications of buildings in which medical services are provided may entail moving patients or equipment from one area or room to another. This may cause temporary disruption in delivery of health services to patients at facilities under renovation.

Impact evaluation

Temporary rearrangement of service areas can have the undesirable consequence of slowing down emergency services or cause inability among health workers to efficiently offer necessary treatment for visiting patients. Movement of equipment may cause their damage.

Impact severity

This impact is short-term but can have long-term and irreversible impacts (such as where human life is lost). Extent of this impact will be mostly local to facilities under renovation although, due to the disturbance, some patients might choose to transfer to alternative healthcare facilities, leading to their congestion.

The impact will potentially occur at every facility in this project. Likelihood of the impact occurring is *high* and significance is therefore predicted to be *medium-high*.

Impact significance

Significance color code	Significance Rating	Significance level of this impact
	Very high	
	High	
	Medium - high	√
	Low- Medium	
	Low	
	Very- Low	

Impact mitigation

Plan pre-construction activities early to identify suitable rooms or adjoining buildings into which patients or service areas can be relocated with minimal inconvenience, especially to patients under intensive care. Advance relocation information should be shared with the affected patients for their planning mental preparedness.

Impact management

Contractors should work closely and harmoniously with healthcare facility administrators to find practical ways to minimize social cost of temporary disruption of services. A grievance mechanism to address complaints from community shall be in place.

7.2.2.5 Social misdemeanor by construction workers

While most workers may originate from the local community where they have families, there might be others from distant places and working away from their families. Contractors might be lionized as being wealthy by local people especially for HCFs in rural settings or trading centers. With some disposable income to spend, this might induce illicit sexual relationships, with attendant risk for spread of HIV/AIDS.

Impact evaluation

Irresponsible sexual relationships in project communities can break families and heighten risk of defilement and contracting HIV/AIDS.

Impact severity

Illicit sexual relationships can be short-term but have long-term and irreversible effects (HIV/AIDS, pregnancy, etc). If this impact occurred, extent of disease spread would be local or national depending on origin and next destination of infected persons. The impact will potentially occur at every facility in this project. Likelihood of the impact occurring is *high* if contractors do not adequately sensitize workers about responsible and safe behavior. Although it is a cumulative impact, its significance is predicted to be *high*.

Impact significance

Significance color code	Significance Rating	Significance level of this impact
	Very high	
	High	√
	Medium - high	
	Low- Medium	
	Low	
	Very- Low	

Impact mitigation

- The Contractors shall be required to put in place and enforce a Code of Conduct for workers (see example in Annex 10).
- As a contractual obligation, contractors should be required to have an HIV/AIDS policy and a framework (responsible staff, action plan, etc) to implement during project execution.
- All construction workers should be orientated and sensitized about responsible sexual behavior in project communities.

Impact management

Where a contractor has a centralized camp for construction workers, posters about HIV/AIDS prevention should be displayed in communal areas. Free condoms should be provided in private areas such as toilets. Where construction workers live in a camp, a strict "No fraternization" policy should be maintained and workers restricted to leave or enter camp after 6 PM to discourage prostitution.

7.2.2.6 Social impact of material transport

Impact identification

Various materials required for renovation works (sand, murram) will be transported to construction sites from various suppliers. This poses impacts associated with spills or dusting during transportation.

Impact evaluation

In the case of fine materials (crushed stone aggregate, sand, murram), dusting or spills on roadways can degrade local air quality or worsen driving conditions increasing risk of road accidents (e.g. shattering windscreens).
This impact will manifest for health centers which are accessible by paved roads. This indirect, short-term but reversible impact will not be as significant on gravel roads as would be on these paved carriageways.

Impact severity

Impact duration is short-term only lasting the construction period, but secondary effects of road accidents will be long-term and possibly irreversible. Unless mitigation measures are instituted, likelihood of the impact occurring is high. Considering the relatively small quantities of materials needed during renovation of each facility (hence low traffic volume) impact severity is low, hence *low-medium* significance.

Impact significance

Significance color code	Significance Rating	Significance level of this impact
	Very high	
	High	
	Medium - high	
	Low- Medium	√
	Low	
	Very- Low	

Mitigation

Fine earth materials (sand, murram) should be covered during haulage to facilities under renovation to prevent spillage and dusting. Haulage trucks should have tailgates that close properly and tarpaulins to cover material being transported. The clean-up of spilled earth and construction material on the paved roads should be a responsibility of the Contractor and should be done in a timely manner (say within 2 hours) so as not to inconvenience or endanger road users. These requirements should be included as clauses in contractor's contracts (see Appendix 5). A grievance mechanism to address complaints from community shall be in place (Section 7.2).

Impact management

The management of adverse impacts associated with materials haulage can be achieved not only through implementation above mitigation actions but also surveillance and supervision of construction contractors.

7.2.2.7 Temporary scenic blight

Impact identification

Construction activities will require material, equipment and cordons at healthcare facilities. Since facilities under renovation would not be closed from access by public, presence of these activities and materials thereof will cause temporary visual blight at all sites.

Impact evaluation

Presence of construction activities will alter visual impressions accustomed to at existing healthcare facilities.

Impact severity

Duration of visual impact will be short-term only lasting only the construction period. Likelihood of the impact occurring is high but considering the dilapidated state of all existing healthcare facilities under this project, this impact will have *low* significance.

Impact significance

Significance color code	Significance Rating	Significance level of this impact
	Very high	
	High	
	Medium - high	
	Low- Medium	
	Low	√
	Very- Low	

Mitigation

Wherever possible, contractors should ensure minimal footprint of construction activities.

Impact management

All unnecessary equipment should be removed from site as soon as possible.

7.2.2.8 Improper site drainage creating breeding grounds for disease vectors

Impact identification

Improper drainage of construction sites and ponding of stormwater would create breeding grounds for disease vectors such as malaria-parasite transmitting mosquitoes.

Impact evaluation

Malaria mosquitoes would pose a negative public health impact to surrounding dwellings.

Impact severity

Duration of visual impact will be localized and short-term only lasting only the construction period. Likelihood of the impact occurring is high especially when construction is undertaken in wet seasons. This impact will have *low-medium* significance.

Impact significance

Significance color code	Significance Rating	Significance level of this impact
	Very high	
	High	
	Medium - high	
	Low- Medium	√
	Low	
	Very- Low	

Mitigation: Contractors should ensure proper site drainage.

7.2.3 Negative environmental impacts

7.2.3.1 Indoor air quality deterioration due to dust

Impact identification

Demolition to modify internal built environment will lead to considerable levels of indoor cement dust which can affect workers and patients.

Impact evaluation

Deteriorated indoor air quality would be of critical effect to especially asthmatic construction workers, patients and health workers with either minor or severe health impact depending on level and duration of exposure.

Impact severity

Impact duration will be short-term occurring only during the construction phase. Extent of this impact will be local limited to interior of buildings being renovated. The likelihood of the impact occurring is *high* when control measures are not instituted but it is reversible. Significance of this impact is *Low- Medium* especially if it affected already ailing patients.

Impact significance

Significance color code	Significance Rating	Significance level of this impact
	Very high	
	High	
	Medium - high	
	Low- Medium	√
	Low	
	Very- Low	

Impact mitigation

- Contractors should use dust screens or nets in windows, doorways and ventilators of rooms where demolition or other dusty construction activities are occurring.
- Ensure good housekeeping and clean construction operations where, among other necessary actions, dust should be quickly swept off cement floors and collected in covered containers.
- Patients shall not be allowed to construction areas.

Impact management

A senior healthcare administrator or superintendent at each facility should have authority to inspect and restrain contractors from generating excessive dust within healthcare buildings.

To minimize indoor dust, portable extraction systems are recommended but they might not be available among local contractors, or lack of electricity on site might limit their use. Water sprays are not practical and could lead to indoor flooding of surrounding rooms or service areas occupied by patients. A grievance mechanism to address complaints from community shall be in place.

7.2.3.2 Improper management of construction activities/ works

Impact identification

At each healthcare facility, renovation activities will involve demolition and construction activities that might generate considerable waste comprising brick and concrete rubble, metal, glass cullet and timber waste.

Impact evaluation

Improper disposal of construction waste could have environmental and public health impacts. This is of particular concern if demolition rubble contains friable asbestos.

Impact severity

Inappropriate disposal of construction waste can have medium or long-term environmental and public health impact. Extent of this impact will be local to areas where waste is dumped or their immediate neighborhoods. Likelihood of the impact occurring is *high* considering prevalent lack of facilities (monofills[14] or even general waste landfills) to handle construction waste in all areas comprising project facilities. Where inappropriately dumped construction waste contaminates environmental resources (soil and water) in communities or causes public health effects, significance of this impact would be *high*.

Impact significance

Significance color code	Significance Rating	Significance level of this impact
	Very high	
	High	√
	Medium - high	
	Low- Medium	
	Low	
	Very- Low	

Impact mitigation

- Contractors should undertake waste segregation at source to separate hazardous from non-hazardous waste.
- Waste (such as metal scrap or wood waste) that can be reused/ recycled may be given to local people.
- Waste hoarding at site before disposal should be at designated places and considering site lay-out in order not to block any exit routes and emergency routes.
- Any hazardous materials shall be handled by NEMA licensed waste-handlers. Asbestos materials handling, management and disposal shall be undertaken following work-method instructions issued by NEMA.
- Seek guidance of local environmental officers to identify acceptable disposal sites.
- Contractors must provide suitable containment and storage of chemicals and hydrocarbons to prevent soil contamination and pollution to ground or water (surface and ground).

Impact management

Supervising engineers and local environmental officers should ensure that contractors do not illegally dump waste in non-designated areas. Local environmental officers (District, Town/ Municipal Environmental Officers) should be

[14] *Monofills are landfills designed for disposal of only one type of waste*.

facilitated to undertake active monitoring roles during construction period. A grievance mechanism to address complaints from community shall be instituted.

7.3 Operation Phase Impacts

7.3.1 Positives social impacts

7.3.1.1 Improved medical services at healthcare facilities

The project will positively impact health of Ugandans through easing access to quality medical care currently non-existent at these facilities. Renovation of facilities and installation of medical equipment will enable currently ineffective healthcare facilities provide new or improved services to patients. Renovation of HCF will save money for poor people when it is no longer necessary to travel to distant medical facilities for healthcare services. This is a long-term secondary benefit.

Benefits of each project component are outlined in table below.

Table 4: Social benefits of each project component

	Project component	Social impact
1	***Component 1***: Scaling up results based financing for frontline health services	This component will improve: i) financial capacity of health centers ii) functional efficiency in delivery of healthcare services iii) technical capability of health centers in service delivery
2	***Component 2***: Strengthening capacity to deliver scaled up RMNCAH services	This component will bear the following social benefits: i) Strengthened institutional capacity to deliver high impact and quality RMNCAH services using pay-for-performance approach ii) The component will provide incentives to the Ministry of Health (MoH) at the center to implement priority health systems strengthening actions that will enhance national capacity to deliver of RMNCAH services and iii) Incentives to DHTs in selected districts to scale up delivery of RMNCAH services. iv) Improve and strengthen performance of healthcare service delivery through use of *pay-for-performance* schemes.
3	***Component 3:*** Strengthen capacity for civil registration and vital statistics (CRVS)	i) Build institutional capacity for CRVS and scale up births and deaths registration services. ii) Support development and dissemination of a national CRVS policy and strategy iii) Finance procurement of the necessary materials, tools and equipment for BDR such as office equipment, IT equipment (computers and mobile phones) and BDR registers. iv) Establishment and operationalization of a CRVS monitoring and evaluation system, and promotion of the use of CR data for planning and accountability purposes. i) Development of the necessary BDR protocols and manuals, including a community cause-of-death reporting tool using verbal autopsy; standard pre-service and in-service training curricula on certification of cause of death. ii) Scale up of birth and death registration at the sub-national levels.
4	***Component 4*****:** Capacity Building, Results Verification and Project Management	This component will support costs related to operations and overall management of the project. This component will support provision of technical assistance in the areas of project management, external verification, financial management, procurement, monitoring and evaluation. Other activities under this component include: the collection of baseline data, coordination and implementation of the mid-term and end-of-project evaluation of all project components, and annual financial audits. The resultant benefit of the component will be beneficial socio-economic participation

	Project component	Social impact
		of local experts, their capacity strengthening and assurance of proper execution of the project thorough monitoring, evaluation and auditing.

Enhancement measures

The interventions under the project will involve improvement in provision of health services to culturally and socially diverse communities with different needs, attitudes and practices requiring adapted measures to ensure the full integration of all serviced communities, including the most vulnerable and marginalized groups (for example, the indigenous peoples).

7.3.1.2 Employment opportunities

Equipping healthcare facilities with modern equipment, enabling provision of new healthcare services and resultant increase in visiting patients may create additional long-term technical and non-technical job opportunities for medical professionals, janitors and security guards.

7.3.1.3 Reduced public risks due to improvement in healthcare waste management

Proper management of medical waste involving segregation of hazardous from non-hazardous streams and safe disposal would mitigate existing public health risk associated with improper disposal of healthcare waste.

7.3.1.4 Improved aesthetics and life of healthcare facilities

Renovation of health centers will improve aesthetics of healthcare facilities some of which, in present state, look dilapidated. Renovation will also give healthcare buildings and equipment extended life.

Enhancement measure

Engineering design for proposed renovation works should incorporate a plan for routine maintenance and sustainability.

7.3.2 Negative social impacts

Key negative impacts during operation of renovated healthcare facilities will arise from:

i) Community risk due to improper waste management (including medical waste, emissions to air and wastewater discharges),
ii) Misuse or inability to use installed equipment for improved service delivery,
iii) Lack of maintenance, hence facilities degenerating to decay again,
iv) Occupational risk to health workers,
v) Fire risk.

If they occurred, the above would mostly be cumulative impacts since they were observed at almost all facilities comprising the proposed project.

7.3.2.1 Community health risk due to improper waste management

Impact identification

Improper waste disposal can cause public health risks due to environmental pollution: impaired air quality, storm water contamination of water courses or when people and children rummage through raw waste stockpiles. Wastewater did not seem to pose considerable disposal challenge since all facilities either had onsite septic systems or sewage lagoons.

Impact evaluation

As already indicated, plume downwash leads to chronic exposure of nearby communities to potent air pollutants including dioxins. Infections (e.g. Hepatitis B) sustained when people or children rummage through improperly dumped infectious waste can be life-threatening.

Impact severity

Unless mitigation recommendations are implemented, this impact will occur at all healthcare facilities. Likelihood of the impact occurring is *high* if incinerator stack designs are flawed or proper solid medical waste management practices are not instituted, and if common practices of burning all waste types in open air continue. Although it is a local cumulative impact, public health due to improper healthcare waste management has *high* impact significance.

Impact significance

Significance color code	Significance Rating	Significance level of this impact
	Very high	
	High	√
	Medium - high	
	Low- Medium	
	Low	
	Very- Low	

Impact mitigation: Ensure proper waste management practices as recommended in the study on improvement of healthcare waste management in Uganda[15].

Impact management

- Ensure regular monitoring of solid, liquid waste management practices and incineration.
- Ensure proper management of pharmaceutical waste by engaging a consultant to develop measures and guidelines for each facility in accordance with the national healthcare waste management plan.
- To ensure proper sewage management latrines shall be constructed where they do not exist.
- Ministry of Health shall develop measures for proper management of expired pharmaceutical drugs and instigate this policy at all health care facilities.

7.3.2.2 Occupational health and safety risks

Impact identification

[15] *MoH 2005 (revised march 2009): Improvement of healthcare waste management in Uganda (conducted by Carl Bro)*

Medical facilities are a potential source of infectious waste in gaseous, liquid or solid forms. These could pose unsafe conditions for healthcare staff. Of particular concern are janitors handling infectious waste (including sharps) without adequate protective gear, storage of sharps in containers that are not puncture-proof and management of radioactive waste at healthcare facilities where x-ray equipment will be installed. While some OHS risks will be new borne by equipment or services introduced after renovation or upgrade of facilities, most other effects are existing (hence cumulative) and would only be exacerbated by increased scale of healthcare services.

Below is a list of OHS risk sources for healthcare staff:

i) Lack of adequate lighting in workplaces
ii) Lack of safe access particularly for disabled employees
iii) Inadequate ventilation in rooms
iv) Lack of adequate training (or neglect of safety precautions/ guidelines) in use of medical equipment
v) Misuse of equipment and materials for functions they are not designed
vi) Lack of safety signage in specific areas (e.g. X-ray rooms)
vii) Electrical hazard
viii) Eye hazards such as splashes in laboratories and operating rooms
ix) Chemical hazards (acids, alkalis, expired drugs, oxidizing and reactive chemicals)
x) Radiological Hazards
xi) Biological Hazards (blood or other body fluids with potential to cause diseases). Biological agents can be classified into four groups[16]:

1: Biological agents unlikely to cause human disease;

2: Biological agents that can cause human disease and are likely to require additional controls, but are unlikely to spread to the community;

3: Biological agents that can cause severe human disease, present a serious hazard to workers, and may present a risk of spreading to the community, for which there usually is effective prophylaxis or treatment available and are thereby likely to require extensive additional controls;

4: Biological agents that can cause severe human disease, are a serious hazard to workers, and present a high risk of spreading to the community, for which there is usually no effective prophylaxis or treatment available.

During routine facilities maintenance or repair, burns from welding / hot works or falls from working at heights might also occur.

Impact evaluation

A considerable number of healthcare workers get life threatening infections in the course of their normal duties. This is a negative and in some cases irreversible health impact.

Impact severity

[16] *World Health Organization (WHO) Classification of Infective Microorganisms by Risk Group (2004).*

Likelihood of the impact occurring is *high* unless control measures are instituted. Although it is a cumulative impact, the risk to human health has *high* significance.

Impact significance

Significance color code	Significance Rating	Significance level of this impact
	Very high	
	High	√
	Medium - high	
	Low- Medium	
	Low	
	Very- Low	

Impact mitigation

The primary measure to mitigate OHS impacts is *prevention* which entails identification of risks and instituting pro-active measures to avoid them. In part this can be achieved by following national guidelines. For unavoidable risks, personal protective equipment (PPE) should be provided to workers.

Places of work involving occupational exposure to ionizing radiation should be provided with requisite protection established and operated in accordance with recognized international safety standards and guidelines. The acceptable effective dose limits appear in Table 5 below.

Table 5: Acceptable effective dose limits for workplace radiological hazards

Exposure	Workers (minimum 19 years of age)
Five consecutive year average (effective dose)	20 mSv/year
Single year exposure (effective dose)	50 mSv/year
Equivalent dose to the lens of the eye	150 mSv/year
Equivalent dose to the extremities (hands, feet) or skin	500 mSv/year

Impact management

Each healthcare facility should have a systemic risk management plan comprising risk prevention, evacuation of accident victims, evaluation and improvement measures.

7.3.2.3 Fire risk

Impact identification

Without provisions for fire safety, there is a risk of fire outbreak at healthcare facilities with disastrous life and financial impact. Fires can start from ignitable materials in laboratories, cigarette smoking in non-designated places or old electrical connections.

Impact evaluation: A large fire at healthcare facilities would have significant human and financial impact.

Impact severity

Likelihood of the impact occurring is *medium-high* since almost all healthcare facilities lacked fire extinguishers. The impact would be local in spatial extent affecting onsite facilities, patients, health workers and neighboring communities with possibly irreversible impacts. Impact significance is therefore *high*.

Impact significance

Significance color code	Significance Rating	Significance level of this impact
	Very high	
	High	√
	Medium - high	
	Low- Medium	
	Low	
	Very- Low	

Impact mitigation

- Provide fire extinguishers to healthcare facilities during their renovation.
- Key healthcare staff should have basic training in fire control
- Fire emergency telephone numbers should be displaced in communal areas

Impact management

- Each healthcare facility will prepare a fire emergency management plan.
- Undertake fire drills at healthcare facility, at a minimum once a year.

7.3.2.4 Misuse or inability to use installed healthcare systems and equipment

Impact identification

This project would be in vain if healthcare staff had no requisite training and skill to use installed equipment for improved service delivery. This would be a significant, negative medium-term but reversible impact.

Impact mitigation

Provide requisite training during equipment installation.

Impact management: Through regular supervision, ensure only trained authorized personnel operate equipment.

7.3.2.5 Lack of sustainability

When improved healthcare facilities are not continually maintained, they would quickly degenerate to pre-project condition. This would be a negative, significant medium-term impact of local spatial extent but reversible.

Impact mitigation: A Facility Maintenance Plan will be prepared and implemented at each medical facility
Impact management: MoH should ensure there is always a budget to sustain healthcare facilities in the country in a functional state.

7.3.3 Negative environmental impacts

7.3.3.1 Air pollution from onsite medical waste incinerators

Impact identification

Incineration of hospital waste if carried out in inappropriate facilities could result into localized pollution of air with pollutants such as respirable ash, furans and dioxins. Dioxins are known to promote cancers in humans.

Impact evaluation: Downwash of incinerator emissions has potential to degrade indoor air quality of healthcare buildings or those of nearby offsite buildings.

Impact severity: Duration of onsite and offsite air pollution would be long-term lasting entire life on incineration units unless the deficient units are either decommissioned or improved. Likelihood of the impact occurring is high. Considering the gravity of potential air pollution on health of patients and nearby communities, this impact will have *high* significance.

Impact significance

Significance color code	Significance Rating	Significance level of this impact
	Very high	
	High	√
	Medium - high	
	Low- Medium	
	Low	
	Very- Low	

Mitigation

- Ensure operator of incineration unit is adequately trained to ensure efficient operation.
- Consultations with potentially affected people should be done by design consultant to inform choice of location of incinerator at each site.

Impact management

- ***Engineering design*** of stacks on onsite brick incinerators should follow good international industry practice (GIIP) as outlined in World Bank's *EHS Guidelines: Air emissions and ambient air quality, April 2007*.
- ***Inspection/ monitoring:*** Healthcare administrators should undertake regular visual inspection of incinerator stack for incidents of downwash and undertake annual monitoring of air quality or a general environmental audit of entire healthcare facility.
- ***Training*** of incinerator operators is important for them to be familiar with basic principles and routine practices. For example homogenization of waste is crucial to ensure efficient and complete combustion during incineration to avoid generation of dioxins for instance when wet waste batches quench flames and lower combustion temperature below levels at which such pollutants are destroyed.

7.3.3.2 Improper medical waste management

Impact identification

During their operation, health centers will generates medical waste in situations of absence of medical waste disposal facilities such as central incinerators or secure landfills. Prevalently waste will continue to be burnt in small onsite

kilns without provision for air scrubbing. While this eliminates a solid waste challenge, it creates a risk of onsite and offsite air pollution that chronically affects patients and surrounding property owners.

Impact evaluation: Improper disposal of medical waste would have environmental and public health impacts.

Impact severity:

Inappropriate disposal of medical waste would have medium or long-term environmental and public health impact. Extent of this impact will be local to areas where waste is dumped or immediate neighborhoods. Likelihood of the impact occurring is *high* considering prevalent lack of facilities (appropriate waste incinerators, monofills[17] or even general waste landfills) to handle medical waste. Where inappropriately dumped medical waste contaminates environmental resources (soil and water) in communities or causes public health effects, significance of which impact would be *high*.

Impact significance

Significance color code	Significance Rating	Significance level of this impact
	Very high	
	High	√
	Medium - high	
	Low- Medium	
	Low	
	Very- Low	

Impact mitigation

It is widely known that simple kilns used by healthcare facilities in Uganda for combustion of medical waste lack air scrubbing provision and hence turn a solid waste problem into air pollution challenge. One solution is for Ministry of Health to devise strategies to stimulate private sector investment in centralised medical waste incineration or disposal facilities that would safely manage healthcare waste from collection to final disposal. The Ministry of Health is to consider HCWM at National level and develop practical way-forward and strategies to develop a network of appropriate facilities and procedures.

[17] *Monofills are landfills designed for disposal of only one type of waste*.

8 ENVIRONMENTAL AND SOCIAL SCREENING PROCESS

8.1 The Environmental and Social Screening Process

The sections below illustrate the stages (steps 1-7) of the environmental and social screening process leading to the review and approval of the project activities. The purpose of this screening process is to determine which activities are likely to have negative environmental and social impacts; to determine the level of required environmental assessment; to determine appropriate mitigation measures for activities with adverse impacts; to incorporate mitigation measures into the sub- program as appropriate; to review and approve the sub-program's proposals; to monitor and report environmental parameters during the implementation of activities. The extent of environmental work that might be required prior to the commencement of the sub-programs will depend on the outcome of the screening process described below.

8.2 The Screening Steps

The environmental and social process of screening consists of the following steps:

Step 1: Screening of the Sub-Programs

The objectives of environmental screening are: to evaluate the environmental risks associated with a proposed operation; to determine the depth and breadth of Environmental Assessment (EA); and to recommend an appropriate choice of EA instrument(s) suitable for a given project. Criteria for classification include type, location, sensitivity, and scale of the project, as well as the nature and magnitude of its potential environmental impacts. Project screening will be based on a project brief prepared by the Environmental Health Division (EHD) of the MoH. However while this requirement is in line with the EIA process of Uganda, Project Briefs (PBs) may not be required for simple civil works and construction, since ESMPs prepared following screening as guided in the ESMF would suffice to handle impacts that may arise.

Screening will be carried out by the Town/ Municipal or District Environment Officer at local government level. Every district, Town or Municipal Council in Uganda has a Municipal or District Environment Officer (MEO/DEO) employed by the District Local Government. These environmental officers are trained and experienced in environmental management and EIA procedures. The District Environment Officer will complete the Environmental and Social Screening Form (see Annex 1) to facilitate identification of potential environmental and social impacts, determination of their significance, assignment of appropriate environmental category (see Box 1 below), appropriate environmental mitigation measures, and where required recommend undertaking of an Environmental Impact Assessment (EIA). According to World Bank, projects are assigned categories A, B, or C in descending order of environmental and social sensitivity as shown in Box 1 below.

Box 1: Definition of environmental categories of projects according to World Bank/ IFC

Category A: Projects expected to have significant adverse social and environmental impacts that are diverse, irreversible and unprecedented

Indicative List of Category A Projects:

- Large-scale infrastructure: ports and harbor development, transport (rail, road and waterways), large- scale water resources management (river basin development, water transfer); dams and large reservoirs, hydropower and thermal power, extractive industries and oil and gas transport;
- Large-scale agriculture, irrigation, drainage and flood control, aquaculture; agro industries, and production forestry;

• Major urban projects involving housing development, water treatment, wastewater treatment plants, solid waste collection and disposal; • Industrial pollution abatement, hazardous waste management, industrial estates, manufacture and large-scale use of pesticides; and Projects that, regardless of scale or type, would have severe adverse impacts on critical or otherwise valuable natural or cultural resources.
Category B: Projects are expected to have limited adverse social and or environmental impacts, site specific and can be readily addressed through mitigation measures Indicative List of Category B Projects: • Small-scale infrastructure projects: power transmission and distribution networks, rural electrification, mini (run of the river with no major water impoundments) or micro-hydropower projects, small-scale clean fuel fired thermal power plants, renewable energy (other than hydropower), energy efficiency and energy conservation, rural water supply and sanitation, road rehabilitation, maintenance and upgrading; telecommunications, etc.; • Health care service delivery, HIV-AIDS, education (with limited expansion of existing schools/buildings), repair/rehabilitation of buildings when hazardous materials might be encountered (e.g., asbestos, stored pesticides); and Small-scale irrigation, drainage, agricultural and rural development projects, rural water supply and sanitation, watershed management and rehabilitation, and small-scale agro-industries, tourism (small-scale developments).
Category C: Projects are expected to have minimal or no adverse impacts Indicative List of Category C Projects: • Education and Health projects not involving construction; • Construction or rehabilitation of a limited number of small buildings (e.g., schools or health clinics where health care waste is not an issue); and • Institutional development, training and certain capacity building activities.

Source: www.worldbank.org

Step 2: Assigning of Environmental Categories

Assignment of appropriate environmental category to a particular activity will be based on information provided in the environmental and social screening form that the Municipal/ District Environment Officer will have administered. There is no project activity envisioned to require a full EIA (Category A) given the fact that the construction is a small scale expansion program, site-based and using mostly local procured materials, and besides the overall project EA category is B.

Step 3: Carrying out Environmental Assessment

After analyzing data contained in the environmental and social screening form and having identified the right environmental category and hence scope of the environmental assessment required, the MEO/ DEO will make a recommendation to Environmental Health Division (EHD) of the MoH as to whether: (a) no EIA will be required; (b) implementation of simple mitigation measures will be required and thus development of ESMP/Project Brief; or (c) a separate environmental impact assessment EIA will be carried out (such activities are not anticipated).

In case of activities under (a) and (b) above, project environmental and social mitigation measures checklist will be used (see Annex 2): Using the checklist the environmental and social mitigation measures will be proposed by the Municipal/ District Environment Officer at high Local Government level and an ESMP developed (as shown in Chapter 10). Alternatively, following the Uganda EIA guidelines, a Project Brief containing the ESMP shall be developed and submitted to NEMA for review and approval. In case of project activities falling under (c) above,

an Environmental and Social Impact Assessment (ESIA) will be carried out by an ESIA practitioner approved by NEMA. The ESIA will be undertaken in accordance with the NEMA-approved terms of reference.

The ESIA will identify and assess the potential environmental impacts for the planned activities, assess alternative solutions and will design the mitigation, management and monitoring measures to be adopted. These measures will be quoted in the Environmental and Social Management Plan (ESMP) that will be prepared as part of the ESIA for each sub-program. The preparation of the ESIA and the ESMP will be done in consultation with all relevant stakeholders, public institutions, including the people likely to be affected by the sub- program, and will be provided to the WB for a "no-objection" before commencing project implementation.

The ESIA will follow the national procedure established in the framework of the Environment Management Act, EIA Regulations, Guidelines and consistent with the WB OP 4.01. In situations where the screening process identifies the need for land acquisition, qualified service providers will prepare a RAP (Resettlement Action Plan), or Abbreviated RAP consistent with the OP 4.12, and the Resettlement Policy Framework (RPF) that has been prepared as a separate document for this program.

Step 4: Review and Approval

Review: At the district or municipal level, the Municipal/ District Environment Officer, and communities will review the environmental and social screening forms and will make recommendations as to whether the results of the screening process are acceptable. If a Project Brief was prepared to facilitate screening, it will be submitted to NEMA for review and/or approval. In case an ESIA needs to be undertaken, the ToR's for the study will be prepared by Environmental Health Division (EHD) of the MoH, reviewed and approved by NEMA, with modifications where necessary.

Approval/Rejection: The ESIA study will be undertaken by the EIA practitioner in accordance with the ToRs approved by NEMA and report submitted to NEMA for review. A Project Brief on the other hand may be prepared by either the client or hired consultant/s and the report submitted to NEMA for review/approval. NEMA will then forward copies to relevant Lead Agencies and Local Authority (MEO/DEO) for comments. Comments from the Lead Agency/ Local Authority will be considered by NEMA in making a final decision on project implementation. If the ESIA is approved, NEMA issues an environmental permit that confirms the EIA has been satisfactorily completed and the proposed sub-program implementation may proceed.

The ESIA will be submitted to WB for non-objection prior to the approval by NEMA.

Step 5: Public Consultations and Disclosure

Public consultations will take place during the environmental and social screening process, and the input from the public consultations will be reflected in the design of the mitigation and monitoring measures. The District/Municipal Environment Officer will communicate the results of environment and social screening to the Town Clerk/ Chief Administrative Officer (CAO) who will in thereafter, communicate the result to the MOH and Local Governments.

According to the procedures governing the EIA, public information and participation must be ensured during the scoping period and the preparation of the terms of reference of the Environmental and Social Impact Assessment. This will be done by EIA practitioner. The involvement of District/Municipal Environment Officer, District/Municipal Community Development Officer, Health Officers level will be encouraged. Public consultations include particularly:

- One or several meetings for presentation of the sub-program with a gathering of local authorities, the populations, the concerned organizations;

- The opening of a register available to all the populations where will be consigned the preoccupations, the appreciations, remarks and suggestions formulated on the program.

World Bank requires disclosure of the environmental assessment report and/or ESMP both in-country by the client (MoH) and at WB's Infoshop by IDA.

Step 6: Environmental Monitoring

Environmental monitoring aims at checking the effectiveness and relevance of the implementation of the proposed mitigation measures. Local councillors, District Environment Officers and local government Health Officers as well as concerned citizens will undertake monitoring exercises as provided for by the National Environment Act. The Municipal/ District Environment Officer in conjunction with the District Health Officer /Inspector will monitor implementation of environment mitigation measures based on the contractor's work plan. MOH in collaboration with NEMA will monitor implementation of the environmental mitigation measures on a sample of project sites on quarterly basis. On annual basis the Municipal/ District Environment Officers, MOH in collaboration with NEMA will carry out a national assessment of project performance in environment and natural resource management using the indicators mentioned in step 7.

Step 7: Monitoring indicators

The monitoring indicators that will be under ESMP for assessing environmental management for the project include:

- Construction management requirements
- Medical waste management
- Compliance with Legislations.

Use of the indicators for environmental monitoring will be included in the training and capacity building program.

9 PROJECT IMPLEMENTATION ARRANGEMENTS

9.1 Institutional and Implementation Arrangements

The project will be implemented by the MoH and the NIRA. The MoH is the main recipient, and NIRA, a sub-recipient under the MoH. Each agency will execute specified activities in line with their respective mandates. The MoH will be responsible for activities under Components 1, 2, and 4, while NIRA will be responsible for activities under Component 3.

The Permanent Secretary (PS) of the MoH, as the "Accounting Officer" of the Project, is responsible for overseeing implementation. The PS will delegate the day-to-day management of the project to a full-time project coordinator (PC). Senior officers at the rank of commissioner or head of department (and above) will be assigned as component coordinators to coordinate implementation of project activities under each respective components. A Project Steering Committee chaired by the PS (MoH), and composed of the Director General (MoH), Executive Director (NIRA), and senior officials from the two agencies will oversee Project implementation.

Project implementation will be mainstreamed within the operations of the MoH and NIRA. This is to ensure that Project implementation is aligned with national processes and systems, thus enhancing coordination and sustainability of programs. Where necessary, consultants financed by the Project, will be recruited to support implementation of Project activities components.

Coordination of implementation for Components 1 and 2 will be done through the existing technical working groups and respective departments/divisions of the MoH. It will be the responsibility of the PC to provide quarterly reports to Senior Management and the Top Management Committees of the MoH. For Component 3 under NIRA, coordination will also be through the existing technical working groups in NIRA under the supervision of the Senior Management Committee. The PC will also provide quarterly reports to the NIRA senior management to ensure coordination and harmonization of policy proposals and decisions affecting BDR.

A dedicated RBF Implementation Unit established at the MoH to coordinate RBF implementation will be responsible for coordinating project RBF activities. This unit will provide technical support and coordinate the rollout of RBF activities under the project. The RBF unit will further be supported by regional teams that will be responsible for supervision and coordination of district teams. The Health Sector Budget Working Group will perform the function of the national RBF steering committee.

The District Health Officer (DHO) will oversee implementation of project activities at the district level. The DHO assisted by an EDHMT will provide oversight functions including coordination of RBF activities at district level. At the health facility level, the HUMC will oversee all project-related activities executed by the facility. The operations of the RBF at the district level will be based on the Memorandum of Understanding signed between the MoH and districts on one hand and the district and health facilities on the other hand.

9.2 Sustainability

The project will consolidate and scale up implementation of selected RMNCAH interventions using existing institutional mechanisms. The majority of these interventions are not new and are already under implementation. The project will help to address the critical health systems bottlenecks for the delivery of RMNCAH services, giving special attention to strengthening management of the health workforce; provision of critical inputs, such as, equipment and essential medicines; strengthening supply chain management; and strengthening systems for

management of health information and support supervision. By addressing these systems bottlenecks, the project will ensure functionality of the existing systems and improve effectiveness of the frontline service providers in the delivery of RMNCAH services. The emphasis on addressing system-wide constraints will ensure that the delivery of RMNCAH services will become more sustainable.

The financial impact of the project on Government's health spending will be felt mainly in terms of additional resources to sustain implementation scale up. The project is part of the broader Government program under the SWAp and it is included within the Government's Medium-Term Expenditure Framework (MTEF). As outlined in the RMNCAH Sharpened Plan for Uganda, the total committed/pledged resources for RMNCAH activities is US$1028 million representing US$231 million from the Ugandan Government and US$797 million from development partners over the period 2016-2020.

9.3 Monitoring socio-environmental aspects comprised in this ESMF

At National Level, MoH will hire an Environmental Specialist as part of the project support team who will take lead in guiding and implementing environmental requirements of the project, working in close collaboration with the respective District Local Governments. Town/Municipal or District Environment Officers will be the key personnel responsible for monitoring the environmental and social impacts of the project. There is also a possibility of hiring supervising consultants to monitor the construction phase and these will be required to have Environmental and Social Specialists on their teams to monitor environmental and social aspects respectively. As earlier indicated, Town/Municipal or District Environmental Officers have requisite training and expertise to undertake necessary monitoring. However, their technical capacity will be enhanced by induction training at the beginning of project implementation. This will facilitate a better understanding and appreciation of safeguard requirements through discussion of modalities for implementation of the project ESMF provisions. Financial facilitation would however be necessary for their effective participation.

9.4 Results Monitoring and Evaluation

The project's results monitoring and evaluation framework is consistent with the monitoring and evaluation (M&E) frameworks of the MoH and NIRA. The Results Framework allows for the monitoring of project implementation and assessment of achievement of its development objectives and focuses on accountability for results. The data will be collected from three main sources: HMIS under the MoH, civil registration database under NIRA, and the project's specific database. In addition, project implementation agencies will collect key information specific to the project for measuring and verifying agreed results for the DLIs and the RBF. The Resource Center in the MoH and the M&E Unit under NIRA will be responsible for coordinating M&E activities under the project. An M&E specialist will be recruited to support the process in the MoH.

Every quarter, the MoH will provide quarterly progress reports and quarterly Interim Financial Reports for onward submission to the Bank in accordance with the reporting requirements set out in the Operations Manual. For reimbursement purposes, the DHMTs will on a quarterly basis submit verified reports to the MoH for payment after certification by the RBF unit. The independent verification agent will prepare semiannual verification reports. Furthermore, a mid-term review will provide the opportunity to assess progress and make appropriate mid-course corrections.

9.5 Capacity enhancement needs

Assessments undertaken during compilation of the ESMF indicate a need to strengthen capacity of Environmental Health Division in MOH for timely and quality execution of project activities. Training required entails:

i) EIA process in Uganda
ii) Environmental aspect-impact relationship
iii) Impact assessment
iv) World Bank Safeguards
v) Environmental monitoring
vi) Stakeholder engagement
vii) Grievance management
viii) Management of environmental and social aspects of civil works management in Health Care Facilities
ix) Health Care Waste Management

10 KEY FINDINGS FROM STAKEHOLDER CONSULTATION

10.1 Findings from Ik indigenous people

The Ik people of Kaabong district are an indigenous and minority people. They did not report need for healthcare services specific to their culture and traditions. There was also no mention of unique diseases limited to their community. A key concern reported was that no Ik language-speaking staff work in *Kamion Health Centre II* which they visit. This causes uneasiness for them to visit a health facility where their language is neither understood nor their culture known. For instance after birth, Ik mothers take and preserve placentas but this may not easily be allowed in a healthcare facility, the reason they resort to using traditional birth attendants.

10.2 Findings from Batwa indigenous people

A meeting held in Kanungu District with Batwa indigenous people led to the following findings:

Diseases Batwa community noted as prevalent were: Malaria, diarrhoea, cough, ulcers, allergy and HIV.

Language used for communication at health centers: Language of communication at the nearest HC is Rukiga and Batwa people, who speak it fluently, said were comfortable with it.

Traditional or cultural practices among Batwa: Batwa parents cut marks on children's chests and these are believed to prevent or treat pneumonia. It was also found that Batwa people believe false teeth are important and they do not seek medical attention to remove them from babies. It was also revealed that generally Batwa people believe that traditional healers cure or prevent witchcraft, false teeth and pneumonia, therefore they consult them first and only visit a health center when the healers fail to provide healing solutions.

Healthcare challenges mentioned:

- Patients referred by VHTs and HCs for further management do not have transport to their destinations. They are usually carried on locally made stretchers for long distances;
- Lack of IPD, especially maternity ward for mothers to deliver from;
- Lack of dental services and as a result, people use crude implements such pliers to extract bad teeth (tis without anesthesia!);

A focus group discussion with Batwa women revealed the following:

- Lack of maternal ward, hence expecting mothers travel long distances to Bwindi Hospital to deliver. Some do not make it.
- Women cited a general lack of access to sanitary facilities;
- Mothers and children lack transport to HCs;
- Batwa women who are financially disadvantaged wait in queues at HCs for long periods which sometimes leads of loss of lives.

10.3 General views from other stakeholders consulted

Most places reported malaria and diarrhea as common illnesses, and rare but dangerous diseases included Hepatitis B, Sleeping sickness and TB. In addition, most communities in Uganda have cultural beliefs and practices attached to pregnancy and child birth which may prevent mothers from seeking medical services.

10.4 Health Centres

Health centers were reported to perpetually lack medical supplies and healthcare staff, and offer services beyond their intended level. For example Kamion HC II was reportedly supposed to have nine staff but has only three healthcare workers and offers other services meant for HC IIIs for example, antenatal care (ANC), family planning, deliveries and in-patient (Admission) all with only one bed. HCs were also reported to lack cemeteries for disposal of unclaimed bodies. Many lacked waste disposal (incinerator) facilities; and staff housing facilities. Common diseases handled included malaria, Respiratory Tract Infections (RTIs), Diarrhoea, Gastro-interties, eye infections and skin diseases. It was noted that land belong to medical facilities was increasingly getting encroached for settlement and cultivation with little help from local government authorities. The main reasons acerbating this was lack of enforcement of physical planning regulations and healthcare facilities land often lacking title deeds.

10.5 Village Health Teams (VHTs)

Village Health Teams (VHTs) were reported to exist and functioning in all sub-counties and villages. The VHTs reported a number of challenges including difficulty of communication including impassable roads, lack of means of transport to reach far areas and poor cellular networks in rural areas.

10.6 Recommendations made by stakeholders

Specific recommendations by Ik indigenous people:

- Consider language and cultural needs of Ik people in staffing health centres to break communication and cultural barriers when they visit health centres (Ik community),
- Construct more health centres to accommodate the ever rising patients numbers,
- VHTs should be supported in areas of transport,
- HCs should be provided with adequate facilities and healthcare staff,
- HCs should have adequate facilities for medical waste management and disposal of unclaimed bodies,
- HCs should legally acquire ownership of land and fence it off to avoid encroachment.

Specific recommendations by Batwa indigenous people:

- Upgrade a HC II in their community to offer IPD services, including maternal care;
- Recruit professional midwives to help women to deliver;
- Provide motorcycle ambulances to take pregnant women to the HCs
- Provision of ambulances (vehicles or motorcycles);
- Upgrade and facility one of the nearby HC IIs to a level to offer in-patient department services, especially maternal services;
- Provide dental service equipment and personnel; and
- Provide and install Solar equipment

11 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

An Environmental and Social Management Plan (ESMP) for the proposed project is intended to ensure implementation of environmental and social management of its activities. An ESMP translates recommended mitigation and monitoring measures into specific actions that will be carried out by the proponent.

The ESMP relevant to the project should be prepared as part of ESIA for project facilities and implemented throughout project life-time. The main components of an ESMP are described in table below (and example provide in Annex 6), which reflects practice at the World Bank. Ideally the ESMP should contain the following:

i) Summary of the potential impacts of the proposal;
ii) Description of the recommended mitigation measures;
iii) Description of monitoring activities and plan;
iv) Allocation of resources and institutional responsibilities for plan implementation and training;
v) Implementation Schedule of the actions to be taken and reporting procedures;
vi) Program for surveillance, monitoring and auditing; and
vii) Contingency plan when impacts are greater than expected.
viii) Estimated related costs and sources of funds

Table 6: Components of ESMP

ESMP Component	Components of ESMP
Summary of impacts	The predicted adverse environmental and social impacts for which mitigation is required should be identified and briefly summarized. Cross referencing to the ESIA report or other documentation is recommended.
Description of mitigation measures	Each mitigation measure should be briefly described with reference to the impact to which it relates and the conditions under which it is required (for example, continuously or in the event of contingencies). These should be accompanied by, or referenced to, project design and operating procedures which elaborate on the technical aspects of implementing the various measures.
Description of monitoring programme	The monitoring program should clearly indicate the linkages between impacts identified in the EIA report, measurement indicators, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions.
Institutional arrangements	Responsibilities for mitigation and monitoring should be clearly defined, including arrangements for co-ordination between the various actors responsible for mitigation.
Implementation schedule and reporting procedures	The timing, frequency and duration of mitigation measure should be specified in an implementation schedule, showing links with overall project implementation. Procedures to provide information on the progress and results of mitigation and monitoring measures should also be clearly specified.
Cost estimates and sources of funds	These should be specified for both the initial investment and recurring expenses for implementing all measures contained in the ESMP, integrated into the total project costs, and factored into loan negotiations.

Source: World Bank, 1999

12 PROTOCOL TO MANAGE CHANCE FINDS

Construction operations may encounter cultural and archaeological resources or chance finds. Construction can also reveal these buried resources, necessitating "salvage archaeology" for their recovery and protection. Once first stages of earthworks show signs of likely presence of archaeological resources, salvage entails quick excavation to remove artefacts or other traces of human settlement before extensive earth-moving continues. As a general construction principle, any archaeological “chance finds” should be handed to the Department of Museums and Monuments in the Ministry of Tourism, Trade & Industry (MITI).

A protocol for managing chance finds developed based on *The Historical Monuments Act, 1967* is provided in Box A7.1 below.

Box A7.1: Suggested protocol to manage “chance finds”

1. The contractor shall not perform excavation, demolition, alteration or any works that may harm resources of cultural importance without authorization of the Engineering Assistant or officials from the Department responsible for museums and monuments.

2. In case of chance finds, the Contractor shall mark, cordon and secure the subject site(s) to avoid damage in the course of road construction and immediately notify the Department responsible for museums and monuments.

3. Opening of a new borrow or quarry site shall be witnessed and inspected by official(s) from the Department responsible for museums and monuments for the first 2 days of site opening. The official(s) shall maintain watching briefs during works, with clear procedures for protection and documentation of any “chance finds” encountered (cost of this has been provided in the ESMP, Chapter 8).

4. The contractor is obliged to provide for and ensure archaeological intervention in case they come across new finds. This involves immediate discontinuation of works and notifying the Department responsible for museums and monuments about any discoveries.

5. “Chance finds” encountered in presence of official(s) from the Department of Museums and Monuments shall be handed to them for transfer to the national museum.

6. “Chance finds” encountered in absence of these official shall be handed over to supervising Engineering Assistant, Environmental Officer or District Engineer who would immediately notify officials of the Department of Museums and Monuments.

7. The Contractor, and supervising engineer shall maintain contact details of the Department of Museums and Monuments to quickly notify it in case chance finds are encountered.

13 GRIEVANCE MANAGEMENT

If any grievances arise during implementation of RMNCAH projects, they should be redressed through a systematic and documentable grievance redress mechanism. The grievance redress mechanism should provide avenues for affected persons to lodge complaints or grievances against the project or contractors during RMNCAH projects. It also should describe procedures, roles and responsibilities for managing grievances and resolving disputes. Every aggrieved person shall be able to trigger this mechanism to quickly resolve their complaints.

Key objectives of the grievance process are supposed to be:

i) Provide affected people with avenues for making a complaint or resolving any dispute that may arise during project implementation;
ii) Ensure that appropriate and mutually acceptable corrective actions are identified and implemented to address complaints;
iii) Verify that complainants are satisfied with outcomes of corrective actions;
iv) Avoid the need to resort to judicial (legal court) proceedings.

If a complaint is not related to construction activities, it should be addressed directly to the medical facility In-Charge.

Based on above objectives, grievance management process is described below:

Step 1: Receipt of complaint

A verbal or written complaint from a complainant will be received by the site supervising engineer and recorded in a complaints log kept on site. Complainants will also report any project related comments to the in-charge of the HF or HC.

Step 2: Determination of corrective action

If in his/her view, a grievance can be solved at this stage, the site supervising engineer will determine a corrective action in consultation with the aggrieved person. Grievances will be logged in, resolved and status reported back to complainants within 5 working days. If more time is required this will be communicated clearly and in advance to the aggrieved person.

Step 3: Meeting with the complainant

The proposed corrective action and timeframe in which it is to be implemented will be discussed with the complainant within 5 days of receipt of the grievance. Consent to proceed with corrective action will be sought from the complainant and witnessed by the area's local council chairperson (LC Chairman) and a member of the HMT.

Step 4: Implementation of corrective action

Agreed corrective action will be undertaken by supervising engineer and/or the in-charge of HF/HC within the agreed timeframe. The date of the completed action will be recorded in the grievance log.

Step 5: Verification of corrective action

To verify satisfaction, the aggrieved person will be asked to return and resume the grievance process, if not satisfied with the corrective action.

14 HEALTHCARE WASTE MANAGEMENT GUIDELINES

Health care waste management (HCWM) is a process to help ensure proper hospital hygiene and safety of health care workers and communities. It includes planning and procurement, construction, staff training and behavior, proper use of tools, machines and pharmaceuticals, proper disposal methods inside and outside the hospital, and evaluation. Its many dimensions require a broader focus than the traditional health specialist or engineering point of view. The stages in HCWM are: production of waste within a hospital ward, segregation of waste, ward storage, onsite transportation and treatment (if any), onsite central storage, offsite transportation, treatment, and final disposal. Dealing with such a comprehensive subject which impacts the construction and functionality of health facilities, can be daunting.

Uganda has inadequate HCWM systems in relation to other resource-poor countries both worldwide and specifically within the sub-Saharan African region. A study to identify strategies for improving HCWM, which was conducted in 2003, showed that on average, a hospital generates 0.1 kg of waste/bed/day (excluding pathological waste); a health center (HC) IV generates 1.5 kg of waste /day; a HC III generates 0.6 kg of waste/day; and a HC II generates 0.5 kg of waste /day [1]. However, there is no robust system in place to manage this waste. Poor segregation practices were reported to be highly prevalent and open sharps containers were being used for collection of used needles and syringes. More recent data collected in districts in eastern Uganda show that on average, a district generates 1,000 kg of hazardous waste per month. National surveys on injection and waste management practices conducted in 2003 and 2013 found that health facilities lacked proper trolleys for on-site transportation of waste. The surveys revealed that 44% and 21% of injection providers interviewed had experienced needle-stick injuries in the year prior to the survey in 2003 and 2013, respectively. Incinerators were found in only 2% of the health units.

The recommendations contained in The Health Workers Guide Second Edition 2013 shall be applied in all health facilities in the country. In situations where all recommendations cannot be immediately applied due to financial or institutional constraints, guidelines provided in Annex 8 shall be implemented. The project shall ensure that health workers are trained and provided waste segregation supplies including bins, bin liners, and safety boxes in participating HCFs. In conclusion, with proper planning, targeted interventions can greatly improve HCWM practices.

At each facility there will be a designated individual for HCWM, and this officer will be incorporated into existing QIT where applicable. In absence of such teams, a working group responsible for implementation of the HCWM plan will be established and trained on HCWM.

14.1 Overview of prevailing conditions

At the time of preparation of this ESMF, key findings below were made at several health centers

a) Onsite facilities

Many health centers in Uganda dispose of waste by combustion in masonry kilns where medical waste is burnt on a metal grate. These kilns characteristically lack provision of emissions scrubbing and hence largely simply turn a solid waste problem to an air pollution challenge. Inability to reach combustion temperatures higher than 1200^{o}C at which dioxins are known to be destroyed, the kilns are a chronic source of dioxins and other polyaromatic hydrocarbons (PAHs) which are cancer-causing (carcinogenic).

Plate 1: This masonry kiln "incinerator" at Kamion Health Center II was poorly designed and its construction was never completed.

b) **Centralized disposal facilities**

It is difficult to find a local government (district) in Uganda that has a centralised medical health disposal facility, either an incinerator or secure landfill. This is the reason waste is disposed of, often inappropriately, on premises by burial (placenta pits) or combustion in masonry kilns or open air burning.

c) Onsite healthcare waste management practices

Plate 2: Collecting healthcare waste in open wrongly labeled containers is a common problem at rural health centers

Waste segregation is still a major challenge for especially rural health centers. While color coding is theoretically known by healthcare staff, often waste ends up collected in wrongly color-coded containers. For example the In-Charge of Serere Health Center IV explained that, dangerous waste is put in RED bins, Food waste in YELLOW bins and stationery waste in BLACK bins but as you seen in above picture (Plate 2) two of the three containers bins had similar colors in spite of the signs on the tiled wall indicating RED, YELLOW and BLACK respectively. Collecting medical waste in open containers is not only unsightly but also a public health and occupational risk.

d) Medical waste contractors

Specialist medical waste contractors having technical know-how, safety gear and appropriate equipment for collection, transportation and disposal of healthcare waste are rare in Uganda. This deficiency is even graver for healthcare facilities located in rural areas. Therefore the common practice at health centers is for waste to be managed by facility's staff who often lack awareness about potential risks, necessary safety gear and potency of some medical waste streams.

e) Linkage with HCWM guidelines

In addition to the National Health Care Waste Management Plan (2009/2010 – 2011/2012) prepared and disclosed under the previous IDA projects, the MoH has the following documents on health care waste management and infection control:

i) Approaches to Health Care Waste Management (HCWM), Health Workers Guide, Second Edition (2013);
ii) Uganda National Infection Prevention and Control Guidelines (December 2013);
iii) National Policy on Injection Safety and Health Care Waste Management (2014).

These documents shall guide management of HCW at facilities constituting this project. According to the proposed project, implementation to this effect shall be through:

- Provision of service standards/protocols for health care waste management (HCWM) under Component 2's "Improved quality of care and supervision",
- Implementation of the medical waste management plan,
- Training health workers in healthcare waste management

14.2 Practical guidelines for management of each class of healthcare waste

Key principles of good health care waste management that will be followed during project implementation are:

- Minimizing waste at purchasing and point-of-service delivery stage
- Segregation of hazardous from non-hazardous HCW
- Adequate packaging, handling, and safe storage of all waste categories
- Safe, appropriate transportation
- Proper treatment of hazardous waste
- Appropriate final disposal.

Simple easy to follow guidelines for proper management of each class of waste are outlined Annex 8.

The following HCWM recommendations adopted from: *"Approaches to Health Care Waste Management (HCWM): The Health Workers Guide Second Edition 2013"* will be implemented, as follows:

A. The District Health Officers

The DHOs will:

a) Put in place arrangements to make sure that infectious health care waste/hazardous waste is not mixed with general waste destined for public landfills. These are set out in summary in tables 7 & 8 below

b) Participate in the formulation for HCWM plan activities proposed for health facilities in their areas of jurisdiction
c) Ensure that coordination, monitoring, and reporting on implementation of the HCWM plan is exercised by the HCWM Committee
d) Support facilities to implement their HCWM plan
e) Set up periodic training programs in all health facilities to ensure that adequate training on HCWM is given to all staff
f) Coordinate and monitor all disposal operations, and for this purpose meet regularly with the concerned representative of the local council.

Table 7: Health Facility/Health Post (Rural)

Activities	**Short Term Solution (up to 2 months)**	**Long Term Solution (beyond 2 months)**
1. Segregation	• Waste labeling • Three-bin system	Three-bin system
2. Collection	Health facility based	Health facility based
3. Storage	On-site storage room	On-site storage room
4. Transportation On-site transport	Wheel barrow/trolley Bucket	Trolley
5. Treatment	• Brick type incinerator/small-scale incinerator (SSI) • HLD • Autoclave/steam for highly infectious waste and reusable items	• De Montfort Incinerator • Brick type incinerator • Double chamber • Autoclave/steam sterilizer for highly infectious waste and reusable items
6. Disposal (**For all category of wastes**)	• Encapsulation • Secured pit burial • Ash pit • Pit burial • Placenta pit • Needle pit	• Incinerator (see above) • Ash pit •

Table 8: Health Facility/Health Post (Urban)

Activities	**Short Term Solution (up to 2 months)**	**Long Term Solution (beyond 2 months)**
1. Segregation	Waste bin labeling	Three-bin system
2. Collection	Health facility based collection	• Health facility based
3. Storage	Puncture resistant container	• Metallic or plastic receptacle • Interim storage room
4. Transportation On-site transport Offsite	• Wheel barrow • Buckets • Motorcycle/car	• Trolley • Car
5. Treatment	• SSI • Drum incinerator • Chemical sterilizer	• SSI at/near HC or hospital • Drum incinerator at/near HC or hospital

Activities	Short Term Solution (up to 2 months)	Long Term Solution (beyond 2 months)
6. Disposal (For all category of wastes)	• Ash pit • Needle pit • Pit burial • Placenta pit	• Incinerator • Ash pit

B. Development and Implementation of a Health Care Waste Management Plan

Each HCW-generating facility shall develop a comprehensive waste management plan as part of the comprehensive HF plan. The HF waste management plan shall be guided by the National HCWM Strategic Plan and HCWM Guidelines. The HCWM plan shall:

i) Spell out duties and responsibilities for each management level and different categories of HF staff members. The roles and responsibilities shall be accompanied by SOPs.
ii) Contain an estimation of the quantities of HCW generated and the annual budgets for the implementation of the HCWM procedures/plan
iii) Contain monitoring procedure to track day-to-day activities of the HF and ensure that HCWM rules are adhered to by all staff
iv) Contain information on procedures, location of bins, and storage at strategic points
v) Contain budgets for training of all categories of HF staff, including newly recruited health workers
vi) Contain budgets for emergency storage and disposal of hazardous HCW in the event of a breakdown of the incinerators or autoclave, and in cases of emergencies as in epidemic outbreaks/epidemics.

Do's and Don'ts:

1. **DO ensure that a good system is in place for segregating different types of waste** and that each type is disposed of in an appropriate and safe way.
2. **DO train all levels of health care staff** (administrators, doctors, nurses, cleaning staff, lab. technicians and engineers) to help ensure that the materials and methods chosen are used correctly and consistently.
3. **DO vaccinate** all workers who come into contact with HCW against hepatitis B virus.
4. **DO monitor costs** throughout project implementation in order to determine whether projections are correct and to provide data for better future cost estimates.
5. **DO** make reasonable adjustments to the project when monitoring progress and costs.
6. **DO** be realistic. Many countries want the very best and latest technology but don't have the necessary resources for sustained use. Proper HCWM can be viewed as a step-wise process, with gains made every few years. The most important goal is to ensure the health and safety of health care workers and the local community.
7. **DON'T forget to engage hospital staff in HCWM decisions.** Normally, as a HCWM progresses, staff will begin offering serious and substantive advice and ideas for improvement within local constraints.
8. **DO** consider and consult with the local community.

Project acceptability within the local community is key and project managers need to get early advice and understand socio-economic factors and local concerns. Communities can become surprisingly emotional about HCWM, especially if it touches on cultural biases regarding various types of waste. It is important to address these issues seriously and resolve any concerns quickly: a project that might be viewed as a success internally could be viewed negatively by the community.

14.3 Linkage with HCWMP and strengthening infection control at healthcare facilities

The project will deliver some of the requirements of the HCWMP and enable strengthening of infection control at healthcare facilities. This will be achieved through training of healthcare staff in proper waste segregation by types, proper containerization or temporary storage before disposal and disposal as required by national guidelines. This training shall also impart skills necessary for healthcare staff to supervise services of independent /private medical waste contractors hired by health facilities.

14.4 HCWM Interventions

14.4.1 Existing situation

MoH has substantial experience in managing medical waste in compliance with Uganda's national environmental requirements, and experience with World Bank's safeguards gained from the implementation of existing IDA projects. However, many health facilities still face significant challenges with management of health care waste, ranging from lack, malfunctioning, dilapidated, or out-of-service infrastructure and lack of records on HCWM. Component 2 of the project shall support health facilities that identify needs and priorities for HCWM infrastructure and improvement of processes.

MoH has a health workers guide for HCWM, which will be made available to all facilities under the project. In addition, this ESMF which provides guidance on HCWM (Appendix 9) will also be made available to participating healthcare facilities.

14.4.2 Criteria on HCWM for selecting participating healthcare facilities

HCWM shall be part of the selection criteria for participating health facilities. Selected facilities will have adequate facilities, know-how, staff and commitment to ensure proper HCWM. Therefore to qualify for participation, as a minimum, the HC facility shall have:

- A well-designed, properly constructed placenta pit (if facility has maternity ward)
- An incineration unit (built in masonry refractory blocks, or of any other suitable type)

It is expected that with financial resources healthcare facilities get, they should be able to properly manage HCW including infection control through measures below:

- Use of stainless trolleys for healthcare waste movement instead of wheelbarrows
- Use of proper protective gear by personnel handling medical waste
- Procurement of waste collection containers in case there is delay in receipt of ones supplied by National Medical Stores (NMS)

14.4.3 Interventions planned by the project

Under Component 2, the project will issue service standards/protocols including on health care waste management (besides ones on maternal and perinatal death audits). Training to build capacity in proper HCWM will be provided for staff of participating healthcare facilities.

Each participating site shall develop a HCWM-Plan which shall be reviewed by IDA before implementation.

It is noted that the project will build new HCW management facilities and where necessary refurbish the dilapidated waste pits, incinerators and placenta pits.

15 ESMF IMPLEMENTATION BUDGET

The quantities, specifications and estimated costs of design measures to avoid or mitigate negative impacts of each project component site will be assessed by the civil design consultants together with their socio-environmental specialist and incorporated into bidding documents. The contractor will execute all required works and reimbursed through pay items in the bill of quantities financed by the project.

Table below shows a budget breakdown of the cost for implementing the Environmental and Social Management Framework (ESMF).

Table 9: Budget estimate for implementing the ESMF

	Item	Cost Estimate (US $)	Notes
1	Mitigation action required during Renovations/repairs/ construction of new health centers	400,000	Control of erosion, dust, drainage impacts and construction waste management
2	Budget for position of Environmental Health Specialist	180,000	Budgeted at USD3000 gross monthly salary for 5 years
3	Improvement of HCW management through support to implementation of the national health care waste plan (including training, preparation of the HF HCWM plans)	200,000	Lumpsum cost for entire project
4	Supervision and monitoring by district officers (responsible for social and environment affairs)	200,000	Budget based on monitoring plan below: ▪ 10 Districts sampled per monitoring quarter ▪ USD 1000 per district per quarter as total expenses for all staff involved. ▪ 20 Quarters in 5 years (hence total: 10 Districts x 20 Quarters x USD1000)
5	Training of health workers on HCWM and strengthening infection control at health facilities	320,000	Training of Health Workers in proper HCWM and World Bank Safeguards (assuming an average of USD80,000 per region)
6	Renovation of existing healthcare waste facilities		To be part of contractors' assessment and price quote
7	Lumpsum support for purchase of HCW containers	400,000	Cost for all four regions
	TOTAL (US$)	**1,700,000**	

16 CONCLUSION

This ESMF describes the proposed project, identifies generic and/or likely social and environmental impacts and proposes management measures to control socio-environmental effects during project implementation.

ESMP should be developed at ESIA stage of project facilities where this is necessary. Involvement of existing institutional structures and training is important especially for impact monitoring. For this reason capacity building of Ministry of Health's Environmental Health Division (EHD), District Local Governments and Health Facility staff is recommended to ensure they are effective in monitoring not only construction activities but also associated operation phase socio-environmental impacts as provided in this ESMF.

References

1. Approaches to Health Care Waste Management, Health Workers Guide, Second Edition (2013),
2. National Health Care Waste Management Plan (2009/2010 – 2011/2012)
3. National Policy on Injection Safety and Health Care Waste Management (20014).
4. NEMA (2009), "*Uganda: Atlas of Our Changing Environment*." National Environment Management Authority (NEMA)
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6. Population Secretariat (2010). *Uganda: Population Factors & National Development*. Kampala Uganda
7. Sansa. A, 2005: relationship between indoor air pollution and acute respiratory infections among children in Uganda. Workshop, Tanzania, January 2005.
8. The Land Act 1998
9. The National Environment Act, Cap 153.
10. The Public Health Act, Cap 281
11. The Water Act Cap 152
12. The Water Resources Regulations 1998
13. Uganda National Infection Prevention and Control Guidelines (Dec 2013),
14. Vaughn L.M, Jacquez. F. and C. Baker. R.C, 2009 . Cultural Health Attributions, Beliefs, and Practices: Effects on Healthcare and Medical Education The Open Medical Education Journal, 2009, 2, 64-74

Annexes

Annex 1: Environmental and Social Screening Form (ESSF)

Please type or print clearly, completing this form in its entirety. You may provide additional information on a separate sheet of paper if necessary. Kindly note that the information you are to provide is required by Section 22 of the National Environmental Management Act of 1994 and it is an offence to give inaccurate information under Section 53 (C) of the same Act.

Project environmental categorisation that will be useful in screening is shown below

Category A: Projects expected to have significant adverse social and environmental impacts that are diverse, irreversible and unprecedented
Category B: Projects are expected to have limited adverse social and or environmental impacts that can be readily addressed through mitigation measures
Category C: Projects are expected to have minimal or no adverse impacts

Source : www.ifc.org

SECTION 1: INFORMATION ON THE CONTACT PERSON

Name: ----------

Institutional Affiliation ----------

Business Title / position ----------

Business Address ----------

Telephone ----------

SECTION 2: DESCRIPTION OF THE PROPOSED PROGRAM

Name of Proposed Program ----------

Date expected to start construction ----------

Proposed location of program ----------
(Attach a map or maps, covering the proposed site and Surrounding 5 km radius)

Land Area ----------
(Approximate land area and of proposed location)

Current Land use (Describe how the land is being used at present)

Describe any Possible Alternative Site(s) ----------

Describe other types of facilities (including health centers and schools) which are located within 100 meters of the site, or are proposed to be located near the proposed facility. Indicate the proximity of the proposed site to residential areas, national parks or areas of ecological, historical or cultural importance.

Indicate whether adequate infrastructure exists at the proposed location, or whether new building, roads, electricity and water lines, or drainage systems will need to be constructed as a part of the proposed program.

SECTION 3: EMPLOYEES AND LABOURERS

Number of people to be employed:

Employees and Laborers	During Construction	During Routine Operation
FULL-TIME		
PART-TIME		

Indicate whether you plan to construct housing / sanitation facilities for temporary or permanent Workers.

SECTION 4: PRODUCTS

Briefly state the nature of the product(s) or output of the proposed sub-program and the expected quantities on a quarterly or annual basis. Indicate the intended uses of the product(s).

Name of Product / Output	Description of uses	Anticipated Output per Qtr/Yr

SECTION 5: BY-PRODUCTS, WASTE MANAGEMENT AND DISPOSAL

Specify the nature of each waste or by-product and the quantity to be generated

Type	Description	Quantity in Kg per wk/mo	Proposed disposal method
Solid (Bulk)			
Solid (particulate)			
Liquid			
Gaseous			
Medical Waste			
Asbestos			
PCB			
Other			

Proposed method of disposal or management of waste (e.g. Burning, burying, landfills etc.) and capacity needed to safely implement the proposed disposal method.

Type(s) and Source	Method of Disposal / Management	Capacity Needs

Indicate sources of noise pollution, the type / quality of noise (i.e. machinery / repetitive pounding, etc.)

Source of Noise	Type of Noise

SECTION 6: ENVIRONMENTAL IMPACTS
Please indicate environmental impacts that may occur as a result of the proposed program.

A. The Biological Environment

8.0 The Natural Environment

8.1 Describe the habitats and flora and fauna in the sub-program area and in the entire area expected to be affected by the sub-program (e.g., downstream areas, access roads):

8.2 Will the sub-program directly or indirectly affect:
8.2.1 Natural forest types?
8.2.2 Mangroves or swamps?
8.2.3 Wetlands (i.e., lakes, rivers, swamps, seasonally inundated areas)?
8.2.4 Natural critical habitats (parks, protected areas)?
8.2.5 Other habitats of threatened species that require protection under Mozambican laws and/or international agreements?

YES ____ NO _____

8.3 Are there according to background research / observations any threatened / endemic species in the program area that could be affected by the program?

YES ____ NO _____

8.4 Will vegetation be cleared?
YES ____ NO _____

8.5 Will there be any potential risk of habitat fragmentation due to the clearing activities?

YES ____ NO _____

8.6 Will the program lead to a change in access, leading to an increase in the risk of depleting biodiversity resources?

YES ____ NO _____

Provide an additional description for "yes" answers:

_____

9.0 Protected Areas
Does the sub-program area or do sub-program activities:

9.1 Occur within or adjacent to any designated protected areas?

YES ____ NO _____

9.2 Affect any protected area downstream of the program?

YES ____ NO _

9.3 Affect any ecological corridors used by migratory or nomadic species located between any protected areas or between important natural habitats (protected or not) (e.g. mammals or birds)?

YES ____ NO _

Provide an additional description for "yes" answers:

_____

10.0 Invasive Species

10.1 Is the sub-program likely to result in the dispersion of or increase in the population of invasive plants or animals (e.g. along distribution lines or as a result of a dam)?

YES ____ NO _

Provide an additional description for a "yes" answer: _____

B. The Physical Environment

11.0 Geology / Soils

11.1 Will vegetation be removed and any surface left bare? YES _____ NO ___

11.2 Will slope or soil stability be affected by the program? YES _____ NO ___

11.3 Will the sub-program cause physical changes in the program area (e.g., changes to the topography)? YES ____ NO __

11.4 Will local resources, such as rocks, wood, sand, gravel, or groundwater be used? YES __ NO ___

11.5 Could the sub-program potentially cause an increase in soil salinity in or downstream the program area? YES ____ NO _____

11.6 Could the soil exposed due to the program potentially lead to an increase in lixiviation of metals, clay sediments, or organic materials? YES ____ NO __

12.0 Landscape / Aesthetics

12.1 Is there a possibility that the sub-program will adversely affect the aesthetics of the landscape? YES ____ NO __

13.0 Pollution

13.1 Will the sub-program use or store dangerous substances (e.g., large quantities of hydrocarbons)? YES ____ NO __

13.2 Will the sub-program produce harmful substances? YES ____ NO ___

13.3 Will the sub-program produce solid or liquid wastes? YES ____ NO ___

13.4 Will the sub-program cause air pollution? YES ____ NO __

13.5 Will the sub-program generate noise? YES ____ NO __

13.6 Will the sub-program generate electromagnetic emissions? YES ____ NO ___

13.7 Will the sub-program release pollutants into the environment? YES ____ NO ___

13.8 Will the sub-program generate medical waste? YES____ NO__

13.9 Will the sub-program generate asbestos? YES___ NO___

14.0 Will the sub-program generate PCB? YES___ NO__

C. The Social Environment

14.0 Land use, Resettlement, and/or Land Acquisition

14.1 Describe existing land uses on and around the sub-program area (e.g., community facilities, agriculture, tourism, private property, or hunting areas):

14.2 Are there any land use plans on or near the sub-program location, which will be negatively affected by sub-program implementation? YES ____ NO_____

14.3 Are there any areas on or near the sub-program location, which are densely populated which could be affected by the sub-program? YES ____ NO __

14.4 Are there sensitive land uses near the program area (e.g., hospitals, schools)?
YES ____ NO____

14.5 Will there be a loss of livelihoods among the population? YES _____ NO ___

14.6 Will the sub-program affect any resources that local people take from the natural environment? YES ____ NO _____

14.7 Will there be additional demands on local water supplies or other local resources? YES _ NO _

14.8 Will the sub-program restrict people's access to land or natural resources? YES _____ NO ____

14.9 Will the program require resettlement and/or compensation of any residents, including squatters? YES __ NO ____

14.10 Will the sub-program result in construction workers or other people moving into or having access to the area (for a long time period and in large numbers compared to permanent residents)? YES ____ NO ___

14.11 Who is/are the present owner(s)/users of resources/infrastructures the sub-program area?

15.0 Occupational Health and Safety, Health, Welfare, Employment, and Gender

15.1 Is the sub-program likely to safeguard worker's health and safety and public safety (e.g., occupational health and safety issues)? YES __ NO _____

15.2 How will the sub-program minimize the risk of accidents? How will accidents be managed, when they do occur?

15.3 Is the program likely to provide local employment opportunities, including employment opportunities for women? YES ____ NO ____

Provide an additional description for "yes" answers:

16.0 Historical, Archaeological, or Cultural Heritage Sites
Based on available sources, consultation with local authorities, local knowledge and/or observations, could the sub-program alter:

16.1 Historical heritage site(s) or require excavation near the same?YES __ NO ___

16.2 Archaeological heritage site(s) or require excavation near the same? YES ___ NO ____

16.3 Cultural heritage site(s) or require excavation near the same? YES _____ NO ___

16.4 Graves, or sacred locations (e.g., fetish trees or stones) or require excavations near the same?
YES ____ NO ___

N.B. For all affirmative answers (YES) Provide description, possible alternatives reviewed and/or appropriate mitigating measures.

D. DETERMINATIONS:

Based on the above screening results, the following determinations are made:

1) The sub-program has been assigned the environmental category A: ~~Since the~~Since ~~te~~ parent program has been categorized as a B, this sub-program shall not arise and cannot be funded.

2) The sub-program has been assigned the environmental category: B: Implementation of the environmental mitigation measures as proposed in the Environmental and Social Checklist (with amendments as appropriate) and as per Environmental Guidelines for Contractors and Clause 8 contained in the Bidding Documents will suffice

3) The sub-program has been assigned the environmental category C: The sub-program does not require any additional environmental work and therefore can be implemented immediately.

In the event that a sub-program requires land acquisition, please prepare and implement a Resettlement Action Plan (RAP) consistent with the provisions of the Resettlement Policy Framework, July 2007

Please note that civil works cannot commence until the provisions of the RAP have been implemented to the satisfaction of the World Bank and the affected persons.

SECTION 8: TESTIMONY

I confirm that the information provided herein is accurate to the best of my knowledge
---

E. LIST OF THIRD SCHEDULE PROJECTS ACCORDING TO THE NATIONAL ENVIRONMENT ACT, CAP 153

The National Environment Act
Third schedule
Projects to be considered for environmental impact assessment.

1. **General –**
   a) An activity out of character with its surroundings;
   b) Any structure of a scale not in keeping with its surrounding;
   c) Major changes in land use.
2. **Urban development, including –**

a) Designation of new townships;
b) Establishment of industrial estates;
c) Establishment or expansion of recreational areas;
d) Establishment or expansion of recreational townships in mountain areas, national parks and game reserves;
e) Shopping centres and complexes.

3. Transportation, including-;
a) All major roads;
b) All roads in scenic, wooded or mountainous areas;
c) Railway lines;
d) Airports and airfields;
e) Pipelines;
f) Water transport.

4. Dams, rivers and water resources, including-
a) Storage dams, barrages and weirs;
b) River diversions and water transfers between catchments;
c) Flood-control schemes;
d) Drilling for the purpose of utilizing ground water resources, including geothermal energy.

5. Aerial spraying

6. Mining, including quarrying and open-cast extraction of-
a) Precious metals;
b) Diamonds;
c) Metalliferous ores;
d) Coal;
e) Phosphates;
f) Limestone and dolomite;
g) Stone and slate;
h) Aggregates, sand and gravel;
i) Clay;
j) Exploration for the production of petroleum in any form.

7. Forestry-related activities, including-
a) Timber harvesting;
b) Clearance of forest areas;
c) Reforestation and afforestation.

8. Agriculture, including-
a) Large scale agriculture;
b) Use of new pesticides;
c) Introduction of new crops and animals;
d) Use of fertilizers.

9. Processing and manufacturing industries, including-
a) Mineral processing, reduction of ores and minerals;
b) Smelting and refining of ores and minerals;
c) Foundaries;
d) Brick and earthenware manufacture;
e) Cement works and lime processing;
f) Glass works;
g) Fertilizer manufacturing or processing;
h) Explosives plants;
i) Oil refineries and petrochemical works;
j) Tanning and dressing of hides and skins;
k) Abattoirs and meat-processing plants;
l) Chemical works and process plants;
m) Brewing and malting;
n) Bulk grain processing plants;
o) Fish processing plants;
p) Pulp and paper mills;

q) Food processing plants;
r) Plants for the manufacture or assembly of motor vehicles;
s) Plants for the construction or repair of aircraft or railway equipment;
t) Plants for the manufacturing or processing of rubber;
u) Plants for the manufacturing of tanks, reservoirs and sheet-metal containers;
v) Plants for the manufacturing of coal briquettes.

10. Electrical infrastructure, including-
a) Electricity generation stations;
b) Electrical transmission lines;
c) Electrical substations;
d) Pumped-storage schemes.

11. Management of hydrocarbons, including the storage of natural gas and combustible or explosive fuels

12. Waste disposal, including-
a) Sites for solid waste disposal;
b) Sites for hazardous waste disposal;
c) Sewage disposal works;
d) Major atmospheric emissions;
e) Offensive odours.

13. Natural conservation areas, including-
a) Creation of national parks, game reserves and buffer zones;
b) Establishment of wilderness areas;
c) Formulation or modification of forest management policies;
d) Formulation or modification of water catchment management policies;
e) Policies for management of ecosystems especially by use of fire;
f) Commercial exploitation of natural fauna and flora;
g) Introduction of alien species of fauna and flora into ecosystems.

Annex 2: Environment and Social Mitigation Measures Checklist

A sample checklist is provided below to guide development of mitigation measures during implementation. It should be noted that this checklist is to be used as a guide and full details of mitigation measures shall be documented in the ESIA/ESMP/contract documents.

Activity: Construction of health centers	**Environmental component affected**	**Nature of environmental concern**	**Required action /mitigation measure by Contractor**
1. Burning of Brick Brick making Firewood Burning of bricks	Soil Geology Vegetation	Soil erosion. Dumping of soil waste material Uncovered pits pollution	Sensitize community Tree planting Cover pits
2.Site Leveling Excavations in borrow areas. Grading to attain right camber	Soil Human beings Animals Geology Plants	Erosion and sedimentation Labor accidents. Silting. Creates ponds that encourage breeding of mosquitoes	Restore the borrow areas with topsoil Proper grading of the sites at the right camber Provide first aid kits. Soil bunds should be constructed around a single designated area
3. Building	Human beings	Noise Accidents Dust	Constructors' Dress First aid Kits Protective gear
4. Roofing	Human beings	Accidents	Protective gear First aid Kits
5. Soak pits, septic tanks and disposal fields	Human beings Land Water	Contaminated water Land acquisition Disease outbreak Accessibility of the waste bins, collection points	Community consultation. Consult with DEO for appropriate siting of waste collection point. Provide adequate waste collection bins Conduct hygiene education campaign.
6. Pit latrines	Vegetation Soil Surface water Human beings	Contamination of ground water supply sources through sub- surface flow of human waste. Contamination of surface water sources through transportation by storm runoff. Flies and rodents carrying disease from latrine. More land is used in construction of new latrines when old ones fill up.	Sensitization of people on hygiene practices after using the latrine e.g. washing their hands. If possible, construct lined pit latrines, which can be emptied. Consider constructing water borne squat toilets if there is piped water in the school.

Annex 3: Sample Terms of Reference for EIA

In case an EIA has to be undertaken for any specific project component or facility, the MoH will procure the services of a certified NEMA EIA Practitioner to undertake the EIA study. The following will be the content of the ToR's for this study.

Introduction and Context
This part will be completed at a time and will include necessary information related to the context and methodology to carry out the study. It will briefly describe the purpose and objectives of the project, and the specific facility for which the EIA is undertaken.

Objectives of EIA study

- To identify all likely positive and negative environmental impacts due to the specific project;
- To identify and evaluate all significant negative environmental impacts, and propose appropriate mitigation measures for the attention of the developer, for incorporation into the final construction and operational phases;
- To propose an environmental management plan for all aspects of the specific project.

EIA study tasks

The consultant should realize the following:

- Describe the project characteristics, including extent, land requirement, material requirements, construction works, and the beneficiary community;
- Describe the biophysical characteristics of the environment where the project activities will be realized; and underline the main constraints that need to be taken into account at the field preparation, construction works and future school or project operations;
- Assess the potential environmental and social impacts related to project activities and recommend adequate mitigation measures, including costs estimation.
- Review alternative more cost-effective and environmentally and socially friendlier options for achieving the same objectives,
- Review policy, legal and institutional framework, at national and international level, related to the environment and identify the constraints for best practices in management with appropriate recommendations for improvements,
- Identify responsibilities and actors for the implementation of proposed mitigation measures,
- Assess the capacity available to implement the proposed mitigation measures, and suggest recommendations in terms of training and capacity building and estimate their costs,
- Develop an Environmental Management Plan (EMP) for the project. The EMP should underline (i) the potential environmental and social impacts resulting from project activities (ii) the proposed mitigation measures; (iii) the institutional responsibilities for implementation; (iv) the monitoring indicators; (v) the institutional responsibilities for monitoring and implementation of mitigation measures; (vi) the costs of activities; and (vii) the implementation schedule,
- Public consultations: The EIA results and the proposed mitigation measures will be discussed with populations, NGOs, local administration and other stakeholders impacted by the project activities. Recommendations from this public consultation will be include in the final EIA report.

Structure of the EIA Report

- Cover page
- Table of contents
- List of acronyms
- Executive summary
- Introduction

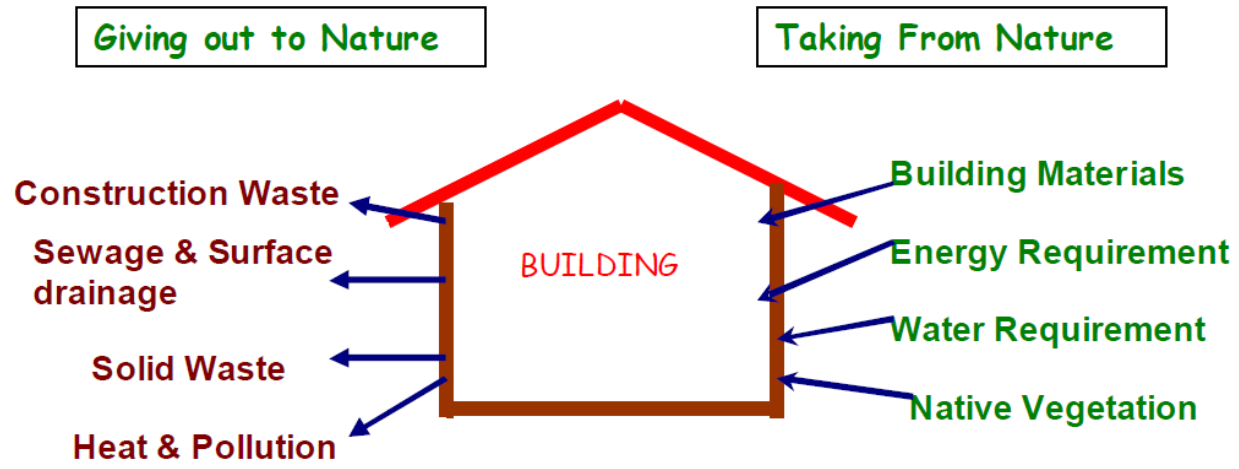
- Description of project activities
- Description of environment in the project area
- Description of policy, legal and institutional framework
- Presentation of results of public consultations and disclosure, and proposed social action by the developer;
- Description of methodology and techniques used in the assessment and analyses of project impacts,
- Description of environmental and social impacts of project activities,
- Environmental Management Plan (EMP) for the project including the proposed mitigation measures; the institutional responsibilities for implementation; the monitoring indicators; the institutional responsibilities for monitoring and implementation of mitigation; Summary table for EMP
- Recommendations
- References
- List of persons / institutions met

Consultant team

The Consultants will be NEMA -Certified EIA Practitioners or others agreed by NEMA.

Typical construction impacts

Typically impacts of construction projects arise from sourcing materials and what is generated after they are used (construction waste) as illustrated below.



Typical impacts are outlined in table below.

	Action	Impact	Mitigation
1	Change of Landuse.	▪ Direct Impact – On the plot of land ▪ Indirect Impact – On neighbouring plots. ▪ Cumulative Impact – On the surrounding area which will gradually change.	▪ Restrict development to school land. ▪ Ensure development is permitted by local physical planning office.
2	Clearing of vegetation.	▪ Soil erosion	▪ Minimise vegetation clearing by

		▪ Dust emissions	restring activity to building footprint, as much as possible. ▪ Revegetate cleared areas as quickly as practicable. ▪ Ensure proper site drainage
3	Material transportation.	▪ Accidents risk to school children. ▪ Road dust. ▪ Traffic noise at school campus.	Schedule this to be before or after school hours.
4	Building activities.	Construction noise.	Schedule noisy activities to be outside school hours.
5	Risk of falling debris to children.	Accident to children.	Fence off construction site to avoid access by children.
6	Waste management	Illegal dumping of waste in unauthorized places leading to contamination or grievances by property owners.	▪ Ensure waste disposal is done with guidance of local environment officer's guidance and authorization. ▪ Stripped soil (overburden) should be used for site restoration/ landscaping, rather than being dumped offsite. ▪ Workers should not liter school campus with litter (plastic bags, water bottles, etc). ▪ Reusable waste (e.g. timber planks, paper bags, etc) should be given to local people if requested. ▪ Pit latrines should be lined with masonry brickwork to enable their emptying with a honey sucker when full.
7	Working at heights or depths	▪ Risk of falls when workers at height (e.g. roofs) do not use safety latches. ▪ Risk of workers being interred by collapsing earth walls when digging pit latrines.	▪ All workers should have appropriate safety gear ▪ Latrines should be safely dug on firm ground, carefully watching out for signs of possible wall failure.
8	Material acquisition	▪ Leaving borrow sites unrestored after project completion.	▪ Obtain material from already existing borrow sites and stone quarries.
9	Employment	▪ Local people benefitting from construction projects	▪ Contractors should hire atleast 5 people from the local community at anyone project.
10	Occupational safety	▪ Workers getting buried by collapsing earth walls when digging pit latrines	▪ Pits must never be dug in unstable soils ▪ All workers must have necessary safety gear

Annex 4: Clauses for Construction Work Contracts on Environmental Compliance

General Environmental Management Conditions for Construction Contracts

General

1. In addition to these general conditions, the Contractor shall comply with any specific Environmental Management Plan (EMP) or Environmental and Social Management Plan (ESMP) for the works he is responsible for. The Contractor shall inform himself about such an EMP, and prepare his work strategy and plan to fully take into account relevant provisions of that EMP. If the Contractor fails to implement the approved EMP after written instruction by the Supervising Engineer (SE) to fulfill his obligation within the requested time, the Owner reserves the right to arrange through the SE for execution of the missing action by a third party on account of the Contractor.

2. Notwithstanding the Contractor's obligation under the above clause, the Contractor shall implement all measures necessary to avoid undesirable adverse environmental and social impacts wherever possible, restore work sites to acceptable standards, and abide by any environmental performance requirements specified in an EMP. In general these measures shall include but not be limited to:

   (a) Minimize the effect of dust on the surrounding environment resulting from earth mixing sites, asphalt mixing sites, dispersing coal ashes, vibrating equipment, temporary access roads, etc. to ensure safety, health and the protection of workers and communities living in the vicinity dust producing activities.

   (b) Ensure that noise levels emanating from machinery, vehicles and noisy construction activities (e.g. excavation, blasting) are kept at a minimum for the safety, health and protection of workers within the vicinity of high noise levels and nearby communities.

   (c) Ensure that existing water flow regimes in rivers, streams and other natural or irrigation channels is maintained and/or re-established where they are disrupted due to works being carried out.

   (d) Prevent bitumen, oils, lubricants and waste water used or produced during the execution of works from entering into rivers, streams, irrigation channels and other natural water bodies/reservoirs, and also ensure that stagnant water in uncovered borrow pits is treated in the best way to avoid creating possible breeding grounds for mosquitoes.

   (e) Prevent and minimize the impacts of quarrying, earth borrowing, piling and building of temporary construction camps and access roads on the biophysical environment including protected areas and arable lands; local communities and their settlements. In as much as possible restore/rehabilitate all sites to acceptable standards.

   (f) Upon discovery of ancient heritage, relics or anything that might or believed to be of archeological or historical importance during the execution of works, immediately report such findings to the SE so that the appropriate authorities may be expeditiously contacted for fulfillment of the measures aimed at protecting such historical or archaeological resources.

   (g) Discourage construction workers from engaging in the exploitation of natural resources such as hunting, fishing, collection of forest products or any other activity that might have a negative impact on the social and economic welfare of the local communities.

   (h) Implement soil erosion control measures in order to avoid surface run off and prevents siltation, etc.

   (i) Ensure that garbage, sanitation and drinking water facilities are provided in construction workers camps.
   (j) Ensure that, in as much as possible, local materials are used to avoid importation of foreign material and long distance transportation.

   (k) Ensure public safety, and meet traffic safety requirements for the operation of work to avoid accidents.

3. The Contractor shall indicate the period within which he/she shall maintain status on site after completion of civil works to ensure that significant adverse impacts arising from such works have been appropriately addressed.

4. The Contractor shall adhere to the proposed activity implementation schedule and the monitoring plan / strategy to ensure effective feedback of monitoring information to project management so that impact management can be implemented properly, and if necessary, adapt to changing and unforeseen conditions.

5. Besides the regular inspection of sites by the SE for adherence to the contract conditions and specifications, the Owner may appoint an Inspector to oversee the compliance with these environmental conditions and any proposed mitigation measures. State environmental authorities may carry out similar inspection duties. In all cases, as directed by the SE, the Contractor shall comply with directives from such inspectors to implement measures required to ensure the adequacy rehabilitation measures carried out on the bio-physical environment and compensation for socio-economic disruption resulting from implementation of any works.

Worksite/Campsite Waste Management

6. All vessels (drums, containers, bags, etc.) containing oil/fuel/surfacing materials and other hazardous chemicals shall be bunded in order to contain spillage. All waste containers, litter and any other waste generated during the construction shall be collected and disposed of at designated disposal sites in line with applicable government waste management regulations.

7. All drainage and effluent from storage areas, workshops and camp sites shall be captured and treated before being discharged into the drainage system in line with applicable government water pollution control regulations.

8. Used oil from maintenance shall be collected and disposed of appropriately at designated sites or be re-used or sold for re-use locally.

9. Entry of runoff to the site shall be restricted by constructing diversion channels or holding structures such as banks, drains, dams, etc. to reduce the potential of soil erosion and water pollution.

10. Construction waste shall not be left in stockpiles along the road, but removed and reused or disposed of on a daily basis.

11. If disposal sites for clean spoil are necessary, they shall be located in areas, approved by the SE, of low land use value and where they will not result in material being easily washed into drainage channels. Whenever possible, spoil materials should be placed in low-lying areas and should be compacted and planted with species indigenous to the locality.

Material Excavation and Deposit

12. The Contractor shall obtain appropriate licenses/permits from relevant authorities to operate quarries or borrow areas.

13. The location of quarries and borrow areas shall be subject to approval by relevant local and national authorities, including traditional authorities if the land on which the quarry or borrow areas fall in traditional land.

14. New extraction sites:

    a) Shall not be located in the vicinity of settlement areas, cultural sites, wetlands or any other valued ecosystem component, or on high or steep ground or in areas of high scenic value, and shall not be located less than 1km from such areas.

    b) Shall not be located adjacent to stream channels wherever possible to avoid siltation of river channels. Where they are located near water sources, borrow pits and perimeter drains shall surround quarry sites.

    c) Shall not be located in archaeological areas. Excavations in the vicinity of such areas shall proceed with great care and shall be done in the presence of government authorities having a mandate for their protection.

d) Shall not be located in forest reserves. However, where there are no other alternatives, permission shall be obtained from the appropriate authorities and an environmental impact study shall be conducted.

e) Shall be easily rehabilitated. Areas with minimal vegetation cover such as flat and bare ground, or areas covered with grass only or covered with shrubs less than 1.5m in height, are preferred.

f) Shall have clearly demarcated and marked boundaries to minimize vegetation clearing.

15. Vegetation clearing shall be restricted to the area required for safe operation of construction work. Vegetation clearing shall not be done more than two months in advance of operations.

16. Stockpile areas shall be located in areas where trees can act as buffers to prevent dust pollution. Perimeter drains shall be built around stockpile areas. Sediment and other pollutant traps shall be located at drainage exits from workings.

17. The Contractor shall deposit any excess material in accordance with the principles of these general conditions, and any applicable EMP, in areas approved by local authorities and/or the SE.

18. Areas for depositing hazardous materials such as contaminated liquid and solid materials shall be approved by the SE and appropriate local and/or national authorities before the commencement of work. Use of existing, approved sites shall be preferred over the establishment of new sites.

Rehabilitation and Soil Erosion Prevention

19. To the extent practicable, the Contractor shall rehabilitate the site progressively so that the rate of rehabilitation is similar to the rate of construction.

20. Always remove and retain topsoil for subsequent rehabilitation. Soils shall not be stripped when they are wet as this can lead to soil compaction and loss of structure.

21. Topsoil shall not be stored in large heaps. Low mounds of no more than 1 to 2m high are recommended.
22. Re-vegetate stockpiles to protect the soil from erosion, discourage weeds and maintain an active population of beneficial soil microbes.

23. Locate stockpiles where they will not be disturbed by future construction activities.
24. To the extent practicable, reinstate natural drainage patterns where they have been altered or impaired.

25. Remove toxic materials and dispose of them in designated sites. Backfill excavated areas with soils or overburden that is free of foreign material that could pollute groundwater and soil.

26. Identify potentially toxic overburden and screen with suitable material to prevent mobilization of toxins.
27. Ensure reshaped land is formed so as to be inherently stable, adequately drained and suitable for the desired long-term land use, and allow natural regeneration of vegetation.

28. Minimize the long-term visual impact by creating landforms that are compatible with the adjacent landscape.
29. Minimize erosion by wind and water both during and after the process of reinstatement.
30. Compacted surfaces shall be deep ripped to relieve compaction unless subsurface conditions dictate otherwise.

31. Revegetate with plant species that will control erosion, provide vegetative diversity and, through succession, contribute to a resilient ecosystem. The choice of plant species for rehabilitation shall be done in consultation with local research institutions, forest department and the local people.

Water Resources Management

32. The Contractor shall at all costs avoid conflicting with water demands of local communities.

33. Abstraction of both surface and underground water shall only be done with the consultation of the local community and after obtaining a permit from the relevant Water Authority.

34. Abstraction of water from wetlands shall be avoided. Where necessary, authority has to be obtained from relevant authorities.

35. Temporary damming of streams and rivers shall be done in such a way avoids disrupting water supplies to communities downstream, and maintains the ecological balance of the river system.

36. No construction water containing spoils or site effluent, especially cement and oil, shall be allowed to flow into natural water drainage courses.

37. Wash water from washing out of equipment shall not be discharged into water courses or road drains.

38. Site spoils and temporary stockpiles shall be located away from the drainage system, and surface run off shall be directed away from stockpiles to prevent erosion.

Traffic Management

39. Location of access roads/detours shall be done in consultation with the local community especially in important or sensitive environments. Access roads shall not traverse wetland areas.

40. Upon the completion of civil works, all access roads shall be ripped and rehabilitated.

41. Access roads shall be sprinkled with water at least five times a day in settled areas, and three times in unsettled areas, to suppress dust emissions.

Blasting

42. Blasting activities shall not take place less than 2km from settlement areas, cultural sites, or wetlands without the permission of the SE.

43. Blasting activities shall be done during working hours, and local communities shall be consulted on the proposed blasting times.
44. Noise levels reaching the communities from blasting activities shall not exceed 90 decibels.

Disposal of Unusable Elements

45. Unusable materials and construction elements such as electro-mechanical equipment, pipes, accessories and demolished structures will be disposed of in a manner approved by the SE. The Contractor has to agree with the SE which elements are to be surrendered to the Client's premises, which will be recycled or reused, and which will be disposed of at approved landfill sites.

46. As far as possible, abandoned pipelines shall remain in place. Where for any reason no alternative alignment for the new pipeline is possible, the old pipes shall be safely removed and stored at a safe place to be agreed upon with the SE and the local authorities concerned.

47. AC-pipes as well as broken parts thereof have to be treated as hazardous material and disposed of as specified above.
48. Unsuitable and demolished elements shall be dismantled to a size fitting on ordinary trucks for transport.

Health and Safety

49. In advance of the construction work, the Contractor shall mount an awareness and hygiene campaign. Workers and local residents shall be sensitized on health risks particularly of AIDS.

50. Adequate road signs to warn pedestrians and motorists of construction activities, diversions, etc. shall be provided at appropriate points.

51. Construction vehicles shall not exceed maximum speed limit of 40km per hour.

Repair of Private Property

52. Should the Contractor, deliberately or accidentally, damage private property, he shall repair the property to the owner's satisfaction and at his own cost. For each repair, the Contractor shall obtain from the owner a certificate that the damage has been made good satisfactorily in order to indemnify the Client from subsequent claims.

53. In cases where compensation for inconveniences, damage of crops etc. are claimed by the owner, the Client has to be informed by the Contractor through the SE. This compensation is in general settled under the responsibility of the Client before signing the Contract. In unforeseeable cases, the respective administrative entities of the Client will take care of compensation.

Contractor's Health, Safety and Environment Management Plan (HSE-MP)

54. Within 6 weeks of signing the Contract, the Contractor shall prepare an EHS-MP to ensure the adequate management of the health, safety, environmental and social aspects of the works, including implementation of the requirements of these general conditions and any specific requirements of an EMP for the works. The Contractor's EHS-MP will serve two main purposes:

- For the Contractor, for internal purposes, to ensure that all measures are in place for adequate HSE management, and as an operational manual for his staff.
- For the Client, supported where necessary by a SE, to ensure that the Contractor is fully prepared for the adequate management of the HSE aspects of the project, and as a basis for monitoring of the Contractor's HSE performance.

55. The Contractor's EHS-MP shall provide at least:
- a description of procedures and methods for complying with these general environmental management conditions, and any specific conditions specified in an EMP;
- a description of specific mitigation measures that will be implemented in order to minimize adverse impacts;
- a description of all planned monitoring activities (e.g. sediment discharges from borrow areas) and the reporting thereof; and
- the internal organizational, management and reporting mechanisms put in place for such.

56. The Contractor's EHS-MP will be reviewed and approved by the Client before start of the works. This review should demonstrate if the Contractor's EHS-MP covers all of the identified impacts, and has defined appropriate measures to counteract any potential impacts.

HSE Reporting

57. The Contractor shall prepare bi-weekly progress reports to the SE on compliance with these general conditions, the project EMP if any, and his own EHS-MP. An example format for a Contractor HSE report is given below. It is expected that the Contractor's reports will include information on:
- HSE management actions/measures taken, including approvals sought from local or national authorities;
- Problems encountered in relation to HSE aspects (incidents, including delays, cost consequences, etc. as a result thereof);
- Lack of compliance with contract requirements on the part of the Contractor;
- Changes of assumptions, conditions, measures, designs and actual works in relation to HSE aspects; and
- Observations, concerns raised and/or decisions taken with regard to HSE management during site meetings.

58. It is advisable that reporting of significant HSE incidents be done "as soon as practicable". Such incident reporting shall therefore be done individually. Also, it is advisable that the Contractor keep his own records on health, safety and welfare of persons, and damage to property. It is advisable to include such records, as well as copies of incident reports, as appendixes to the bi-weekly reports. Example formats for an incident notification and detailed report are given below. Details of HSE performance will be reported to the Client through the SE's reports to the Client.

Training of Contractor's Personnel

59. The Contractor shall provide sufficient training to his own personnel to ensure that they are all aware of the relevant aspects of these general conditions, any project EMP, and his own EHS-MP, and are able to fulfill their expected roles and functions. Specific training should be provided to those employees that have particular responsibilities associated with the implementation of the EHS-MP. General topics should be:

- HSE in general (working procedures);
- emergency procedures; and
- social and cultural aspects (awareness raising on social issues).

HIV/AIDS

The contractors should have an HIV/AIDS policy and a framework (responsible staff, action plan, etc) to implement it during project execution.

Cost of Compliance

60. It is expected that compliance with these conditions is already part of standard good workmanship and state of art as generally required under this Contract. The item "Compliance with Environmental Management Conditions" in the Bill of Quantities covers these costs. No other payments will be made to the Contractor for compliance with any request to avoid and/or mitigate an avoidable HSE impact.

Example Format: HSE Report

Contract:
Period of reporting:
HSE management actions/measures:
Summarize HSE management actions/measures taken during period of reporting, including planning and management activities (e.g. risk and impact assessments), HSE training, specific design and work measures taken, etc.

HSE incidents:
Report on any problems encountered in relation to HSE aspects, including its consequences (delays, costs) and corrective measures taken. Include relevant incident reports.

HSE compliance:
Report on compliance with Contract HSE conditions, including any cases of non-compliance.

Changes:
Report on any changes of assumptions, conditions, measures, designs and actual works in relation to HSE aspects.

Concerns and observations:
Report on any observations, concerns raised and/or decisions taken with regard to HSE management during site meetings and visits.

Signature (Name, Title Date):
Contractor Representative

Example Format: HSE Incident Notification

Provide within 24 hrs to the Supervising Engineer

Originators Reference No:
Date of Incident: **Time:**

Location of incident:

Name of Person(s) involved:

Employing Company:

Type of Incident:

Description of Incident:
Where, when, what, how, who, operation in progress at the time (only factual)

Immediate Action:
Immediate remedial action and actions taken to prevent reoccurrence or escalation

Signature (Name, Title, Date):
Contractor Representative

Annex 5: Record of Consultation

Week		Meeting date	31 March 2016
		Recorded by	Richard
Meeting/subject	Meeting with Kaabong District Health Officials and Kamion HC II Officials on, IPP For Uganda Reproductive, Maternal, Neonatal, and Child Health Improvement Project	Total pages	2

Item	Update
1.	**Introduction**
	The team leader started by introducing himself, the project and purpose of the meeting which was primarily to inquire abotu health related issues concerning the Ik people in Kaabong district. Kamion Health Centre II is one of the health centre located in the Ik community. The DHO welcomed the team and he expressed gratitude to consult the Ik people who for long have been marginalized and seen as minority among the people of the district.
2.	**Issues discussed**
2.1.	**Do you have Village Health Team (VHT) in Kaabong District?** We have them in all the sub-counties and villages.
	Are they active in their work? Yes they are active.
	What common diseases are there among the IK? There are many diseases but the most common ones are, Malaria, Respiratory Tract Infections (RTIs), Diarrhoea, Gastro-interties, eye infections and skin diseases.
	Which is the most prevalent but most dangerous? Malaria, Chicken pox, dysentery
	Are there staff who speak Ik language in health center(s) visited by Ik people? Unfortunately no and Ik people are compelled to use Karamojong language since they are the minority.
	Do the IK people practice any traditional health practice? Yes for example consulting traditional healers, medicine men/women and foretellers.
	Do Ik people have culture practices that may be harmful to their health? They copy the practice of the Karamojong for example body tattooing.
	Are the services provided to the IK very specific or general even to the other communities? No special services are provided to the Ik people. However, services such as safe delivery education are often offered, and they (Ik) are also taken as priority at any time, for example they are always attended to 24 hours 7 days a week.
	Is there any cultural practice that prevents them from seeking medical help? Not many apart from the practice of mothers demanding to keep placentas after birth.
	What is the staffing of health centre II? It is supposed to be 9 staff; however for our case we have only 3.
	Do you offer services of Health Centre II or Health Centre III? This is Health CenterII which is meant to offer only out-patient department (OPD). However being the only health centre in the area we offer also other services for health centre III for example, antenatal care (ANC), family planning and deliveries and in-patient (Admission) but with only one bed.
	Does the community get epidemics and when? We get epidemics especially during wet season when there are many mosquitoes.
	How does Kamion HC II manage medical waste? Through segregation into different categories since there are different types of waste for example pharmaceutical waste, human excretes, and other waste.
	Do you have proper waste disposal facilities? No, due to the fact that there is no functional incinerator.

Week		Meeting date	31 March 2016
		Recorded by	Richard
Meeting/subject	Meeting with Kaabong District Health Officials and Kamion HC II Officials on, IPP For Uganda Reproductive, Maternal, Neonatal, and Child Health Improvement Project	Total pages	2

Item	Update
	How does the HC dispose of unclaimed dead bodies? They are always taken to the hospital cemetery
	Does the HC own a cemetery? No.
	What do you suggest about the above? I suggest that the local health centre administration should purchase a parcel of land for that purpose.
	Who owns the land where the health centre located? It was donated by the local community.
	Is there some encroachment on the health centre land? Yes.
	How do you manage the land encroachment problem? Through meetings with the health unit management committee and the encroaching people so that we reach a mutual agreement.
	Generally, what are the challenges faced here? • No communication network available which creates communication gap between the health centre and the main hospital. • There is lack of transport to facilitate health workers movement during outreach programs and implementation of health programs. • Health programmes on radio, posters and brochures are only in Karamojong language creating an information gap for Ik people.
3.	**Recommendations**
	What do you think needs to be done to improve health sector facilities / services here? • Number of staff to be increased from 3 to 9. • Staff housing to be constructed so as to motivate them to offer quality services. • General structure of the health centre to be improved.
3.1.	**What are your recommendations on health?** • Health equipment supply to be increased due to wide catchment area. • Power to be installed for instance solar or standby generator for the purpose of proper storage of medicine and lighting as well. • Ambulance and bicycles to be given to VHTs. • Hiring Ik staff in the health department to make them help each other well.

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH.

LOKIYOTO VILLAGE

Attendance List

Project District: KAABONG – IK COMMUNITY. Date: 31/03/2016

No	Name	Village	Designation	Signature
01-	LOUPE REX TIMOTHY	DHO's office KAABONG	ADHO (MCH/FP)	
02	NGOYA PETER	LCI CHAIRPERSON	KAMION S/C	
03	KWAM LARGO MOTT	LOKIYOTO S/S	KAMION S/C	
04	KUNUME ALICE	LOKIYOTO FARMER	KAMION S/C	
05	LOKWANG SIMON	LOKIYOTO FARMER	KAMION S/C	
06	NATANG MACHILINA	FARMER LOKITOTO	KAMION S/C	
07	LEMEI ANNA	FARMER LOKITOTO	KAMION S/S	
08	NAKONG ALICE	FARMER LOKITOTO	KAMION S/C	
09	CHILLA ANDREW	FARMER NAWADOW	KAMION S/C	
10	LOTUKEI CHATINA	FARMER LOKITOTO	KAMION S/C	
11	KALOYANG LUCIA	PPLE LOKIYOTO	KAMION S/C	
12	NAKONG JESCA	FARMER LOKITOTO	KAMION S/S	
13	ADUPA ROSE	FARMER LOKIYOTO	KAMION S/C	
14	NYELECHA EMUYO	FARMER LOKITOTO	KAMION S/C	
15	NALEM CHRISTINE	FARMER LOKITOTO	KAMION S/C	
16	NAROT BETTY	PPLE LOKITOTO	KAMION S/C	
17	LODUKUI ROBERT	KAMION HEALTH CENTRE	KAMION S/C	

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH.

Attendance List

Project District: KAABONG Date: 31st/08/2016

No	Name	Village	Designation	Signature
995701 01	ADUNGO RAZE	MORU-ATAP	V.H.T.	
231068 02	Ngoya paulino	MORU-ATAP	V.H.T.	
03	SILO1 paulino	MORU ARENGAN	V.H.T.	
OK	LOJORE PASQUALE	NACHAKURET	V H T	
	ALUM MARK	LOUSUNA	V H T	
	LOCHAM HELLEN	KOKOSOWA	V H T	
	KICHA ROSE	MORU-ARENGAN	V H T	
	ITAO MARCHLINA	NAWADOU	V H T	
	NAKOT MARIA	LOCHETO	V H T	
	MACHU CHICILIA	MORU-ATAP	V H T	
	LOKUDA DAVID	NAWADOU	V H T	
	NGOYA JAMES	NAKUKENY	V H T	
	NAKOR ALICE	LOKIYOTO	V H T	
	LOKIENY JAMES	LOCHETO	V H T	
	RIWOKE J. BOSCO	KOKOSOWA	V H T	
	ADUPA SARAH	LOUSUNA	V H T	

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH.

Attendance List

Project District: KAABONG Date: 31st/03/2016

No	Name	Village	Designation	Signature
0756760217	OCHOU JOSEPH	LOKITOTO	VHT	
	ARICO ALFRENSA	NAKUKIENY	VHT	
	NICHELECHA REGINA	NACHAKUNET	VHT	
	LOKIEN			

Air Water Earth (AWE)
27 Binayomba Road
Bugolobi, Kampala, Uganda
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Kampala, Uganda

T +256 41 4268466

E mail@awe-engineers.com
W www.awe-engineers.com

Meeting Record

Week		Meeting date	4 April 2016
		Recorded by	Richard
Meeting/subject	Meeting with Obongi HC IV Administrators on RPF, IPP and IPF For Uganda Reproductive, Maternal, Neonatal, and Child Health Improvement Project	Total pages	2

Item	Update
1.	**Introduction**
	The team leader started explained the proposed project and purpose of the consultation exercise and how findings would be utilised in preparation of the project's ESMF.
2.	**Issues discussed**
	How is the land owned? Land on which Obongi HC IV is located by was donated by the local community which currently has increasing land scarcity. Although there is congestion within the health centre fence, the community does not welcome the idea of donating any more land to the healthcare facility. There was noted a need to acquire a larger land parcel which can accommodate all the health facility space needs, and a new site had already been identified and meeting held with the family of the landowner which agreed to offer 88.8 acres of land. There was reported a plan to have a hospital in the future and a nurse training school.
2.1.	**How has the affected health centre managed this problem?** "We, tried by all means to come to a common agreement with them but it failed therefore the issue is still in court waiting for the court ruling".
	How do you want the District Land Board to help? They should ensure that all government facilities have documented ownership in form of a title deed in order to avoid occurrence of similar problem in the future.
	How are sub-county authorities involved in managing land ownership issues between health center and communities? They have helped by requesting that all government entities have their land surveyed, registered and title deeds issued to avoid encroachment.
	Are there strong existing laws to protect land owned by the healthcare facilities? Yes there are land ordinances enacted by the district land office.

Item	Update
	What needs does this health centre have? • An x-ray machine. • There is need to have personnel to operate an ultrasound machine which currently lacks an operator. • We should have two doctors to make it easier to run both administrative work and health issues. • An ambulance. • Water system needs to be repaired: the current water has a lot of iron which stains equipment. • Solar lighting systems are always affected during rainy season. • The proximity of the isolation ward (TB), to the boardroom and out patients department is a challenge to healthcare providers. Therefore we request that it is shifted elsewhere. • There is lack of shade for OPD that is screening of patients is done under a mango tree so we are with the view of having a permanent shade. There should be a shaded connecting walkway to the ward to for protection from rain and very hot sunshine. • We also need to acquire a mortuary for the health centre to help bury dead ones decently. • For proper waste management, an incinerator to is required because at the moment an open rubbish pit is used for disposal of medical waste- this is a huge public health risk. • The drug store is too congested and not in good condition for storing drugs: on hot days temperature in there rises up to 40^{o}C. • Finally internet service to be installed in order to ease communication within and outside the health centre

Week		Meeting date	4 April 2016
		Recorded by	Richard
Meeting/subject	Meeting with Obongi Health Centre IV Medical Staff on RPF, IPP and IPF For Uganda Reproductive, Maternal, Neonatal, and Child Health Improvement Project	Total pages	1

Item	Update
3.	**Introduction**
	The team leader started explained the proposed project and purpose of the consultation exercise and how findings would be utilised in preparation of the project's ESMF.
4.	**Issues discussed**
4.1.	**What are the most common diseases you register in Obongi health centre?** Malaria, pneumonia, trauma, gastro-intestinal disorder, intestinal worms and diarrhoea
	What is the most rare but dangerous disease encountered at the health center ? Sleeping sickness.
	Are there staff in the health facility who speak the language of Obongi people? Yes, there is completely no language barrier.
	Are you aware of any cultural practices preventing people from visiting health centres for treatment? Yes, the traditional healers, herbalists, and the witchdoctors.
	Are there any harmful cultural practices which affect health? Not any today but in the past there was a cultural practice of cutting marks on babies chests in a decorative pattern
	How do you manage medical waste? We use a rubbish pit for open air burning of solid medical waste.
	Are there any needs concerning waste management? Yes, there is need to have an incinerator and placenta pit for proper disposal of medical waste.
	Is construction waste managed well? This waste is somehow managed well but not satisfactorily.
	Do you have a health centre cemetery? No we do not have a cemetery. Not even the health centre mortuary.
	Why don't you have a mortuary? For so long we have complained for it but there is no fund for the construction
	Do you have land which can be allocated for cemetery? No, it has to be purchased
	What can be done to acquire land for a mortuary ? There are two options: either the health center buys land for this purpose or it requests the local community to donate land, however it is unlikely that this would be successful without it (community) asking for compensation or land purchase at market value

Week		Meeting date	4 April 2016
		Recorded by	Richard
Meeting/subject	Meeting with Village Health Teams VHTs on RPF, IPP and IPF For Uganda Reproductive, Maternal, Neonatal, and Child Health Improvement Project	Total pages	2

Item	Update
5.	**Introduction**
	The team leader started explained the proposed project and purpose of the consultation exercise and how findings would be utilised in preparation of the project's ESMF.
6.	**Answer session**
6.1.	**Are village heath teams active and functioning effectively?** Yes we are active.
	How do you solve health issues in your villages? • We start by identification and counselling affected persons. • We administer first aid and pain killers to them. • Then we prepare them for referral to a healthcare facility. • We strive to involve local leaders in health matters such as proper sanitation. • We advise community on disadvantages of poor health practices
	When you come to the health centre do you get proper services supposed to be provided by a Health Centre IV facility? • There are always challenges: staff are not enough. • Blood transfusion services are lacking and cases of children with anaemia dying on a weekly basis are not rare. • Fuelling of the health centre ambulance at a fee of 80,000 per trip remains a big financial constraint. This is because the health centre provides the vehicle and the driver only but the fuel cost should be borne by patients. It is not easy for a poor peasant to quickly mobilise UgShs 80,000 at short notice moreover during an emergency. • There is a major problem in the operation theatre since there is only one doctor to handle both minor and major operations. • Moyo General Hospital is the closet referral hospital is located a very long distance away and that is why sometimes patients go to Adjumani District. • There is inadequate water supply at Obongi Health Centre IV. And the water has a high iron content which stains medical equipment and tools. • There is a problem of diagnosis in the health centre, there when you come with a complain of headache you will be given malaria treatment even before proper investigations done.
	Is it a challenge to bring patients from villages to the health centre? It is not challenging to nearby villages but serious for people in distant locations far because bicycle ambulances which were given are either all broken down or considered outdated, Motorcycles are easier to use nowadays.

Item	Update
	What are your suggestions? Bicycls ambulance to be given and put under the control of the VHTs to manage them but kept by the village local council chiefs (LCs). People fear using bicycles because they take long to reach the health centre in an emergency. People prefer to use motor-cycles instead and if possible, motorcycle ambulance should be provided.
	In your view, how do you want your health centre to be like? • At least we hope to have two doctors to manage the high number of patients. • The theatre should be improved and even an ultra sound department opened up. • More specialized staffs should be hired for instance Dental health, Eye Care, ENT clinic. • Power system that is the generator should be properly maintained in order to avoid power blackouts, and its fuel should always be available in adequate quantities. • Admission rooms should be enlarged and separated accordingly. This is because at the moment there is only one ward called the general ward handling all illnesses apart from maternity, regardless of age and sex. • Isolations wards to be erected to avoid transmission of air borne diseases
	As VHTs do you know of any cultural practices preventing people to seek services from health centers? There might be there but not very common due to rising literacy levels and sensitization done by VHTs.
	Do you have staff here in the hospital that speaks local languages? Yes.
	Are there any language barriers in your health centre? It is not a problem because here we have three languages namely Gimara, Madi and Lugbara which we are all comfortable with.
	What is the most rare disease but dangerous here? Cholera and Meningitis.
	What are the challenges faced by the VHTs? • There is low motivation in terms of salary and wages. • Health kits given to us are not stocked/supplied with medicines in time. • There is no followup after training us on health issues. • Mobilization gadgets like micro-phones, public address systems and loud speakers are not availed to us making mobilization a problem. • We lack training and refresher courses to keep abreast with on health issues. • Lack of gear like gumboots, torches, overalls, gloves to avoid riskof contracting diseases from patients.

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH.

Attendance List

Project District: Moyo District Date: 27/09/2016

No	Name	Village	Designation	Signature
1	ADRAWA Muhamad 0772694895	MOYO DISTRICT	ADHO	
02	AMOKO STEPHEN (Stevamokogmail.com)	MOYO DLG	PHI/AG ADHO	0772994245
03	DR. Iranya Richard Newton	OBONGI HC IV	INCHARGE (richardiranya@yahoo.com)	0788403970
04	OCHA KENNEDY (Kennedyocha@gmail.com)	OBONGI HC IV	HI	0772693756
05	Zukum Juma	LIONGA CENTRAL		0776042605
06	SOSONGA ZAITUN	TOWN EAST	VHT	0784588872
07	ADUGA ALLI	LIONGA CENTRAL	V.H.T	0787146768
08	AMORY JUMA ADAM	Kilembe	V.H.T	0782357802
09	CANDIA GRACE	TOWN WEST	VHT	0785448
10	ALLI AHMED	TOWN EAST	VHT	0782287885
11	ASIO ADALDIZA	Town central	VHT	0758215
12	OMA-G LEONARD	YAKINGMIJI	V.H.T	0772048
13	WASSA KARALASON	GANGO	V.H.T	—
14	AMOSU SILVIO	KENYA	VHT	—
15	YUMA RASHID	KILEMBE	VHT	0779583
16	MURESO MARGARET	LIONGA 'S'	VHT	—
17	MANDRAA KARULING	YAKINGMIJI	VHT	—

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH.

Attendance List

Project District: Moyo Lobongi H/C IV Date: .....

No	Name	Village	Designation	Signature
01	ZAIDA SADIC	Lionga	Hamc c/person	Zaid. 0779742900
02	ADRUPIO ROSE YUCHARI	OHC IV -	SNO	
		roseyuchari03@	0772589106/	
		gmail.com	0758098133	

Week		Meeting date	31 March 2016
		Recorded by	Richard
Meeting/subject	Meeting with Kaabong District Health Officials and Kamion HC II Officials on RPF, IPP and IPF For Uganda Reproductive, Maternal, Neonatal, and Child Health Improvement Project	Total pages	2

Item	Update
4.	**Introduction**
	The team leader started by introducing himself, the project and purpose of the meeting which was primarily to inquire abotu health related issues concerning the Ik people in Kaabong district. Kamion Health Centre II is one of the health centre located in the Ik community. The DHO welcomed the team and he expressed gratitude to consult the Ik people who for long have been marginalized and seen as minority among the people of the district.
5.	**Issues discussed**
5.1.	**Do you have Village Health Team (VHT) in Kaabong District?** We have them in all the sub-counties and villages.
	Are they active in their work? Yes they are active.
	What common diseases are there among the IK? There are many diseases but the most common ones are, Malaria, Respiratory Tract Infections (RTIs), Diarrhoea, Gastro-interties, eye infections and skin diseases.
	Which is the most prevalent but most dangerous? Malaria, Chicken pox, dysentery
	Are there staff who speak Ik language in health center(s) visited by Ik people? Unfortunately no and Ik people are compelled to use Karamojong language since they are the minority.
	Do the IK people practice any traditional health practice? Yes for example consulting traditional healers, medicine men/women and foretellers.
	Do Ik people have culture practices that may be harmful to their health? They copy the practice of the Karamojong for example body tattooing.
	Are the services provided to the IK very specific or general even to the other communities? No special services are provided to the Ik people. However, services such as safe delivery education are often offered, and they (Ik) are also taken as priority at any time, for example they are always attended to 24 hours 7 days a week.
	Is there any cultural practice that prevents them from seeking medical help? Not many apart from the practice of mothers demanding to keep placentas after birth.
	What is the staffing of health centre II? It is supposed to be 9 staff; however for our case we have only 3.
	Do you offer services of Health Centre II or Health Centre III? This is Health CenterII which is meant to offer only out-patient department (OPD). However being the only health centre in the area we offer also other services for health centre III for example, antenatal care (ANC), family planning and deliveries and in-patient (Admission) but with only one bed.
	Does the community get epidemics and when? We get epidemics especially during wet season when there are many mosquitoes.
	How does Kamion HC II manage medical waste? Through segregation into different categories since there are different types of waste for example pharmaceutical waste, human excretes, and other waste.
	Do you have proper waste disposal facilities? No, due to the fact that there is no functional incinerator.

Item	Update
	How does the HC dispose of unclaimed dead bodies? They are always taken to the hospital cemetery
	Does the HC own a cemetery? No.
	What do you suggest about the above? I suggest that the local health centre administration should purchase a parcel of land for that purpose.
	Who owns the land where the health centre located? It was donated by the local community.
	Is there some encroachment on the health centre land? Yes.
	How do you manage the land encroachment problem? Through meetings with the health unit management committee and the encroaching people so that we reach a mutual agreement.
	Generally, what are the challenges faced here? • No communication network available which creates communication gap between the health centre and the main hospital. • There is lack of transport to facilitate health workers movement during outreach programs and implementation of health programs. • Health programmes on radio, posters and brochures are only in Karamojong language creating an information gap for Ik people.
6.	**Recommendations**
	What do you think needs to be done to improve health sector facilities / services here? • Number of staff to be increased from 3 to 9. • Staff housing to be constructed so as to motivate them to offer quality services. • General structure of the health centre to be improved.
6.1.	**What are your recommendations on health?** • Health equipment supply to be increased due to wide catchment area. • Power to be installed for instance solar or standby generator for the purpose of proper storage of medicine and lighting as well. • Ambulance and bicycles to be given to VHTs. • Hiring Ik staff in the health department to make them help each other well.

Week		Meeting date	31 March 2016
		Recorded by	Richard
Meeting/subject	Meeting with Kamion HC II VHTs on RPF, IPP and IPF For Uganda Reproductive, Maternal, Neonatal, and Child Health Improvement Project	Total pages	1

Item	Update
7.	**Introduction**
	The team leader started by introducing himself, the project and purpose of consultations that would benefit stakeholders and the project.
8.	**Answer session**
8.1.	**When visit a local health center do you get all the services you expect?** No, not all, there are some problems not handled by the health center.
	What are other problems faced? • security since the area is a route for the cattle raiders. • Network to communicate health related issues to the unit. • Inadequate number of qualified staffs to handle patients. • Problem of common but very important medicines such as panadol.
	If there is health problem how do you handle it as a VHT? We help the sick with first aid then later take them to the health unit for further investigation and treatment.
	How do you think this health centre should be help to improve? • Clean/safe drinking water to be provided. • Need to construct more structures to accommodate the ever rising health related issue. • The VHT should be supported with means of transport. • The standard to be upgraded to HCIII. • Need to fence it to avoid encroachers and to accommodate patients in quiet environment.
	What other cultural practices prevent people to seek health assistance? Preventing children to go for immunization and the language use in the health centre which does not favour the Ik patients.

Week		Meeting date	1 April 2016
		Recorded by	Richard
Meeting/subject	Meeting with the Ik Local Community on RPF, IPP and IPF For Uganda Reproductive, Maternal, Neonatal, and Child Health Improvement Project	Total pages	1

Item	Update
1.	**Introduction**
	The Ik communities were mobilized by the area LCI for a meeting with the team in one of the village and the following were their responses to the questions asked.
2.	**Answer session**

Item	Update
2.1.	**Do you people have communication challenges when you visit a local health centre?** There was mixed answers: some people said yes because they did not speak know Karamojong language well yet those at the health facility speak only that language, while others said no problem because they spoke Karamojong.
	Do you think it would be good if one of you was trained to work in the local health centre? Yes it would be a very good idea
	Why? Because he/she would avoid the communication barrier and secondly it will help to reduced marginalization of the Ik people.
	What are the common diseases you suffer from? Malaria, headache, skin diseases, scabies, eye infections.
	What challenges do you face from the health centre? • There is no adequate drug to cater for us and the neighboring communities. • There are few healthcare staff making the ratio of patient to staff high. • The distance from peoples homes to the hospital is too long.

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH.

Attendance List

Project District: KAABONG Date: 31st/03/2016

No	Name	Village	Designation	Signature
01	ADUNGO RAPH	MORU-ATAP	VHT	
02	NGOYA paulino	MORU-ATAP	VHT	
03	SILO1 paulino	MORU ARENGAN	VHT	
OK	LOTORE PASQUALE	NACHAKUNGET	VHT	
	ALUM MARK	LOUSUNA	VHT	
	LOCHAM HELLEN	KOKOSOWA	VHT	
	KICHA ROSE	MORU-ARENGAN	VHT	
	ITAO MARCHLINA	NAWADOU	VHT	
	NAKOT MARIA	LOCHETO	VHT	
	MACHU CHICILIA	MORU-ATAP	VHT	
	LOKUDA DAVID	NAWADOU	VHT	
	NGOYA JAMES	NAKUKENY	VHT	
	NAKOR ALICE	LOKIYOTO	VHT	
	LOKIENY JAMES	LOCHETO	VHT	
	RIWOKE J. BOSCO	KOKOSOWA	VHT	
	ADUPA SARAH	LOUSUNA	VHT	

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH.

Attendance List

Project District: KAABONG Date: 31/03/2016

No	Name	Village	Designation	Signature
0756760217	OCHOU JOSEPH	LOKITOTO	VHT	
	ARICO ALFRENDA	NARUKIENY	VHT	
	NICHELECHA REGINA	NACHAKUNET	VHT	
	LOKIEN			

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH.

Attendance List

Project District: Kaabong Date: 31/3/2016

No	Name	Village	Designation	Signature
1.	Dr. Nalibe Sharif 0782263012	District Health office Kaabong DHO	Ag. DHo	
2.	LOPE REX TIMOTHY 0773879019	ADHo (mch/n) Kaabong DLG	ADHo (mch/n)	
3	ADUAKUN SAMUDRO	District Health Kaabong	AHE	
4.	LOSUKUI ROBERT.			
4	LOSUKUI ROBERT.	HEALTH UNIT INCHARGE KAMION HCII	HEALTH UNIT INCHARGE	

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH.

LOKIYOTO VILLAGE

Attendance List

Project District: KAABONG – IK COMMUNITY. Date: 31/03/2016

No	Name	Village	Designation	Signature
01-	LOUPE REX TIMOTHY	DHO's office KAABONG	ADHO (MCH/FP)	
02	NGOYA PETER	LC1 CHAIRPERSON	KAMION S/C	
03	KWAM LARGO MOTT	LOKIYOTO S/S	KAMION S/C	
04	KUNUME ALICE	LOKIYOTO FARMER	KAMION S/C	
05	LOKWANG SIMON	LOKIYOTO FARMER	KAMION S/C	
06	NATANG MACHILINA	FARMER LOKITOTO	KAMION S/C	
07	LEMEI ANNA	FARMER LOKITOTO	KAMION S/S	
08	NAKONG ALICE	FARMER LOKITOTO	KAMION S/C	
09	CHILLA ANDREW	FARMER NAWADOM	KAMION S/C	
10	LOTUKEI CHATINA	FARMER LOKITOTO	KAMION S/C	
11	KALOYANG LUCIA	PPLE LOKIYOTO	KAMION S/C	
12	NAKONG JESCA	FARMER LOKITOTO	KAMION S/S	
13	ADUPA ROSE	FARMER LOKIYOTO	KAMION S/C	
14	NYELECHA EMUYO	FARMER LOKITOTO	KAMION S/C	
15	NALEM CHRISTINE	FARMER LOKITOTO	KAMION S/C	
16	NAROT BETTY	PPLE LOKITOTO	KAMION S/C	
17	LODUKUI ROBERT	KAMION HEALTH CENTRE	KAMION S/C	

Week		Meeting date	**13 April 2016**
		Recorded by	**Richard**
Meeting/subject	Meeting with Serere Health Centre IV VHTs on RPF, IPP and IPF For Uganda Reproductive, Maternal, Neonatal, and Child Health Improvement Project	Total pages	**1**

Item	Update
1.	**Introduction**
	The team leader introduced purpose of the meeting and importance of stakeholder consultation process to the project as well as meeting World Bank (lender) and Uganda Government requirements .
2.	**Answer session**
2.1.	**Common diseases registered in Serere Health Centre IV** Malaria affects everybody across all ages. Diarrhoea is mainly in children so are Gastroenteritis, RTIs, Pneumonia.
	Rare but dangerous? TB, Cancer, Heart disease, intestinal obstructions, uterine rupture.
	Cultural practices preventing people from seeking medical attention • Mainly in Teso region, women are not supposed to show their pregnancy until you can't avoid it. That makes women go for antenatal late, within the third trimester. • There was a religious sect that had started in the area and was against Male circumcision but with the help of VHTs sensitization it was eliminated in the area.

Item	Update
	Are the VHTs active? **VHTs are very active,** • Acts as a leak between the Health facility and the community; • Refer the sick to the Health facility; • Clients mobilization, Family planning, immunization and HIV outreaches
	waste management Generally waste management is very poor; • They use open burning is used to treat and dispose most waste generated; • Placenta pit is located very close to Maternity ward and the Trading Centre; • The health facility has no incinerator; the only one constructed had design flaws and was never used.
	Lands HC land has been encroached on and the issue was put to the attention of Health monitoring team. Therefore, HC land should be surveyed, titled and fenced off to avoid future land encroachers
	Challenges at the Health facility • Current staffing is still below the level of a Health centre IV; • The Health centre structures are very old especially the Maternity ward; • The CH lacks IPD wards; both male and female share the ward and female ward is very congested , old and too small; Isolation ward and surgical ward, and as a result TB patients are treated as out-patients; • The HC lacks lighting facilities; the solar equipment is faulty so as back up health workers use small lanterns or flash light for lighting; • The operating theatre was renovated recently but the equipment are very old some are out-dated and others lack simple spares; • The mortuary building at the facility is too small and does not have any equipment to hold bodies for long; • Most of the equipment was acquired from development partners through projects, when projects end maintenance and repair becoming a problem due to lack of funds.

The general ward built in 1939 for both male and female patients

Femalepatients' Ward with faulty solar system

An derelict incinerator that was never used due to poor design

Week		Meeting date	**13 April 2016**
		Recorded by	**Richard**
Meeting/subject	Meeting with Serere Health Centre IV VHTs on RPF, IPP and IPF For Uganda Reproductive, Maternal, Neonatal, and Child Health Improvement Project	Total pages	**1**

Item	Update
3.	**Introduction**
	The team leader the project, explained purpose of the consultation meeting and opened a question and answer session.
4.	**Answer session**
4.1.	**Common diseases handled by VHTs attached to Serere Health Centre IV** Malaria, Measles, Diarrhoea, Cough.
	Rare but dangerous? Hepatitis B and TB
	Cultural practices preventing people from seeking medical attention • Mainly in Teso region, women are not supposed to show their pregnancy until you can't avoid it. That makes women go for antenatal late within the third trimester. • Children with measles are not given certain foods like eggs, meat, will not bathe and kept indoors.
	Challenges • Poor motivation and facilitation since we are the Health centre I; • Lack PPE such as gum boots, groves and rain coats • At risk of contracting Hepatitis B and TB; • Lack transport; • Lack data tools, register, referral forms and report forms • The VHT to Household ratio is 1: 250; higher than 1: 25 households intended

Item	Update
	Grievance Mechanism VHTs meet monthly to share information and solve prevailing challenges and for these meetings we usually invite concerned parties to be present and sometimes the health centre In-Charge and religious leaders.

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH.

Attendance List

Project District: SERERE HEALTH CENTER IV Date: 13/APRIL/2016

No	Name	Village	Designation	Signature
01	Dr. Ogwal Daniel - danielogwal@yahoo.com	Serere HC III	MO - Incharge	0774-757381
02	Engu michael mgmichaelengu@gmail.com	SERERE HC IV	DHA - Serere	0752030205
03	OJANGOK-ORETTA ROSE	SERERE HC IV	N/OM i/c MATERNITY	0782590772
04	OONYU THADEO Occupational Therapist 0782066664	DHOS office	District Health Inspector	0774206664
	KISSOKA EMMANUEL 0772961820	KADUPA	VHT Coordinator	
	KIM Immaculate	AGEGA	VHT	
	EKOMU MARY	Abilaep	VHT	0784401778
	OGUTI JUSTINE	OJEBURIN	VHT	0773961975
	Opio James	Kakusi	VHT	0772367628
	Ekou DAVID	Kakus	VHT	0775672910
	OIBA RICHARD	KIKOTA	VHT	0779066394
	Edet Christine	Kikota	VHT	0775101832
	KULUMU FARIDAH	CENTRAL CELL	V.H.T	0773350979

Consultation record with Batwa indigenous people

Week		Meeting date	April 2016
		Recorded by	Richard
Meeting/subject	Meeting with Batwa community members	Total pages	1

Item	Consultation
1.	**Introduction**
	The team consulted Batwa community at Kitariro CH II premises, Kanungu District in a meeting organized with assistance of one Nibarema Godfrey. He introduced the consultants team to the congregation and encouraged his kinship to freely air out their views about the project's possible impact and benefits.
2.	**Issues discussed**
2.1.	**Diseases the Batwa community noted as prevalent are:** Malaria, diarrhoea, cough, ulcers, allergy and HIV.
	Language used for communication at health centers: Language of communication at the nearest HC is Rukiga and Batwa people, who speak it fluently, said were comfortable with it.
	Traditional practices that prevent Batwa from seeking health services Cut marks on children's chests to prevent and treat pneumonia.
	Challenges • Patients referred by VHTs and HCs for further management do not have transport to their destinations, they are usually carried on locally made stretchers for long distances; • Lack of In-Patient Department (IPD), especially maternity ward for women to deliver; • Lack of dental services, as a result some Batwa people use crude implements including pliers to extract teeth; • Lack of electricity and lighting in HCs.
3.	**Recommendations**
3.1.	• Provision of ambulances (vehicles or motorcycles); • Upgrade one of the nearby HC IIs to a level to offer IPD services, especially maternity ward; • Provide dental service equipment and personnel; and • Provide solar power equipment to the health center

Week		Meeting date	April 2016
		Recorded by	Richard
Meeting/subject	Meeting with the In-charge of Kitariro HC II	Total pages	1

Item	Consultation
1.	**Introduction**
	The team met the officer at her office, Kitariro CH II in Kanungu District. Kitariro is one the health facilities accessed by the Batwa in Kanungu.
2.	**Issues discussed**
2.1.	**Common diseases among the Batwa people:** The officer mentioned malaria, gastro-intestinal disorders, ulcers and respiratory tract infections as the common diseases. Coccidiosis (Butamba) was named as a rare but dangerous disease, especially among population near Bwindi Forest. As result, people near the forest receive vaccines twice every year as a cautionary measure. In addition, scabies was reported as a seasonal disease especially during dry seasons.
	Common language healthcare staff use to communicate with Batwa people The widely used language is Rukiga. This is because the minority Batwa have learned to speak the language of the majority- Rukiga. Secondly, the Batwa are uneducated and therefore cannot get technical placement at the HC, which up to now has precluded opportunity for a native Batwa person being a staff at the health center.
	Traditional practices that prevent Batwa from seeking health services The Batwa believe that traditional healers cure/prevent witchcraft, false teeth and pneumonia, therefore they consult them first and only visit a health center when the healers fail to provide healing solutions.
	Healthcare waste management: Waste generated is sorted and disposed of by opening burning in pits. It was also noted that the HC does not have mortuary facilities.
	Land resource: Church of Uganda through Kinkiizi Dioceses brought land for the Batwa to settle on. The In-Charge of the health center indicated that the HC has sufficient development and for expansion.
	Challenges: Patients referred by VHTs and HCs for further treatment or management always lack transport, resorting to usually being carried on locally made stretchers for as long as 30 km before they get a taxi to a hospital.
3.	**Recommendations**
3.1.	**Health services:** Provision of ambulances (vehicles or motorcycles) is essential for this community
	Waste management: For proper waste management, a suitable incinerator should be constructed

Week		Meeting date	April 2016
		Recorded by	Richard
Meeting/subject	Meeting with the VHTs	Total pages	1

Item	Consultation
1.	**Introduction**
	The team met VHT members at Kitariro CH II premises, Kanungu District.
2.	**Issues discussed**
2.1.	**Challenges cited** • Lack incentives hence motivation for their services; • Lack of adequate safety wear such as gumboots and umbrellas and tools (registers and first aid boxes) needed for duties. VHT members indicated receiving few medical supplies which also take long to get replenished once used up; • Members indicated lack of relevant information/ health care knowledge and required continual training. • Batwa community's mindset was also cited as challenge: Batwa people are used to free things and are reluctant to pay for any service however little the charge might be
3.	**Recommendations**
3.1.	**Health services** • Monetary allowances should be provided; • Government should increase quantity and frequency of replenishment of health supplies; • VHT should be provided with adequate safety gear and tools; and • Community should be sensitized to change their mindset of always expecting free services

Week		Meeting date	April 2016
		Recorded by	Richard
Meeting/subject	Focus Group Discussion with Batwa Women	Total pages	1

Item	Consultation
1.	**Introduction**
	The team met a group of Batwa women at the Kitariro HC II premises, Kanungu District.
2.	**Issues discussed**
2.1.	**Diseases among the Batwa community** The Batwa women mentioned some of the common diseases in their children and these included; Malaria, Diarrhea, Pneumonia, Cough and flue
	Health services for women Family planning
	Challenges • Lack of maternal ward, therefore expecting mothers have to travel long distances to Bwindi Hospital to deliver; • Women cited lack of access to sanitary facilities; • Mothers and children lack transport to the HCs; • Batwa women who are financially disadvantaged wait in queues at the HCs for long periods which sometimes leads of loss of lives of mothers, babies or both.
3.	**Recommendations**
3.1.	• Upgrade a HC II in their community to offer IPD services, including maternal care; • Recruit professional midwives to help women to deliver; • Provide motorcycle ambulances to take pregnant women to the HCs;

Week		Meeting date	April 2016
		Recorded by	Richard
Meeting/subject	Meeting with the Secretary of Kinkizi Diocese	Total pages	1

Item	Consultation
1.	**Introduction**
	The team met the officer in his office at Kinkizi Diocese.
2.	**Issues discussed**
2.1.	**Contribution of Church to Batwa well-being** • The church of Uganda through Kinkiizi Diocese brought land and settled Batwa people. • The church established "*Batwa Development Program*" to give assistance to Batwa in education, knowledge for agriculture and health services. • It was also mentioned that Batwa people pay UgShs2000 per year quarter for treatment at health centers (many of whom consider it high and not affordable).

Week		Meeting date	April 2016
		Recorded by	Richard
Meeting/subject	Meeting with the Coordinator of Health Sector on IPPF for Uganda Reproductive, Maternal, Neonatal, and Child Health Improvement Project	Total pages	1

Item	Consultation
1.	**Introduction**
	The team met the officer in his office, Kanungu District.
2.	**Issues discussed**
	Health Services The Batwa community have a number of health facilities they can visit to access health services, such as: ▪ BWINDI HOSPITAL ▪ KIHEMBE HEALTH CENTER II ▪ KITARIRO HEALTH CENTER II ▪ JUMBA SATELLITE CLINIC ▪ KANYASHOJE HEALTH CENTER II
	Diseases among the Batwa community The officer mentioned Malaria, Malnutrition, scabies, cough and diarrhoea as most common diseases amongst the Batwa. Coccidiosis (Butamba) was named as a rare but dangerous disease, especially among population near Bwindi Forest. As result, populations near the forest receive vaccines twice every year as a preventative measure.

Week		Meeting date	April 2016
		Recorded by	Richard
Meeting/subject	Meeting with the Coordinator of Health Sector on IPPF for Uganda Reproductive, Maternal, Neonatal, and Child Health Improvement Project	Total pages	1

Item	Consultation
	Challenges Batwa people commonly face • Lack of maternal ward; • The shs.2000/= paid quarterly for treatment is still high for Batwa; • Batwa people are harsh to be handled and they have a negative attitude towards healthcare staff**;** • The Batwa always expect receiving free services; • The Batwa travel long distances to Bwindi Hospital where they receive free treatment.
	. **Language of communication** The District Health Officer informed that the Batwa people use Rukiga Language for communication. Therefore there is good communication between the Batwa and other people they surround.
	Traditional practices that prevent Batwa from seeking health services He said that the Batwa people have some cultural practices that prevent them from seeking health medication. It was revealed for instance that Batwa people believe false teeth are important and they do not seek medical attention to remove them from babies.
	Recommendations • HCs need more clinical officers in the Batwa community; • The project interventions should include providing Infrastructure such as maternal wards and laboratories for better services for the Batwas;

DIOCESE OF KINKIIZI- CHURCH OF UGANDA (ANGLICAN)
NYAKATARE Health Centre III
KATUMBA RITAH
Health unit administrator/IHC
P.O. Box 77, Kanungu
Mob: +256 782 875 531
+256 701 035 328
E-mail: katumbarital@gmail.com / katumbarita@yahoo.com

MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH

Attendance List KINKIIZI Diocese

Kinkiizi Diocese 02/05/2016.

No	Name	Village	Designation	Signature
1	Rev Can. Bernard Bageuka	Diocese of Kinkiizi	Diocesan Secretary.	
2	KATUMBA RITAH	DIOCESE OF KINKIIZI	DIOCESAN HEALTH COORDINATOR	Katumbarital@gmail.com/Katumbarita@yahoo.com

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH

Attendance List FOR VHTS

Project District: HEALTH CENTRE II KITARIRO Date: 02nd/05/2016

No	Name RWAMALIE FRAN	Village	Designation VHTS	Signature
1	Rwamalie Frank	Rukamba VHT	0773646406	Frank
2	TUMUBWEINE RUTH	MABARE VHT	0779994395	Tumubweine
3	MAHANO JEFURE	BUHAMBA	VHTs	MAHANO

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH

Allowance Form FOR VHTS

Project District: KITARIRO HEALTH CENTRE II Date: 02/05/16

No	Name	Village	Amount	Designation	Signature
1	Rwamalie Frank	Rukamba	10000	V.H.T.	Frank
2	Tumubweine Ruth	mabare VHT	10000F	VHT	Tumubweine
3	Tindimwebwa Hope	Kitariro HC	10000=	NIASS	
4	Musinguzi Sophie	Kitariro	10,000=	NIASS	

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH

Attendance List FOR STAFF

Project District: KITARIRO HEALTH CENTRE II Date: 2nd/05/2016

No	Name	Village	Designation	Signature
01	Musinguzi Sophie	Kitariro HC II	NIASS	0777690071
02	Tindimwebwa Hope	Kitariro HC II	NIASS	0782794402

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH

Attendance List

Project District;.....Date.....

No	Name		Village	Designation	Signature
15	TWAIIIMA	FLORENCE	Kitariro	omuhingi	florence.
16	[illegible]	Phoeb	kitariro	omuhingi	phoeb.
17	Niasima	glory	kitariro	omuhingi	gloria.
18	Nyanjera	Betrice	kitariro	omuhingi	betrice
19	Kemitumba	catherine	kitariro	omuhingi	catherine
20	Kato	Evalyne	kitariro	Omuhingi	Evalyne.
21	sunday	Hope	kitariro	Omuhingi	Hope -
22	Asiimwe	zedeck.	kitariro	Omuhingi	zedeck
23	Mugisha	innocent	kitariro	Omuhingi	innocent.
24	Bokobo	cristofer	kitariro	Omuhingi	cristofer
25	MITURO	samuel	kitariro	omuhingi	sam
26	Kazungu	Irette	kitariro	Omuhingi	Irette.
27	Kahoota	Annet	kitariro	omuhingi	Annet.
28	Kabiki	provia	kitariro	Omuhingi	provia.

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH

Attendance List

Project District;.....Date.....

No	Name		Village	Designation	Signature
29	Kiconco	medius	kitariro	Omuhingi	medius
30	Ensinikweri	Gedion	kitariro	omuhingi	gedion
31	Niasima	Evas	kitariro	omuhingi	Evas
32	Ekibahigire	Abias	kitariro	Omuhingi	Abias
33	kanyampaka	Elifazi	kitariro	Omuhingi	Elifazi
34	Natukunda	patience	kitariro	Omuhingi	patience.

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH

Attendance List ALL MEMBERS FOR BATWA COMMUNITY

Project District:..... Date.....

No	Name	Village	Designation	Signature
1	BUGUZA : ABEL	kitariro	omuhingi	Abel
2	BETISI BOY	kitariro	omuhingi	
3	MAHANE medadi	kitariro	- - -	
4	Tuhirirwe Florah	Kitariro	omuhingi	Florah
5	Kesande margret	Kitariro	omuhingi	Kesande
6	mugasho pisi	Kitariro	omuhingi	mugasho
7	Hopu monday	Kitariro	omuhingi	Hopu
8	Kyomugisha Evarini	Kitariro	omuhingi	Kyomugisha
9	Marem Godfree	Kitariro	Omuhingi	Marem
10	Karandwa Ayirini	Kitariro	omuhingi	Karandwa
11	Bizakuhenga moses	Kitariro	omuhingi	Moses
12	Mashano Gefere	Kitariro	OMuhingi	Mashano
13	Bakanyemera ALICE	Kitariro	omuhingi	Bakanyemera
14	MUSIIMENTA JANE	Kitariro	omuhingi	Jane

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH WOMEN ONLY (Focus Discussion for WOMEN)

Attendance List

Project District:..... Date.....

No	Name	Village	Designation	Signature	
15	Komitumba catherine	Kitariro	peasant	catherine	
16	~~Mesh~~ Sunday Hope	Kitariro	peasant	Hope	
17	Bakanyemera Alice	Kitariro	peasant	Alice	
18	Karanchiro Bren.	Kitariro	peasant	Bren.	
19	Kazunga Ariett.	Kitariro	peasant	Ariett	
20	Katibiri Aidah	Kitariro	peasant	Aidah	
21	Ninsiima gloria.	Kitariro	peasant	gloria.	
22	Ekibahigire Abias	Kitariro	peasant.	Abias.	0755782532

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH WOMEN ONLY (FOCUS DISCUSSION FOR WOMEN)

Attendance List

Project District;.....Date.....

No	Name	Village	Designation	Signature
1	Kesande Margret	kitariro	peasant	magret
2	Kiconco medius	kitariro	peasant	medius 0788233181
3	Monday Hope	kitariro	peasant	hope
4	Mugasho peace	kitariro	peasant	peace
5	Namiria Phoeb	kitariro	peasant	phoeb
6	Twasiima Florence	kitariro	peasant	florence
7	Kyomugisha Evalyne	kitariro	peasant	evalyne
8	Kato Evalyne	kitariro	peasant	Evalyne
9	Twikirize Florah	kitariro	peasant	florah
10	Kyomugisha Allen	kitariro	peasant	allen
11	Kabibi provia	kitariro	peasant	provia
12	Nyangire Betrice	kitariro	peasant	Betrice
13	Betise Loy	kitariro	peasant	Loy
14	Musiimenta Jane	kitariro	peasant	Jane

UGANDA REPRODUCTIVE, MATERNAL and CHILD HEALTH IMPROVEMENT PROJECT (P155186) BY MINISTRY OF HEALTH

Attendance List

Project District;... Kanungu .....Date... 02/05/2016

No	Name	Village	Designation	Signature
01	Atukwise Innocent	Kanungu	D/planner	
02.	DR. SEBADDE STEPHEN	Kihumuro	DHO	dr sebadde@doctor.com

Photographs of stakeholder consultations

	Consultation meeting with In charge Obongi Health Centre IV
	Focus group discussion of IK Women
	Consultation meeting with Health Inspector, Chairperson Health Management Committee and Senior Nursing Officer Obongi Health Center IV.

	Consultation meeting with VHTs at Obongi Health center IV
	Small lamps used at in a maternity ward at night .

	An IK homestead
	Security fence around an Ik homestead for protection from hostile tribes like the Karamojong and Turkana.
	A consultation meeting with IK community *Village Health Team* at Kamion Health Centre II.

	A refrigerator at Kamion Health Centre II IK community
	A typical dwelling in an Ik household

Annex 6: Example of ESMP

Environmental issue	Mitigation measures taken or to be taken	Agency in charge of implementing measures	Indicators to be monitored	Agency in charge of monitoring	Frequency of Monitoring
1. **Land take prior to construction**	▪ Mandatory regulatory notice to be given to affected persons before commencing project activities ▪ Compensation / resettlement will be undertaken for land owners before project commencement.	School	Number of land owners not compensated	Chief Government Valuer (CGV)	Monthly
2. **Sediment deposition into wetlands**	Sediment traps to be provided when working near rivers/ swamps.	Contractor	Muddy color in water	District Wetlands Office,	Monthly
3. **Opening and use of quarries and borrow sites**	▪ Prepare project briefs for all borrow sites as required by NEMA. ▪ Restore borrow pits, and return them to original owners without visual blight or residual contamination.	Contractor	▪ Number of land owners compensated ▪ Number of borrow pits and quarries restored.	NEMA (through DEOs)	Upon project commencement and at sites closure (at end of project)

Annex 7: Format of an Environmental Report

A EIA report should include the following items (not necessarily in the order shown):

(a) *Executive summary*. Concisely discusses significant findings and recommended actions.

(b) *Policy, legal, and administrative framework*. Discusses the policy, legal, and administrative framework within which the EA is carried out.

(c) *Project description*. Concisely describes the proposed project and its geographic, ecological, social, and temporal context, including any offsite investments that may be required (e.g., dedicated pipelines, access roads, power plants, water supply, housing, and raw material and product storage facilities). Indicates the need for any resettlement plan or indigenous peoples development plan.

(d) *Baseline data*. Assesses the dimensions of the study area and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences. Also takes into account current and proposed development activities within the project area but not directly connected to the project. Data should be relevant to decisions about project location, design, operation, or mitigatory measures. The section indicates the accuracy, reliability, and sources of the data.

(e) *Environmental impacts*. Predicts and assesses the project's likely positive and negative impacts, in quantitative terms to the extent possible. Identifies mitigation measures and any residual negative impacts that cannot be mitigated. Explores opportunities for environmental enhancement. Identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions, and specifies topics that do not require further attention.

(f) *Analysis of alternatives*. Systematically compares 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 these impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training, and monitoring requirements. For each of the alternatives, quantifies the environmental impacts to the extent possible, and attaches economic values where feasible. States the basis for selecting the particular project design proposed and justifies recommended emission levels and approaches to pollution prevention and abatement.

(g) *Environnemental management plan (EMP)*. Covers mitigation measures, monitoring, and institutional strengthening.

(h) *Appendixes*

(i) List of EA report preparers--individuals and organizations.

(ii) References--written materials both published and unpublished, used in study preparation.

(iii) Record of interagency and consultation meetings, including consultations for obtaining the informed views of the affected people and local nongovernmental organizations (NGOs). The record specifies any means other than consultations (e.g., surveys) that were used to obtain the views of affected groups and local NGOs.

(iv) Tables presenting the relevant data referred to or summarized in the main text.

(v) List of associated reports (e.g., resettlement plan or indigenous peoples development plan).

Annex 8: Healthcare Management Guidelines

Simple, easy to follow guidelines for proper management of each class of waste (excerpted from the national healthcare waste management guidelines) are outlined below:

Class 1: Non-hazardous Health Care Waste

i) Non-hazardous (domestic) HCW of class 1 should be placed in black bins at the point of generation.
ii) All non-hazardous (domestic) HCW that is biodegradable should be disposed of in a compost pit. In places where there are municipalities, the waste should be handed over to a licensed provider or disposed of at a municipal skip.
iii) Non-biodegradable waste that cannot be recycled should be landfilled.
iv) Non-hazardous items that are designated for recycling should be packed in:
    a. Green bins marked “Non-infectious plastic” for plastics
    b. Black bins marked “Non-contaminated glass materials” for glass.
v) Non-hazardous HCW for recycling should be taken for recycling by an approved service provider.
vi) The bins for storage of HCW should be placed in all rooms, wards, and in all public areas where such waste is likely to be generated.

Class 2: Infectious Waste

i) All infectious waste should be placed in yellow polyethylene bags (minimum 300 microns gauge) marked “Danger! Hazardous infectious waste” and indicated with the international biohazard symbol.
ii) The bags/bin liners shall be placed in yellow bins or bag-holders.
iii) Bags shall be tied or sealed with appropriate adhesive tape, removed and replaced immediately when they are no more than three-quarters full.
iv) As much as possible, infectious HCW shall be incinerated in double chamber incinerators, but where appropriate, chemical treatment and autoclaving can be used as alternative methods for treating infectious waste.
v) In densely populated areas, a centralized pyrolytic incinerator, reaching 8500°C and above is preferable.
vi) Yellow bins for infectious waste should be located in all wards and rooms where infectious waste could be produced. Infectious waste containers should never be placed in public areas.
vii) Infectious waste generated outside health facilities; for example, during SMC outreaches at schools and churches, should be handled appropriately. Put sharps in a safety box and double-bag and seal other infectious waste to ensure safety during transport to a nearby recommended disposal facility.

Class 3: Sharps

i) All sharps should be placed in puncture-resistant and leak-proof cardboard or plastic safety boxes, designed so that items can be dropped in using one hand and no items can be removed.
ii) The safety box should be yellow, marked “Danger!” or “Contaminated sharps.”
iii) Yellow is the conventionally accepted colour and it is advisable to adhere to this convention.
iv) The safety box shall be closed and sealed for disposal when it is three-quarters full.
v) In particular, all disposable syringes and needles shall be discarded in the safety box immediately following injection/use.
vi) The needle shall never be recapped or removed from the syringe; the whole combination shall be inserted into the safety box.
vii) In very rare situations where there is need to re-cap, single hand recapping may be authorised by a senior supervisor; for example, in laboratories when intact needles on syringes are being used to transport blood samples. Two-handed recapping is an unacceptable practice under any circumstance.
viii) Under no circumstances are used syringes, needles, or safety boxes to be disposed of in normal garbage or dumped randomly without prior treatment.
ix) Sharps are destroyed together with infectious waste. The method of choice for destruction of full safety boxes is incineration, preferably in an appropriate double-chamber (>900°C) incinerator.
x) Safety boxes must be located in all rooms and wards where injections and other sharps may be used.

Class 4: Anatomical Waste, Including Placentas

i) In operating theatres, all anatomical waste, including placentas, should be collected separately and placed in red polyethylene bags of minimum 300 microns gauge, marked "Danger! Hazardous! Highly infectious waste" and indicated with the international biohazard symbol
ii) The bags shall be placed in red bins or bag-holders.
iii) In Uganda, the cultural preference is to have anatomical waste buried. In such situations, anatomical waste and placentas should be buried at a sufficient depth (>1m) inside the HF compound, preferably placed in a placenta pit.
iv) However, when a centralized incinerator is available and culturally acceptable, the anatomical waste can be incinerated. Nevertheless, when low-cost incinerators are used, only small quantities of anatomical waste or placentas should be incinerated at any time. This is because large quantities can be difficult to incinerate and drastically reduce the performance of the system.
v) Where licensed service providers are available, anatomical waste may be handed over for appropriate offsite disposal.
vi) If transportation and disposal cannot be immediately ensured, anatomical waste should be stored in the mortuary. Red bins for highly infectious waste should be located in all theatres and rooms where anatomical waste, including placentas, could be produced. Highly infectious waste containers should never be placed in public areas.

Class 5: Hazardous Pharmaceutical and Cytotoxic Waste

i) Hazardous pharmaceutical waste and cytotoxic waste should be sorted according to specific categories: cytotoxic drugs, narcotics; ignitable, corrosive, and/or reactive materials, as well as the waste's nature of formulation
ii) Brown bins for pharmaceutical waste should be located in all wards and rooms where pharmaceutical and cytotoxic waste could be produced.
iii) All expired pharmaceutical and cytotoxic products should be removed from shelves, labelled, and stored in a secure room or segregated area.
iv) The products should be boarded off by the Board of Survey following the Public Procurement and disposal of Public Assets Act 2003 (a form should be filled in and signed by all members present as evidence).
v) All sorted expired pharmaceutical and cytotoxic waste should be repacked in specific boxes such as cardboard boxes labelled "Danger! Hazardous pharmaceutical or cytotoxic waste."
vi) Clearly-labelled pharmaceutical waste from public facilities should be sent to the district medicines store that shall ensure their disposal at the central level. Non-public facilities should make prior arrangements with the National Drug Authority (NDA) to have waste disposed of. (Contact your regional NDA office for further details on assistance with the disposal of small quantities of expired pharmaceuticals).
vii) Stores charged with the responsibility of storage of pharmaceutical and cytotoxic waste should follow the guidelines for storage
viii) Transportation: Unlike other types of health care waste, transportation of pharmaceutical waste for final disposal should be done in the presence of NDA representatives. If the waste has narcotics, police should be notified.
ix) All pharmaceutical and cytotoxic wastes should be disposed of according to recommended best practices
x) Special precautions should be taken to ensure that expired and/or unusable pharmaceuticals do not pilferage (leak) back to the public.

Class 6: Highly Infectious Waste

i) All highly infectious waste from HFs should be placed in red polyethylene bags of minimum 300 microns gauge marked "Danger! Hazardous highly infectious waste!" and marked with the international biohazard symbol (see Table 3).
ii) Highly infectious waste (such as cholera waste) from isolation wards or permanent treatment centres should always be incinerated on-site.
iii) Highly infectious waste from the medical diagnostic laboratory of the HF, such as media and culture plates, should be collected in leak-proof red polyethylene waste bags (300 microns thick) suitable for autoclaving and properly sealed.
iv) Media and culture plates should be autoclaved at a temperature of 121°C at one bars for at least 20 minutes at the source (e.g., in the medical diagnostic laboratory).
v) Disinfected waste should be collected and treated with infectious HCW.

vi) If a separate autoclave for waste treatment is not available at the medical diagnostic laboratory to ensure a thermal treatment, highly infectious waste should be disinfected in 10% solution of sodium hypochlorite in concentrated form and left overnight.
vii) It should then be discarded in a red polyethylene bag, properly sealed and discarded with other infectious HCW.
viii) If none of the above steps can be taken, highly infectious waste should at a minimum be sealed in a red polyethylene bag and directly disposed of with infectious HCW.

Class 7: Radioactive Waste

i) All radioactive waste should be stored to allow decay or decomposition to diminish its radioactive nature. Such waste has a minimum storage time of 10 half-life times for radioisotopes in wastes with a half-life of less than 90 days.
ii) Radioactive waste should be placed in a large container or drum and labelled with the radiation symbol showing the radionuclide's activity on a given date, the period of storage required, and marked "Caution! Radioactive waste!" Containers or tanks with radioactive waste that has not decayed to background level should be stored in a specific marked area, with concrete walls at least 25 centimeters thick.
iii) Non-infectious radioactive waste which has decayed to background level should follow the non-hazardous HCWM procedure (Class 1), while infectious radioactive waste which has decayed to background level should follow the infectious HCW procedure (Class 2).
iv) Liquid radioactive waste should be discharged into the sewerage system or into a septic tank only after it has been kept in adequate tanks and allowed to decay to background level.

Class 8: Waste with High Contents of Heavy Metals

i) Waste with high contents of heavy metals should normally be treated in specific recovering industries.
ii) Alternatively, the waste should be encapsulated for handling and disposal. Encapsulation is a process where containers are filled three-quarters full with hazardous waste. Then material such as cement mortar, clay, bituminous sand, or plastic foam is used to fill the container. When capping material is dry, the container is buried or landfilled.
iii) Wastes with high contents of mercury or cadmium should never be incinerated because of the risk of atmospheric pollution with toxic vapours.

Class 9: Effluent

Improper management, collection, treatment, and disposal of wastewater (effluent) and sludge will result in the pollution of local water sources with pathogens. This can cause numerous water- and vector-borne diseases (e.g., malaria and filariasis) by providing breeding places for the vectors, and favours the spread of parasites (e.g., roundworms or Ascaris lumbricoides). Wastewater discharged in an uncontrolled manner into the environment can lead to several waterborne diseases that are a threat to human life, such as cholera, typhoid fever, campylobacteriosis, hepatitis A and E, and schistosomiasis.

By disposing of untreated wastewater in the environment, nutrients are biologically degraded in groundwater, lakes, and rivers by using oxygen present in fresh water (eutrophication). If the oxygen demand of the wastewater is too high, hypoxia (oxygen depletion) of a watercourse will result in significant environmental degradation though sucking oxygen along the path over which the water is flowing and in the process destroying lives of organisms and plants along the way. Additionally, the nutrients can increase algal production and algal blooms that will favour potentially hazardous bacteria (e.g. cyanobacteria) and might result in hazardous toxins forming that can cause illnesses, such as from exposure to cyanotoxins. Nitrate in the groundwater from untreated wastewater can result in methaemoglobinaemia, particularly in babies.

i) All infectious effluents should be discharged into the sewerage system or soak pits only after being treated according to WHO standards .
ii) Wastewater from HFs should not be released into the environment without treatment because it may contain various potentially hazardous components such as microbiological pathogens, hazardous chemicals, pharmaceutical waste, and radioactive isotopes.
iii) Although proper treatment of wastewater from HFs is very expensive and cannot be currently foreseen in every HF in Uganda, steps 1 and 2 should be applied in order to contribute to the reduction of public health risk associated with liquid waste and wastewater.

Annex 9: Health Care Waste Management Plan Checklist

Key elements in a Health Care Waste Plan

a. Clearly identifies the types of wastes that need special management (at minium following the WHO criteria and include a special focus on sharps management).

b. Structures a waste management system which provides for a specific segregation system, minimizing hazardous chemical wastes, and providing safe collection of all wastes.

c. Establishes clear protocols for safe and secure collection, treatment and disposal of sharps (e.g., needles, syringes, blades, and other instruments capable of inflicting a wound or a puncture). Identifies as part of the protocol the specific legal and regulatory requirements that must be followed from "cradle to grave" management of the health care wastes. This enables employees to be aware of the specific laws and regulations that they are required to comply with, as well as to be alerted to any regulatory changes that, in turn, require them to change their practices.

d. Identifies specific strategies, including purchasing of supplies and equipment which minimize volume and toxicity of wastes (e.g., investment in non-mercury diagnostic technology; water-less/chemical-less x-ray processing; needless IV systems)

e. Provides for an effective and defined worker safety program for all levels of staff. This would include training, provision of appropriate personal protective equipment, clear safety policies, and a 100% staff participation program for immunizations for at minimum Tetanus and Hep B.

f. Provide leakproof, color coded, labeled containers for each waste stream, and puncture resistant containers for collection of sharps wherever they are generated.

g. Ensure secure transportation of waste through the facility, secure storage on site while awaiting pick-up, and safe and secure transportation to treatment and final disposal.

h. Identify key personnel who have charge of the total waste system (planning, documentation, evaluation, maintenance).

i. Identify environmentally sound and cost- effective treatment technologies to render special waste streams harmless – this could be on-site, or off-site methods – in all cases there will be more than one technology necessary to adequately treat all wastes (e.g., silver recovery unit for radiology, xylene recover still for the lab, formaldehyde filtration for pathology, autoclave for most infectious wastes, burial/cremation contract or capacity with local facilities for body parts).

j. Contracts with certified hazardous waste management firm for any chemical hazardous wastes which are not treatable by safe practices on site.

k. Agreement with municipal or private landfill for secure final disposition of all residual wastes. (This may also include contract for controlled collection of recyclable materials from the hospital waste stream - packaging and other clean materials).

Checklist for an effective waste plan

Critical Elements of Waste Plan	Present? Yes /No	If no, what is missing?	Recommended Action to Meet Critical Requirements
❑ Clearly identifies types of waste needing special	❑ YES		❑ Develop Sharps Management Program

treatment with special emphasis on sharps management	❑ NO		❑ Other:
❑ Evidence of Waste Segregation System?	❑ YES ❑ NO		❑ Establish waste segregation systems
❑ Evidence of segregation/minimization of hazardous chemical wastes?	❑ YES ❑ NO		❑ Develop hazardous waste minimization plan and program
❑ Overall safe collection of all wastes?	❑ YES ❑ NO		❑ Need to enhance safety of all waste systems
❑ Defined safe protocols for secure collection treatment and disposal of sharps waste. (note: sharps includes needles, lancets, scalpels, blades, etc.)	❑ YES ❑ NO		❑ Need to establish a defined sharps waste management program. See WHO guide.
❑ Collection of sharps waste should be in puncture resistant plastic or metal containers. Cardboard is NOT acceptable.	❑ YES ❑ NO		○ Need to obtain rigid puncture resistant, leakproof containers to collect sharps wastes.
❑ Defined policies to minimize volume and toxicity of wastes generated? (purchasing policy)	❑ YES ❑ NO		❑ Need to establish purchasing policy to support waste volume and toxicity reduction. See WB Guide
❑ Worker Safety Protocols? Evidence of training, evidence of use of personal protective equipment, evidence of consistent practice among workers?	❑ YES ❑ NO		❑ Need to establish worker safety programs. See SIGN, WHO, WB documents
❑ TB, Hepatitis B vaccine for all workers handling waste	❑ YES ❑ NO		❑ Establish immunization plan and program for workers.

❑ Leakproof, color coded, labeled containers for collection of each type of waste?	❑ YES ❑ NO		❑ Obtain proper collection containers for each waste stream. Seek special assistance for collection of hazardous chemical wastes.
❑ Secure transport of wastes within facility? E.g. closed collection carts, containers	❑ YES ❑ NO		❑ Need to obtain proper containers to ensure safe collection and transport of all wastes within facility.
❑ Waste Manager, or someone designated to oversee all aspects of waste program/	❑ YES ❑ NO		❑ Designate someone to oversee waste programs, provide training as needed. See WHO guide, WB notel
❑ Adequate Treatment technologies to render special wastes harmless? ❑ Silver recovery - radiology ❑ Solvent recovery - laboratory ❑ Formalin/Formaldehyde recovery - laboratory ❑ Autoclave – facility-wide for infectious materials ❑ Burial/cremation contract for body parts ❑ Contracts with certified hazardous waste management firm(s) for chemical hazardous wastes	❑ YES ❑ NO ❑ YES ❑ NO ❑ YES ❑ NO ❑ YES ❑ NO ❑ YES ❑ NO ❑ YES ❑ NO		This section requires an area-by-area inquiry ❑ Obtain silver recovery technology or service ❑ Obtain solvent recovery technology or service ❑ Obtain formalin/formaldehyde recovery technology or service ❑ Obtain autoclave technology or other similar technology or service ❑ Identify and secure contract for burial or cremation services. ❑ Identify hazardous waste firm for hazardous chemical wastes. ❑ Identify neutralization process for hazardous chemicals
❑ Agreement with municipal or private landfill for secure final disposition of all residual wastes (this can include controlled collection of recyclable wastes such as paper, metal, plastics, glass, cardboard)	❑ YES ❑ NO		❑ Obtain agreement for secure landfill of residual wastes
NOTE: With all queries above, note if there are contingency plans in the event the primary system or plan fails.			

Annex 10: Code of Practice for Construction Workers

Part I: Code of Practice

Part I: Code of Practice

This provides general operational guidance to contractors.

Part II: Code of Conduct

This entails governance/management and regulation of social behavior of contractors at work.

1. INTRODUCTION

This code of practice provides guidance to contractors who will undertake construction of healthcare facilities associated with this project.

Construction work is work carried out in connection with construction, alteration, conversion, fitting-out, commissioning, renovation, repair, maintenance, refurbishment, demolition, decommissioning or dismantling of a structure.

Construction workers must always:

- take reasonable care for their own health and safety
- take reasonable care that their acts or omissions do not adversely affect the health and safety of other persons, and
- comply with any reasonable instruction and cooperate with any reasonable policy or procedure relating to health and safety at the workplace.

2. MANAGING RISKS WITH CONSTRUCTION WORK

The first step in the risk management process is to identify the hazards associated with construction work. Examples of hazards include:

- collapse of trenches
- falling objects, for example tools, debris and equipment
- hazardous manual tasks
- structural collapse
- the construction workplace itself, including its location, layout, condition and accessibility
- the handling, use, storage, and transport or disposal of hazardous chemicals
- the interface with other works or trade activities
- the physical working environment, for example the potential for electric shock, immersion or engulfment, fire or explosion, slips, trips and falls, people being struck by moving plant, exposure to noise, heat, cold, vibration, radiation (including solar UV radiation), static electricity or a contaminated atmosphere, and the presence of a confined space.
- the presence of asbestos and asbestos-containing materials
- the use of ladders, incorrectly erected equipment, unguarded holes, penetrations and voids, unguarded excavations, trenches, shafts and lift wells, unstable structures such as incomplete scaffolding or mobile platforms, fragile and brittle surfaces such as cement sheet roofs, fibreglass roofs, skylights and unprotected formwork decks
- welding fumes, gases and arcs

3. SAFE WORK METHOD STATEMENTS (SWMS)

All persons who are involved in high risk construction work must develop and implement arrangements to ensure the work is carried out. This necessitates a SWMS, which is a written document that details high risk construction work activities to be undertaken, hazards or risks arising from those activities and measures to control the risks. All workers who will be involved in high risk construction work must be provided with information and instruction so they:

- know what to do if the work is not being conducted in accordance with the SWMS.
- understand and implement the risk controls in a SWMS
- understand the hazards and risks arising from the work

This information and instruction may be provided during general construction induction training, workplace-specific training or during a toolbox talk by the principal contractor, contractor or subcontractor.

4. Occupational Health safety (ohs) MANAGEMENT PLANS FOR CONSTRUCTION PROJECTS

An OHS management plan is a written plan that sets out the arrangements for managing some site health and safety matters. The intention of an OHS management plan is to ensure the required processes are in place to manage the risks associated with a complex construction project, as there are usually many contractors and subcontractors involved and

circumstances can change quickly from day to day. An OHS management plan must be in writing and must be prepared by the principal contractor before a project commences. It should be easily understood by workers (including contractors and subcontractors). It may not be necessary to communicate the entire OHS management plan to all workers; however, they must be made aware of the parts that are applicable to the work they are carrying out. The OHS Management Plan must contain:

arrangements for consultation, cooperation and coordination

- arrangements for managing incidents
- arrangements to collect and assess, monitor and review SWMS.
- names of persons at the workplace whose positions or roles involve specific health and safety responsibilities, for example site supervisors, project managers, first aid officers
- site-specific health and safety rules and how people will be informed of the rules

While a OHS management plan is required for every construction project, a principal contractor may prepare a generic OHS management plan that applies to several construction projects, if the arrangements to manage work health and safety are the same for each construction project. However the principal contractor must review and revise the plan to ensure it addresses the risks
of the actual workplace.

5. INFORMATION, TRAINING, INSTRUCTION AND SUPERVISION

All contractors and subcontractors must provide relevant information, training, instruction and supervision to protect all persons from risks to their health and safety arising from construction work carried out.

A range of activities can assist in ensuring people have the necessary knowledge and skills to complete the work safely, including general construction induction training and other training that may be specific to the workplace or the task the person is performing.

Information that might be provided includes workplace health and safety arrangements and procedures, such as for emergency evacuations. Information can be provided in various forms, including written formats or verbally, for example during workplace-specific training, pre-start meetings or toolbox talks.

General construction induction training provides basic knowledge of construction work, the work health and safety laws that apply, common hazards likely to be encountered in construction work, and how the associated risks can be controlled.
Any person who is to carry out construction work must successfully complete general construction induction training, for example project managers and engineers, foreman, supervisors, surveyors, and labourers.

6. GENERAL WORKPLACE MANAGEMENT ARRANGEMENTS

The principal contractor must put in place arrangements for ensuring compliance with the following duties:

- providing a safe working environment
- Zero tolerance to Child Labour
- providing and maintaining adequate and accessible facilities
- providing first aid
- preparing, maintaining and implementing emergency plans
- providing workers with PPE, if PPE is to be used to minimise a risk to health and safety
- managing risks associated with airborne contaminants
- managing risks associated with hazardous atmospheres including ignition sources
- storage of flammable and combustible substances
- managing risks associated with falls, and
- managing risks associated with falling objects.

The principal contractors may put in place arrangements for ensuring compliance with the above requirements through contractual arrangements, but they cannot rely only on these arrangements to ensure compliance. The principal contractor may also coordinate with other subcontractors, and check compliance whenever the principal contractor attends the construction site.

Part II: Code of Conduct for Contractors

Each employee including trainee or volunteer of a **Contractor** who have interaction with the project must sign this "Code of Conduct."

In this Code, "Contractor" shall mean and apply to the contractor, its employees, sub-contractor, officers, agents, representative or those contracted through the Contractor to perform services authorized by the contract.

The contractor agrees to adhere to this Code of Conduct when providing services to this project. The Code of Conduct is in addition to all other contract requirements, policies, rules and regulations governing delivery of services. The purpose of the code is to protect vulnerable people from abuse, neglect, maltreatment and exploitation. It clarifies expectation of conduct of the parties and their employees, which includes administrative staff, care staff, support services staff and any others when interacting with the project.

Contractor, its agents or representatives authorized through it shall not abuse, sexually abuse or sexually exploit, neglect, exploit or maltreat any fellow employees or people from general public/ community. Additionally, no person shall cause physical injury to any other person.

The Contractor shall not by acting, failing to act, encouragement to engage in, or failure to deter from will cause any person to be subject to physical or mental abuse, sexual abuse or sexual exploitation, neglect, exploitation, or maltreatment. The Contractor shall not engage any person as an observer or participant in sexual acts.

Contractor understands and acknowledges that failure to comply with this Code of Conduct may result in corrective action, probation, suspension, and/or termination of contract.

Equally important to realise is that this Code also protects any person under the age of 18 years and any person 18 years of age or older who is physically or mentally **handicapped or impaired** due of mental illness, mental deficiency, physical illness or disability, or other temporary or permanent cause, to the extent that he is unable to care for his own personal safety.

1) Abuse shall include the following, but is not limited to:

a) Harm or threatened harm, meaning damage or threatened damage to physical or emotional health and welfare of any person.
b) Unlawful confinement.
c) Deprivation of life-sustaining treatment.
d) Physical injury including, but not limited to, any contusion of the skin, laceration, malnutrition, burn, fracture of any bone, subdural hematoma, injury to any internal organ, any injury causing bleeding, or any physical condition which imperils a person's health or welfare.
e) Any type of physical hitting or corporal punishment inflicted in any manner upon the body.

2) Sexual misdemeanor will include, but not be limited to:

a) Engaging in exploitive or manipulative sexual intercourse with any person. There will be zero tolerance to sexual misdemeanor including rape, defilement of minors/ sexual child abuse, sexual harassment and elopement.
b) Taking indecent liberties with a person, or causing an individual to take indecent liberties with a person, with the intent to arouse or gratify sexual desire of any person.
c) Employing, using, persuading, inducing, enticing, or coercing a person to pose in the nude.
d) Employing, using, persuading, inducing, enticing or coercing a person to engage in any sexual or simulated sexual conduct for the purpose of photographing, filming, recording, or displaying in any way the sexual or simulated sexual conduct. This includes displaying, distributing, possessing for the purpose of distribution, or selling material depicting nudity, or engaging in sexual or simulated sexual conduct.

e) Use of profanities and obscene language in communities or when instructing others.

3) Neglect may include but is not limited to:

a) Denial of sufficient nutrition to any person.
b) Denial of sufficient sleep to nay person.
c) Denial of sufficient protective gear to any person.
d) Failure to provide adequate supervision; leading to drug use in workplaces, accidents and impairment of employees.
e) Failure to arrange for medical care and/or medical treatment for any person in an emergency.
f) Failure to drive courteously at all times, leading to accidents.
g) Failure to avoid damage public property.
h) Neglecting public and employee complaints.

4) Drug abuse may include but is not limited to:

a) Smoke in public or smoking in undesignated areas
b) Consumption of alcohol while on duty/at work
c) Use and trading in narcotics

5) Illegal trade activities without necessary licenses:

a) Trade in protected fauna or flora species
b) Trade in ivory or similar regulated wildlife products including game meat
c) Trade in processed, semi-processed minerals and their ores

Financial exploitation will include, but is not limited to:

Utilizing labor of without paying for it, or at a non-commensurate financial rate/ wage.

Mistreatment will include, but is not limited to:

a) Physical exercises, such as running laps or performing pushups,
b) Unauthorized chemical, mechanical or physical restraints except,
c) Assignment of unduly physically strenuous or harsh work.
d) Failure to behave in a polite and courteous manner to the general public
e) Requiring or forcing the individual to take an uncomfortable position, such as squatting or bending, or forcing people to repeat physical movements when used solely as a means of punishment.
f) Group punishments for misbehavior of individuals except in accordance with the written policy.
g) Verbal abuse: engaging in language whose intent or result is demeaning
h) Denial of any essential service solely for disciplinary purposes
i) Denial of visiting or communication privileges with family or significant others
j) Requiring the individual to remain silent for long periods of time solely for the purpose of punishment.

Contractor agrees to document and report abuse, sexual abuse and sexual exploitation, neglect, maltreatment and exploitation as outlined in this Code and cooperate fully in any resulting investigation. Contractor shall prominently display a poster, notifying contractor employees of their responsibilities and to report violations and giving appropriate phone numbers.

Contractor/ Employee/ Volunteer/ subcontractor

Signed: …… Date (dd/mm/yyyy):

Name: ……