Republic of Uganda

Department of Refugees, Office of the Prime Minister

Regional Operation on Development Response to Displacement Project in the Horn of Africa - Uganda Project

Updated Environmental and Social Management Framework-ESMF

January, 2018

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ACRONYMS	
CAO	Chief Administrative Officer
CBO	Community Based Organization
CDD	Community Driven Development
CDO	Community Development Officer
CIR	Community Infrastructure Rehabilitation
CPC	Community Procurement Committee
CPMC	Community Project Management Committee
CSO	Civil Society Organization
DEC	District Executive Committee
DoR	Department of Refugees
DRDIP	Development Response to Displacement Impacts Project
DTPC	District Technical Planning Committee
ESMF	Environmental and Social Management Framework
GoU	Government of Uganda
GPN	General Procurement Notice
NHS	National Household Survey
NUSAF 3	Northern Uganda Social Action Fund Phase 3
OPM	Office of the Prime Minister
PC	Parish Chief
PDC	Parish Development Committee
PRDP	Peace, Recovery and Development Plan
IDP	Internally Displaced Person
IEC	Information, Education and Communication
LRA	Lord's Resistance Army
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
M&E	Monitoring and Evaluation
MIS	Management Information System
MoES	Ministry of Education and Sports
MoFPED	Ministry of Finance Planning and Economic Development
MoLG	Ministry of Local Government
MoU	Memorandum of Understanding
RPF	Resettlement Policy Framework
SAC	Social Accountability Committee
SCC	Sub-County Chief
SCEC	Sub-County Executive Committee
SMC	School Management Committee
ToRs	Terms of Reference
TPC	Technical Planning Committee
UBOS	Uganda Bureau of Statistics

EXECUTIVE SUMMARY

BACKGROUND

For over five decades, Uganda has provided asylum to people fleeing war and persecution from many countries, including its neighbors. Uganda is party to key refugee conventions and international human rights treaties, and currently hosts over 1.35 million refugees, the majority from South Sudan (75%), the Democratic Republic of Congo (17%), Burundi (3%) and Somalia (3%). When renewed conflict broke out in South Sudan in July 2016, an unprecedented number of refugees came to Uganda, doubling the refugee population in less than seven months. Uganda has since become the largest refugee-hosting country in Africa, with refugees making up 3.5% of the country's total population of 39 million. The economy faces challenges, compounded by adverse weather and spill-over from the civil unrest in South Sudan.

DEVELOPMENT RESPONSE TO DISPLACEMENT IMPACT PROJECT-DRDIP

In response to the impacts of forced displacement on refugee hosting countries and communities in HOA, the proposed operation is a multi-country development response by the respective Governments of Djibouti, Ethiopia and Uganda. The proposed regional operation addresses the unmet social, economic and environmental needs of the local communities both host and displaced (refugees and returnees) in targeted areas of the three proposed project countries. The project in Uganda will be implemented in the districts of: Adjumani, Arua, Isingiro, Kamwenge, Kiryadongo, Koboko, Kyegegwa, Lamwo, Moyo and Yumbe.

Project Development Objective: The Project Development Objective (PDO) is to improve access to basic social services, expand economic opportunities, and enhance environmental management for communities hosting refugees in the target areas of Uganda. The proposed regional project will embed the essential features of ensuring citizen participation and engagement in identifying and prioritizing developmental needs, including socio-economic infrastructure and livelihood opportunities to improve self-reliance of host communities; improving social cohesion between refugees and host communities; increasing citizen voice and role in development decision making; and eliciting greater demand for social accountability.

Project Components

The Project components include:

Component 1: Social and Economic Services and Infrastructure: The component will provide investment funds that together with community contributions both in cash and kind, as feasible; will help expand and improve service delivery, and infrastructure for local development including the construction/expansion of schools, health centers, water supply, and all-weather roads. As appropriate, this component will also include interventions addressing pervasive protection challenges including response and/or prevention initiatives addressing varying forms of gender-based violence (GBV). Investments will be identified, prioritized, implemented and monitored by beneficiary communities. The investments will be determined following a process of information dissemination and sensitization, and community mobilization, creation of inclusive community based organizations followed by mapping of

social and economic infrastructure and resources to identify potential gaps and underserved populations.

Component 2: Sustainable Environmental Management: In almost all of the hosting areas, the large number of refugees has resulted in environmental degradation and loss of vegetation cover. The unmet energy needs of the displaced and the host communities has resulted in the harvesting of fuel wood and construction wood, denuding the areas which is also a cause of tension between the displaced and host communities. Denudation and deforestation have resulted in erosion from wind and water, and that the precondition to restoration will be measures countering erosion processes. A comprehensive package of measures will be identified based on: (i) analysis/mapping/typifying and prioritizing of damage, (ii) developing options for remediation approaches and methodologies, including cost intensity; (iii) selection of intervention areas, considering demand/priority, and available techniques/ budget. For example, some remediation would consist of constructing or rehabilitating physical structures for water catchment management such as check-dams, and water harvesting structures; and biological measures like afforestation. In addition alternate energy sources like solar stove or alternative fuel like kerosene will be explored. The proposed interventions will be innovative and technologically sound, particularly with respect to energy and water management.

Component 3: Livelihoods Program: This component will support the development and expansion of traditional and non-traditional livelihoods of the poor and vulnerable households to build productive assets and incomes. A thorough mapping of existing productive livelihoods including agricultural, agro-pastoral and pastoral, will be undertaken based on consultations with target households accompanied by a technical and market analyses to understand the potential for each of the major livelihoods, the opportunities along the value chain and required inputs in terms of the information, finance, technology, tools, and technical assistance. The process to be followed will include community mobilization, formation of producer/livelihood collectives to achieve efficiencies of scale for accessing both input and outputs markets, and forging private sector linkages. Given the large youth population among the beneficiaries, skills enhancement for jobs and employment will also be explored based on market needs and skills gap assessment. Livelihoods programs targeting women and female-headed households as an integrated component of GBV interventions will serve both as a means of prevention (i.e. reducing women's vulnerability and potential exposure to violence or high risk environments) and as a means of longer-term support for those affected by violence.

Component 4: Project Management including M&E and Regional and National Institutional Support: The following activities will be included: Strategic Communication, Monitoring and Evaluation arrangements –Management Information System (MIS), independent process monitoring, and outcome/impact evaluations at midterm and end of project; and measures for enhanced transparency and accountability; and development learning to around policy and practice of forced displacement.

Project Financing: The total estimated Uganda DRDIP costs are based on an IDA allocation for an overall estimated budget of US$ 50 million over a Five-Year period.

THE ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK-ESMF

Purpose and Scope of ESMF

The National Environment Act Cap 153 in its Article 23 stipulates the need to conduct environmental and social impact assessment in development projects. In addition, in its Third Schedule, it lists types of projects that require mandatory Environmental and Social Assessments to be conducted before their implementation. This proposed project has components activities dealing with infrastructure constructions and rehabilitation works which are aimed at improving their functionality in delivery of social services to the host communities. In all, such works are likely to trigger fairly limited, small-scale, localized and short-term negative environmental and social impacts which are reversible. However, though at this stage, the specific locations for infrastructures are not yet known, the ESMF sets measures for identification and management of possible environmental impacts of the proposed project. After fully clarifying details of project interventions, site specific environmental and social assessments and respective Environmental and Social Management Plans (ESMPs) shall be prepared before on set of implementations. It is important to note that, during project implementation, all sub-projects shall be subjected to environmental and social screening before start of any works. The ESMF further provides guidance on resolution of grievances and a mechanism of handling any physical cultural resource that may be encountered during project implementation. The ESMF also provides guidance on development of Pesticides Management Plan where use of pesticides and associated agrochemicals may be applicable.

World Bank Safeguard Policies

The project triggers the following World Bank policies: Environmental Assessment (OP 4.01), Natural Habitats (OP 4.04), Forests (OP 4.36), Pest Management (OP 4.09), Physical Cultural Resources (OP 4.11), Involuntary Resettlement (OP 4.12), safety of dams (OP 4.37) and Projects on international waters (OP 7.50)

PROJECT ACTIVITIES, IMPACTS AND THEIR MITIGATION MEASURES

Overview of the activities

The project will support interventions designed to improve livelihoods and access to basic socio-economic services in selected districts. The salient physical characteristics relevant to safeguard analysis relate to social and economic investments which entail civil works and/or construction/expansion of schools, health centers, water supply, and all-weather roads. Others include some remediation would consist of constructing or rehabilitating physical structures for water catchment management such as check-dams, and water harvesting structures; and biological measures like afforestation. In addition, alternate energy sources will be explored. Under project component 3: support and expansion of livelihoods program while supporting the development and expansion of traditional and non-traditional livelihoods of the poor and vulnerable households to build productive assets and incomes.

Positive impacts

Overall, the positive impacts of Uganda DRDIP can be summarized as follows:

a. ***Creation of Employment opportunities:*** It is expected that some jobs will be available during construction of the different subprojects for the local population, mainly as casual workers.

Though the envisaged employment opportunities are expected to be temporary and benefit the community in the short term.

b. ***Improvement in availability of water at household levels;*** availability of water both at the refugee settlements and host communities is dire with individuals accessing on average, 8-12 litres of water which is below WHO recommended amounts. Water availability constitutes one of the main sources of conflicts between the refugees and their host communities;
c. ***Livelihoods improvement:*** Given that the refugee hosting areas are also among the poorer and less developed regions in Uganda, refugee presence further undermines the coping abilities of host communities further exacerbated by limited social capital, less diverse livelihoods and low levels of assets. One of the positive contributions that Uganda DRDIP may make to host communities' development of livelihood improvement skills and knowledge that can be utilized for the benefit of local people;
d. ***Food security at household levels:*** Where the project will construct water storage facilities, this will guarantee availability of water at households in the host communities, which could be used to address food production during drought periods and ensuring water availability for domestic use;
e. ***Improvement in delivery of social services:*** The health services are stretched and the refugee hosting areas are prone to a higher prevalence of malaria, respiratory tract infections (RTIs), diarrhoea and preventable diseases among children. Therefore, support to rehabilitate health facilities will bring about improved delivery of social services in terms of medical to host communities and better health at household levels. While construction or improvement on classroom facilities will have large positive impact in the delivery of education services and improvement of learning environment in the host communities;
f. ***Improved water and sanitation situation:*** Due to the shortage of water points, the host communities rely on the few available boreholes distributed within the settlements and host communities. Therefore, the proposed provision of more water points under the project is likely to reduce such conflicts/fights. Provision of latrines (separate for boys, girls; male and female teachers) at schools will provide convenience and improve sanitation. This will be so especially if hand wash water is provided at latrines***.***
g. ***Improved environmental and eco-system services:*** Host populations experience deterioration in the quality of their environment; normally available materials and supplies for construction, consumption and fuel are short, and prices for fuel and food in local markets rise. However, one of the objective of Uganda DRDIP is to ensure that environmental and natural resources are carefully and sustainably managed to support current and future needs and livelihoods.
h. ***Tree Planting:*** Under the project, planting of trees will help provide a sustainable source of poles for construction of shelter as well as provision of firewood. This will also reduce encroachment on protected forests in search for firewood.
i. ***Source of income to material/equipment suppliers and contractors:*** The proposed rehabilitation of and small-scale construction/civil works will necessitate procurement of equipment, construction materials and services which will be sources of income to suppliers of such materials.
j. ***Other Positive Impacts of community roads:*** these will improve connectivity amongst host communities, refugees' areas and the wider communities thereby enhancing trade, delivery and access to social services. This will also have positive, significant and long-term local and national socio-economic impacts which include: reduced travel time; safer journeys with reduced accident risks.

Negative impacts

Negative impacts and Mitigation Measures for water storage facilities:

a. ***Site clearance based impacts:*** construction of valley dams can potentially disturb the landscape around the dam through site clearance, excavation, establishing areas for storage equipment and construction materials, establishing accommodation facilities and parking, access roads. **This is to be mitigated through ensuring that, works are kept to the minimum and restricted to the sites designated for the valley dams and their support facilities and after works site be fully restored;**

b. ***Risks of drowning in the dams:*** during their operations, there are potential risks of drowning in the dams by children who are likely to be tempted to go and swim in the dams. **This is to be mitigated through fencing off the dams and watering/fetching waters from shallow ends. The community leaders to sensitize the communities on the risks of swimming in the dams;**

c. ***Creation of borrow pits:*** dam construction creates borrow pits which degrade the environment through extraction of fill materials for embankments. The borrow pits if poorly restored can be breeding sites for malaria and other water based vectors. **The contractors should restore borrow areas as part of their contracts and the obligation should be built in the contract and the DEOs should certify to ensure compliance;**

d. ***Management of cut-to spoil materials:*** Cut to spoil materials generates loose soils that can silt the water sources. Contractors will lease dumpsites for stock-piling of the cut to spoil materials and should be sited outside water sources. The sites be leased from landlords in the area after negotiated payments for such sites;

e. ***Impacts of equipment storage yards:*** Since Uganda DRDIP envisages rehabilitating valley small dams, it means the construction process will involve fairly light equipment which will have minimum impacts on soils. Also, the works will be of short-term nature thus reducing impacts on environment;

f. Risks to livestock safety: dam embankments can pose safety risk to both livestock and the communities. If the banks are high, safety of cattle to access water becomes an issue as well for the communities to draw water. In some instances, children can have tempted to swim in the dams and may end up drowning. ***Fencing the dams and reservoir may be required to prevent access to the embankment and its reservoir especially control access to deep sections;***

g. Construction dust: construction works for the water storage facilities will generate dust which can cause health associated implications on the workers and neighboring communities. ***This is to be mitigated through provision of Personal Protection Equipment (PPEs) and observing good engineering practices during construction alongside sprinkling water on loose soil surfaces; and***

h. ***Potential conflict over use of dam waters:*** likely conflicts over access and usage of waters from the dams can arise from arguments on watering turns, watering utensils and petty differences within the community which get carried to the dams culminating into quarrels and sometimes, fights. This could be mitigated by strengthening implementation of Community engagement including setting up transparent and inclusive dam/water user committees with agreed water use guidelines by the user communities.

Potential negative Impacts and Mitigations for health centers interventions

1. ***Disruption in the delivery of services*** during improvements works involving moving some services to some rooms or sealing off some areas from the public which all will likely cause temporary disruption in delivery of health services to patients at the facilities under renovation. Advance relocation information should be shared with both the health centers and workers, and the patients for purposes of preparing them for the relocations.
2. **Fears of electrocution,** the rehabilitation works inside operational rooms will likely involve cutting off electricity supply an exercise if not well handled could be fatal. It is suggested, the contractor works with UMEME to disconnect power supply to the facilities and after works, securely and safely reconnect supply.
3. **Indoor air quality deterioration due to dust from renovation works: through** demolition to modify internal built environment inside the health centers will likely lead to slightly moderate levels of indoor dust which can affect construction workers, health workers, members of the public and patients. Contractors should use dust screens or nets in windows, doorways and ventilators of rooms where demolition or other dusty construction activities are occurring.
4. **Risks of Improper management of construction works:** 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. Contractors should undertake waste segregation at source to separate hazardous from non-hazardous waste amongst others.
5. **Health risks from improper waste management:** 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. WHO protocol for management of medical waste should be adopted.
6. **Potential risks on injury to patients or healthcare staff by construction activities:** where renovation will entail modification of internal built environment, it will be necessary to temporarily relocate patients and medical services to adjoining rooms to allow demolition and reconstruction.
7. ***Safety of the public utility:*** The health facilities will remain open for use during their rehabilitation works as such, there will be concerns regarding the safety of the public in the facility. It is suggested that, the contractors should screen off the areas through use of warning signs both in ***English and in local languages***, use of reflective tapes, barriers and guards.
8. ***Occupational health safety (OHS) risks for contractors*** and therefore, contractors should provide all workers with requisite protective gear.
9. ***Loss of vegetation:*** Stock piles for construction materials will likely take up space in the health facilities as well routes followed by construction crews and their equipment can cause damage to the greenery in the health facilities. The materials stockpile areas have to be fully rehabilitated and restored at the close of the project works;
10. **Management of human anatomical waste;** sometimes the health centers undertaken some levels of surgical operations requiring removal of human body parts and such wastes cannot be disposed under usual hazardous waste management measures. Such waste will be managed through placenta pits, incineration and burial either by the next of kin or in urban cemetery;

11. **Impact of establishing a temporary Equipment Storage Area and Office:** For purposes of managing construction logistical needs, the contractor will require a temporary equipment storage area (store) inside the health premises to house equipment and Office space for general administration of the project. This can cause public health issues regarding management of human waste amongst others. It can also cause conflict with the patients in terms of water and parking space.
12. **Issues relating to construction materials extraction:** The rehabilitation/expansion or improvement works in health centers will require sand, bricks, and stones for masonry works. These materials have to be extracted and transported to the construction sites. The process of extraction of these materials will entail creation of borrow and quarry pits thereby distorting the landscape and aesthetics of the areas. This will likely be a small negative irreversible impact of long term nature.
13. **Issues of child labor;** In search of employment opportunities, there are likely to be instances of young boys and girls being attracted to come over for employment opportunities in the project. The contractors will be under strict instructions not to employ children of school going age in the project.
14. **HIV/AIDS concerns:** Interactions between the workers and female community members has a potential to trigger risks of communicable diseases transmission such as HIV/AIDS and related STDs. There will be need to sensitize the workers and the communities on the risks of HIV/AIDS at the start of the project through an arrangement with an HIV/AIDS service provider from such project areas.

Impacts on PCRs

At the moment, it is known that, the health centres are existing and improvement works will be undertaken within such confines. However, it is anticipated that, there will be excavations works that are likely to discover some physical cultural resources (PCRs). Under such circumstances, measures outlined in the Chance Finds Procedures in this ESMF should be operationalized to address such accidental encounters.

Negative impacts from classrooms works and their operations

Summary of the negative impacts that are likely to arise from classroom works and their operations include:

1. **Land take and livelihood displacement concerns** may arise where classrooms will be constructed in existing schools' compounds. Once the projects are identified, land take and livelihood displacements will be assessed to define the impacts. As may be appropriate, OPM and the benefiting districts, will take the necessary actions including acquisition of land as may be appropriate as in the guidance given in the RPF. Where voluntary land donation by communities is done, guidelines for such a process will be provided in the RPF.
2. **Setting and operations of temporary workers' camp site** can raise public health issues which the contractor will address through routine cleaning of the toilets and later, demolition and fully landscaping such sites;
3. **Vegetation loss implications**, through site clearance and preparation works and should be mitigated through full restoration and re-grassing the sites at the end of the project;
4. **Potential conflict in water use**: the contractor to put in place, his own water supply preferably, ferry his own trucks of water for project works instead of relying on the school systems where such is available to avoid conflict with the pupils and school operations;
5. **Potential Risks of Violence-SGBV**: contractor to have his own public toilets than have his crew use

facilities for the schools which can lead to sexual abuse of school girls. The contractor will ensure that a code of conduct deterring workers from engaging in potential rights abuse is signed by the workers and is observed with Zero tolerance. Continuous sensitization will be required.

6. **Management of cut to spoil material** which is likely to arise through excavation works and general works to with foundations and such waste material should be dumped in agreed sites not in wetlands or roadsides areas;
7. **Erosion control concerns** likely to arise through site clearances and excavations, run-offs from roofs of constructed classrooms, and transport routes for construction traffic. This can be mitigated through site restoration, re-grassing, planting ornamentals and rain-water harvesting.
8. **Noise nuisance** which can arise through transportation of construction materials and from the workers which noise can be a nuisance to the schools' operations and is to be mitigated through briefing the workers and drivers on the need to control noise while in the schools' settings and restricting construction activities to daytime (8:30 am-5:00 pm);
9. **Demolition works impacts** this is likely to arise where works entail demolition of makeshift classroom shelters to make way for new classroom blocks. The impact will be in terms of construction debris, noise and dust. Such sites will be horded to keep off dust nuisance and intrusion to the site;
10. **Potential disruption of schools' operations** which can be occasioned by demolition of temporary classroom facilities and construction operations though short-term, will need to be mitigated by the schools' management committees who should put in place, temporary arrangements to cater for children in the event that makeshift classrooms are to be demolished paving way for construction of permanent classrooms. Also, major civil works should be synchronized to be done during the long end of year holidays (December-February);
11. **Impacts relating to sourcing of construction materials** like stones, sand, etc. will have impact on the environment at their points of extraction which emphasizes the need for the contractors to fully restore such site to the satisfaction of DEO and the Project Engineer;
12. **Occupational health safety (OHS) risks** on both the construction workers and the school community is to be mitigated by providing PPEs to the workers, having modestly stocked First Aid kits on the site and observing speed limits of 20km/hour while on the school compounds. In addition, the contractors should have contacts of nearby ambulance and police fire and rescue services for any emergencies;
13. **Risks to the safety of the school** pupils and the school communities to injuries from construction traffic**;** this is to be mitigated through use of appropriate and standard signage to warn staff and/or visitors that are not involved in construction activities of dangers in the construction sites and by ensuring trucks observe speed limits while on the schools' confines;
14. **Risks of HIV/AIDS, STIs/STDs** or other contagious diseases among local community and pupils alongside child abuse (child labour, child pregnancy, sex work involving children). This is a serious concern to be addressed by Client and contractors include adherence to the code of conduct while working in schools, defining zero tolerance to engaging in sexual relations with pupils, not employing children in the project according to the Children Rights Statutes and Labour laws of Uganda;
15. **Management of construction waste,** such as cement bags, brick debris, off-cuts from roofing and timber works, waste paper, plastic bags and heaps of excavated soils will all have to be transported outside the sites by the contractors to agreed/approved disposal sites.
16. **Fears of collapse of infrastructure,** will be addressed in the project through employing a Project

Engineer to oversee the construction processes as well as, certify works on behalf of the Client; and **Risks of lightning strikes** to be mitigated by putting in place, lightning conductors/arrestors on buildings and such arresters should be aluminium type which are not so much sought out by thugs compared to copper rods.

Negative impacts associated with construction of wells

1. **Land acquisition concerns:** the process of sinking production wells, associated drilling will be a limited foot-print impact and also, land is already availed to OPM and others, offered by the communities, which triggers no compensation; and
2. **Anxiety on the part of community** in anticipation for water which can trigger un-rest regarding location of the wells with some sections of the community wanting to have the facility on their lands without knowing the process involved in siting of wells.
3. **Loss of vegetation:** the drilling site works will lead to loss of vegetation though this impact will likely to be of minimal scale since the area taken up will small and such sites will be fully restored;
4. **Risks associated with management of drill mud.** This should be disposed as guided by the engineer overseeing the drilling process;
5. **Risks of STD/STI** this is of concern during the drilling in which, the drill crews can develop relations with women and girls in the community and can result in conflict and spread of HIV/AIDS in instances of unprotected sex relations.
6. **Risks of vandalism and abuse of facilities** by children and impact of livestock watering will call for protection of Well infrastructure through fencing and instituting and equipping working community management framework such as Water Use and WASH Committees, involvement of women in such management arrangements

Civil Works (community roads improvements)

Summary of community road works improvements works and their mitigations measures

Activity	Impact	Mitigation Measures/Benefit Enhancement
Civil Works		
Ditch cleaning	a. Flooding of agricultural lands and homesteads due to modification of points or direction of discourage of ditches	a. Form offshoots to spit flow in the drain. Construct infiltration ditches, soak pits to prevent water being discharged towards agricultural lands and homesteads.
Medium and light grading	a. Disruption of traffic flows b. Increased pressure on water sources used by the community	a. Warn the public about planned and on-going road works and advise an alternative route to avoid delays due to road works. b. Water for road maintenance should be obtained from sources which do not affect water supply to communities.
Grading, re-gravelling and spot gravelling	a. Reduced land use option on sites where borrow pits will be located. b. Loss of land values on properties on which borrow pits will be located.	a. Compensate adequately owners of land where construction materials are collected from. b. Restore borrow pits. c. Sprinkling water on the roads to check dust levels.

Activity	Impact	Mitigation Measures/Benefit Enhancement
	c. Breeding of disease causing vectors in stagnant water collecting in borrow pits. d. Dust during transportation of field materials. e. Noise due to haulage trucks. f. Delays in traffic due to detours and diversions hence, disruption of traffic flows. g. Increased pressure on water sources used by the communities.	d. Erect speed warning signs near settlements sensitive to noise e.g. schools, health centers. e. Warn road users about road works and suggest alternative road routes to avoid traffic delays. f. Reduce slopes of pits, i.e. backfill and re-vegetate pits. g. Water for road maintenance work should be obtained from sources which do not affect the water supply to communities.
Health and Safety aspects	a. Accidents and injuries to both workers and the general public;	a. Provide relevant PPE to road workers and ensure their usage at all times; b. Provide First Aid facilities throughout the construction phase for the use of workers where required; c. Provide suitable and safe accommodation and sanitation facilities, including available drinking water and latrines for workers; d. Condone/ screen off construction sites to limit and regulate public/un-authorized access e. Recruit workers from within the communities to avoid separating families.
Social ills of HIV/AIDS, Gender based Violence and Violence Against Children aspects, management of workers/code of conduct	a. Risk of increased incidence of STD and HIV/AIDS; b. Risk of sexual abuse by workers and especially child abuse; c. Marginalization of women during employment process; d. Women being sidetracked from the decision-making processes.	a. Compliance to Employment Act 2006, Section 7 to check SBGV; b. Prioritize employment of local workers to reduce the risk of HIV/AIDS through separating families; c. Provide opportunities to women in income generating activities during construction, e.g. provision of catering services, selling local products, etc.; d. Prepare and implement an STD and HIV/AIDS prevention program including a strict prohibition of sexual abuse and sexual relations with partners younger than 18 years-old (underage sex); e. Immediately report any suspected case of sexual abuse to the nearest police or local authorities; f. Sensitize all contractors, workers and communities on the STD and HIV/AIDS

Activity	Impact	Mitigation Measures/Benefit Enhancement
		program, including explanations on risks posed by STDs, sanctions, etc. as well as on grievance mechanism in place; and g. Establish a 'grievance mechanism' for workers and local residents. h. Contractors to take responsibility of their workers including defining a specific code of conduct defining their boundaries and responsibilities while they are employed

Tree Nurseries and Afforestation

Summary of impacts of tree planting interventions under DRDIP

Potential Impact	Recommended Mitigation
Wet season soil disturbance	Schedule activities for the dry season
Potential for debris flows or landslides	Prepare a watershed plan that identifies and address drainage/slope instability
Sensitive downstream ecosystems	Identify and avoid effects of diversion or dams on downstream ecosystems
Removal of native plant/tree species	Protect and encourage regeneration of endemic species
Introduced plant/tree species invasion of native species	Ensure non-native species are compatible with native species
Environmentally sensitive areas disturbed	Identify and avoid activity in forest, riparian and wetland habitats with particular biodiversity
Informal land uses displaced or access restricted	Avoid interference with informal land users, and take measures to provide access to alternative lands or resources
Insufficient capacity to manage new plantations/pastures	Establish a local committee, where appropriate, and/or bylaws and provide appropriate controls

Latrines

Potential Impacts	Mitigations
a. Potential risks of groundwater contamination due to improper siting of pit latrines. b. Improper use of pit latrines	a. Ensure latrines are sited at least 30 meters far away from shallow wells, cisterns, spring sources and boreholes. b. Latrine pits will be dug in the unsaturated zone above the water table, and latrine pits are protected against flooding and overflow due to intense rainfall; c. Site should NOT have an average slope in excess of 5%; d. Latrine design should prevent in-and-out access for insects or other disease vectors from the pit e. Latrines should be accompanied by hand wash stations f. Establish Community Sanitation Groups or Committees to sensitize the public about proper toilet use including hand washing after use.

Implementation overview

The implementation of the project will be mainstreamed into existing government structures at national and local government levels. Accordingly, all levels of governments will have roles in providing oversight and implementation supports. Local authorities will be responsible for oversight and coordination of the project implementation at district, sub county and community levels. The community will have a leading role in the identification, prioritization and implementation of their prioritized project activities. The PIM will set forth the roles and responsibilities of all stakeholders of the project. In addition, the PIM will also include details of all operational and procedural steps regarding reviews and approvals of specific activities, flow of information, detailed description of project management and implementing bodies, procurement and financial management arrangements, reporting requirements, and manual amendment procedures.

PROJECT INSTITUTIONAL IMPLEMENTATION ARRANGEMENTS

Office of the Prime Minister

The Office of the Prime Minster (OPM) through its Department for Refugees (DOR) will have overall responsibility for implementing and accounting for project funds and coordinating activities under all project components. The OPM Permanent Secretary will be assisted by a Project Implementation Support Team (PIST) that will be established under the Refugee Department within the OPM. The PIST will be led by the Project Director and will include Project Manager, Project Engineer, Livelihoods Officer, Monitoring and Evaluation (M&E) Officer, Procurement officer, Project Accountant, Environmental Officer and Social Safeguards Officer. This Team will work closely with the NUSAF3 Technical Support Team (Safeguards, Finance, Procurement and M&E) to provide technical support during implementation, monitoring and evaluation. The Project Implementation Support Team (PIST) shall be responsible for I) managing project funds (ii) managing the project at the national level, including financial management, procurement in accordance with World Bank guidelines and procedures, and Monitoring and Evaluation; (iii) finalizing the National Project Implementation Manuals and (iv) producing national progress reports on the project. At District level the Environmental and Community Development Officers will take lead in management of safeguards issues and at Sub County and Community level CDOs and Environmental Focal point person at parish level will do the same.

NUSAF 3 involvement

NUSAF 3 comes on the scene following influx of refugees into some of the districts which were originally in the focus of UGANDA DRDIP(i.e. Koboko, Lamwo, Moyo and Yumbe). NUSAF 3 implementation framework has built on its earlier NUSAF 2 project. In those areas, NUSAF 3 will employ expand its coverage to include those areas neighboring refugee settlements through its Community Driven Development (CDD) approach that will ensure no duplication of efforts between those districts under its operations and those outside under the project. The implementation will continue to be supported by the Technical Support Team headed by a Project Director and staffed by relevant technical experts. In all the two scenarios, the Project Director and the Permanent Secretary, Office of the Prime Minister will have overall responsibility for the coordination, accounting for the project resources and ensuring successful implementation of the Project. Both the NUSAF 3 and Uganda DRDIP will be implemented by OPM and will use, as much as possible, the same implementation structures at the central and local government and community levels.

Other stakeholders

1. ***Ministry of Gender, Labor, and Social Development;*** will be responsible for the overall resources management and implementation of the project, the Ministry of Gender, Labor, and Social Development (MoGLSD) mandate as the government agency responsible for Social Protection sector policymaking and overall coordination of SP interventions;
2. ***Ministry of Health,*** health services in Uganda are delivered within the framework of decentralization. District Health Officers are responsible for performing the policy, planning, and supervision functions required of monitoring health services and products in the districts;
3. ***Ministry of Agriculture, Animal Industry and Fisheries:*** OPM will closely work with MAAIF to strengthen the afforestation, crop production and veterinary extension services systems to address the beneficiaries' demands of extension services;
4. ***Ministry of Water and Environment,*** will oversee compliance requirements on matters of wells and boreholes drilling amongst others;
5. Ministry of Works and Transport; will give sectoral guide on matters of community access roads through its District and Urban Roads department;
6. ***Ministry of Lands, Housing and Urban Development (MoLHUD)-***will be sectorally poised to guide on matters of land acquisition and compensation if such arose;
7. **National Forestry Authority,** will play a role on project aspects of tree planting and afforestation;
8. ***The National Environment Management Authority (NEMA):*** will be to review and approve environmental impact assessments and Project Briefs as well as monitoring project implementation in accordance with the National Environment Act and the respective regulations.
9. ***Local Government Administration Structures (Districts and Sub-counties);*** every district has a Community Development Officer who is responsible for mobilizing communities to participate in projects as well as coordinating and reporting on the impact of projects (positive and negative) on the communities. The implementing Partners will liaise with the Community Development Officers in mobilizing and sensitizing target groups on a number of aspects of the DRDIP interventions. Other district staff relevant for the projects include Water and Sanitation Officers, Education Officers, Public Health Officers and District Engineers;
10. ***Host Communities:*** The project will follow a Community Driven Development (CDD) approach whereby communities will play a key role in identifying, prioritizing and implementing the project activities of their choice. The Community Monitoring Group (CMG) will be elected by the beneficiary community and will be responsible for overseeing the overall implementation of the project at community level. The CMG will be the first recipients of any complaints and appeals about the project and will help to resolve at community levels; and
11. ***The role of the contractors:*** The role of the contractors, will be as per the contract will be accountable for the overall implementation of the mitigation measures and this will be monitored and supervised by the OPM Environmental Unit. As such, an ESMP will be prepared for each sub-project. In the schedule of works, the Contractor will include all proposed mitigation measures, and the Supervising Engineers will also ensure that, the schedules and monitoring plans are complied with. This will lend a sense of ownership to the Contractor. The Contractor on his part will also be responsible for planning, implementing and reporting on mitigation measures during the execution of the project works. The Contractor will also be required to apply standard quality assurance procedures in full compliance with the NEMA's Approvals.
12. ***The World Bank:*** The Bank will review and clearance of RAPs as well as independently monitoring the project's environmental and social performance in relation to the respective safeguards

through implementation support supervision missions. World Bank will also review regular monitoring reports and officially disclosing relevant documents on its website. Technical guidance may also be provided by World Bank to OPM as needed from time to time.

MONITORING, EVALUATION AND REPORTING

The environmental and social safeguards monitoring and reporting shall be carried out by OPM-DRDIP Safeguards team, the District Environment Officer and Community Development officer. Monitoring, evaluation and reporting on environmental and social issues will form part of the overall sub-project implementation processes and LG reporting systems. Communities will keep records of all activities done in their respective communities and submit the same to the local governments for consolidation. The District Environment Officers and Community Development Officer will work with the communities to capture and report on environment and social issues on a monthly basis through DRDIP Management Information System. The monitoring reports will then be compiled by the Safeguards team on quarterly basis and shared with NEMA, line ministries and the World Bank.

BUDGET OF ESMF

Nº.	**Item**	**Cost in USD**					**TOTAL**
		Year 1	Year 2	Year 3	Year 4	Year 5	
01.	Training of Line Ministries, Implementing Partners, RWCs, Camp Commandants, DEOs, DFOs and CDOs in safeguards management (environment, social, vulnerability issues, GRM issues, monitoring and reporting etc.)	150,000					150,000
02.	Waste management infrastructures in settlements	50,000	80,000				130,000
03.	Hire of Environmental and Social Safeguards Officers (5 years)	60,000	60,000	60,000	60,000	60,000	300,000
04.	Capacity building for community environmental and water use groups	20,000	20,000	20,000	20,000	20,000	100,000
05.	Environmental assessments, auditing and monitoring		50,000		50,000	50,000	150,000
GRAND TOTAL FOR ESMF							**$830,000**

CONCLUSION AND RECOMMENDATIONS

a. As a result of ongoing conflicts and instability in the Great Lakes Region and Somalia, Uganda is currently hosting over 1,300,000 refugees and asylum-seekers mainly in South-West and Mid-West Uganda in the districts of Adjumani, Arua, Isingiro, Hoima, Kamwenge, Kiryandongo, Lamwo, Moyo Koboko Kyegegwa and Yumbe. As a result, refugee hosting areas are increasingly faced with increased strain in their quest to provide social services not only to the refugees but to the host communities. In particular, there is increasing strain in the provision of education, health, roads, energy supply and WASH based services which is manifest in acute shortage of safe water supply and deteriorating WASH standards at both household and institutional levels. Hence, the timeliness of the proposed interventions under DRDIP;

b. The implementation of the DRDIP will be under the overall coordination by the Department of Refugees in the OPM. However, in areas under NUSAF 3 (i.e. Adjumani, Arua, Koboko, Lamwo and Yumbe), its framework of working with communities will be employed and the Safeguards Specialist will take a lead on matters of compliance. It is important to note that, as much as possible, the same implementation structures at the community, local and central governments levels will be employed to deliver the outputs of the DRDIP under Community Driven Development (CDD) approach;
c. No doubt, to address the gap in the delivery of social services in the host communities, DRDIP project will put in place a number of infrastructures for education, water supply, investments in sustainable environment management amongst others. However, to ensure sustainability of such interventions, it is important that, institutional capacity component should focus on establishing and building of capacities of Water Use Committees (WUC) in the communities and Environment and Sanitation Clubs in schools. Such institutions should serve to sensitize the communities on the usage and care of the interventions which is expected to instil a sense of ownership and stewardship at both community and institutional levels; and
d. Construction and operations of the proposed infrastructures should, to the extent possible be in accordance with sectoral guidelines for such interventions i.e. classrooms, toilets, roads as well as planting of trees. For instance, MoWE emphasizes the need for all drilling contractors to be licensed and approved by the Ministry and for each production well to be sunk, an abstraction permit is required amongst others.

1 UGANDA DEVELOPMENT RESPONSE TO DISPLACEMENT IMPACTS PROJECT

1.1 BACKGROUND

Events in Uganda have been linked to issues surrounding the presence and creation of varying numbers of refugees fleeing from problems of political oppression, armed conflicts, religious persecution and other human rights abuses. Conflicts and tension in the Great Lakes region and Horn of Africa mirror the transnational nature of contemporary conflicts, whose consequences in one country affects another especially neighboring country through refugee flows.

Context for over five decades, Uganda has provided asylum to people fleeing war and persecution from many countries, including its neighbors. Uganda is party to key refugee conventions and international human rights treaties, and currently hosts over 1.35 million refugees, the majority from South Sudan (75%), the Democratic Republic of Congo (17%), Burundi (3%) and Somalia (3%). When renewed conflict broke out in South Sudan in July 2016, an unprecedented number of refugees came to Uganda, doubling the refugee population in less than seven months. Uganda has since become the largest refugee-hosting country in Africa, with refugees making up 3.5% of the country's total population of 39 million. The economy faces challenges, compounded by adverse weather and spill-over from the civil unrest in South Sudan.

1.2 TOWARDS A MORE COMPREHENSIVE REFUGEE RESPONSE

With an open-door policy, the Government upholds an inclusive approach, granting refugees freedom of movement, the right to seek employment, establish businesses and access public services such as education, on par with nationals. Refugees in Uganda do not live in camps. The Government has set aside many thousands of hectares of land for refugee use, and more have been provided by local communities. In order to ease pressure on local services and leverage the positive economic impact of refugees, Uganda has integrated refugees into national development plans. Likewise, it has established the Settlement Transformative Agenda (STA), which supports the development of refugee-hosting districts by investing in infrastructure, livelihoods, peaceful coexistence initiatives and environmental protection. The STA takes into account the protracted nature of displacement and their impact on local communities. Furthermore, it is in line with the 2030 Agenda for Sustainable Development and its main principle to "leave no one behind". Owing to this, Uganda is regarded as a model for many other refugee-hosting countries.

1.2.1 UGANDA REFUGEE STATUS

Uganda hosts a multi-ethnic group of refugees who include the Rwandese, Congolese, Ethiopians, Kenyans' Sudanese and Burundians. Uganda is the third largest refugee-hosting country in Africa. As a result of ongoing conflicts and instability in the Democratic Republic of Congo (DRC), Somalia and South Sudan, Uganda is currently hosting over 1,300,000 refugees and asylum-seekers. By October 2017, it estimated that, a total of 1,321, 207 refugees and asylum seekers were living in Uganda. Of these, 1,034,16 are South Sudanese. Between About 1st January-30th October 2017 a total of 347,389 South Sudanese entered Uganda into its 11 hosting districts of Arua, Adjumani, Yumbe, Koboko, Moyo, Lamwo, Hoima, Kamwenge, Isingiro and Kyegegwa (Figure 1).

UGANDA

Refugees and asylum-seekers

as of 01 October 2017

KEY FIGURES

1,381,207

total refugees and asylum-seekers

1,269,432 bio-metrically registered

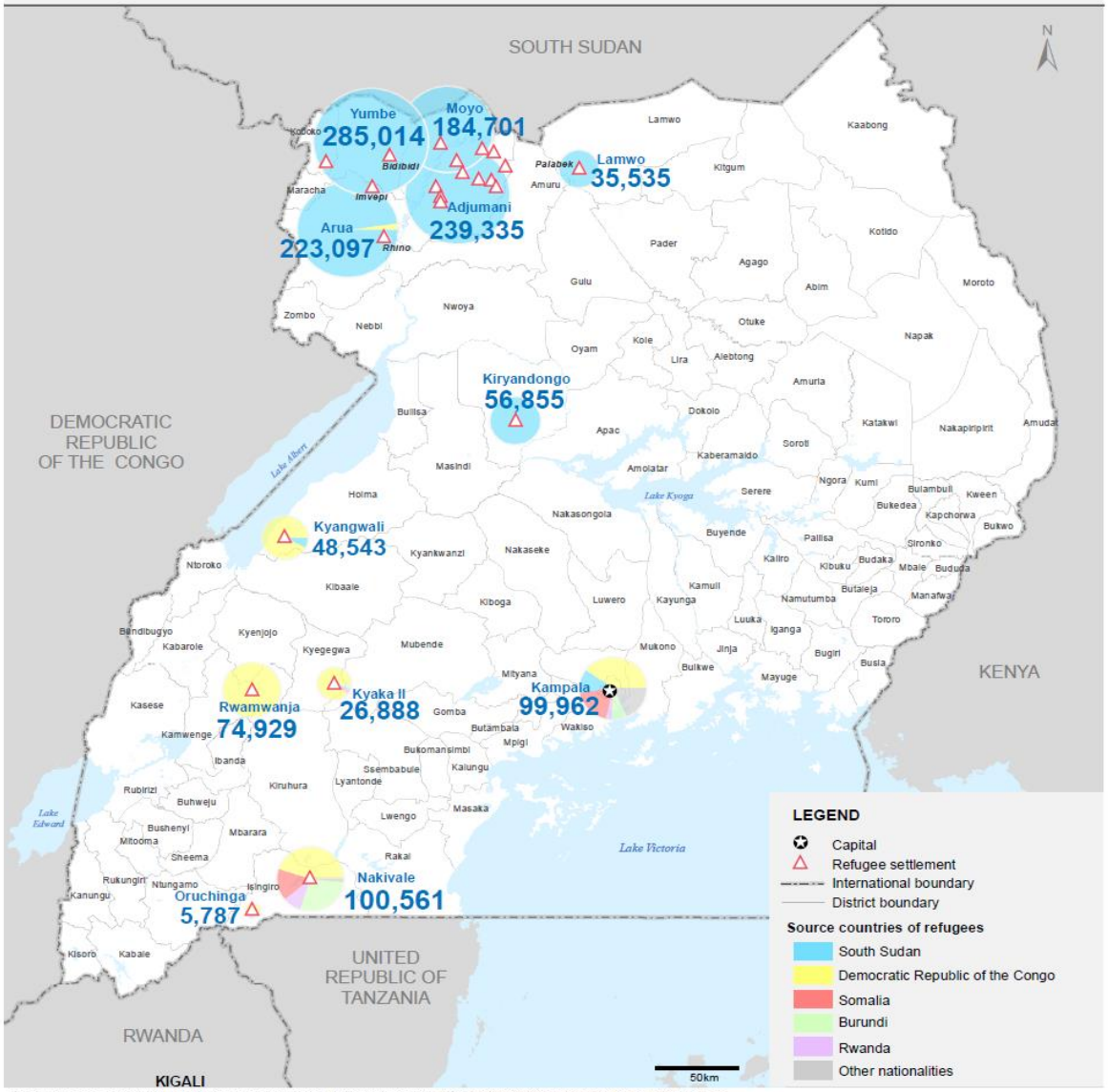
111,775 pending bio-metric registration*

COUNTRIES OF ORIGIN

SOUTH SUDAN	1,034,106
DRC	236,572
BURUNDI	39,041
SOMALIA	35,373
RWANDA	15,031
OTHERS	21,084

REFUGEE LOCATIONS

YUMBE	21%
ADJUMANI	17%
ARUA	16%
MOYO	13%
NAKIVALE	7%
KAMPALA	7%
RWAMWANJA	6%
KIRYANDONGO	4%
KYANGWALI	4%
LAMWO	3%
KYAKA II	2%
ORUCHINGA	0.4%



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

** Koboko refugee population is considered under Arua district.*

Creation date: 01 October 2017 **Geodata Sources:** UNHCR, UNCS, UBOS **Statistics:** Provided by Government (OPM), Refugee Department, Registered in (RIMS)
Author: UNHCR Representation in Uganda **Feedback:** IM Team Uganda (ugakaimug@unhcr.org) | UNHCR BO Kampala

Figure 1: Uganda Refugee and Host Community Composition as of Oct 2017

1.2.2 CURRENT KEY CONFLICT AREAS BETWEEN REFUGEES AND HOST COMMUNITIES

The relationship between refugees and the host communities in Uganda has largely been peaceful, despite isolated clashes and disputes between the two sections of these communities. The conflicting relationship between hosts and refugees in many cases serves to emphasize the importance of identifying main sources of conflict and co-existence in the relationship for achieving a peacefully relationship. The combination of limited livelihood opportunities in the host community and imbalance of humanitarian assistance appear to be the greatest challenges for promoting more coexistence. Some collaboration between host and refugees are identified at individual levels through socio-economic impacts and humanitarian initiatives. Nevertheless, situations of conflict in the relationship are more common and a challenge towards coexistence. Research on this subject reveal that, host communities' experiences of refugees' impacts are much related to how their relationship with the refugee population develops. The presence of refugees has on some occasions created tensions and conflicts with host communities for a number of reasons:

1.2.2.1 DISTRIBUTION OF HUMANITARIAN ASSISTANCE

One contentious issue that causes tension is the distribution of humanitarian aid funds and projects. In response to the refugee situation, support by the Ugandan government, by humanitarian aid organisations, as well as by development partners has been massively increased. Host communities in Northern Uganda who feel relatively deprived compared to other regions in Uganda, express expectations to benefit from the resources. In some instances, high expectations compared to the actual support that host communities received has caused open resentment and protest. Locals in Yumbe, for instance, recently blocked access to a drinking water borehole for several hours claiming to not be benefiting from the influx of refugees.[1] In April 2017, armed youths even ambushed a convoy in an attempt to stop supplies reaching the settlement.[2]

1.2.2.2 INCREASING PRESSURE ON LABOR MARKET

Another contentious issue is the increasing pressure and competition on the labour market. The Government of Uganda's progressive refugee policy allows refugees to freely participate in the Ugandan labour market. Host communities however fear that this leads to increasing competition for limited employment opportunities. While some would point out that host communities largely benefit from additional employment opportunities in humanitarian and development projects, the distribution of such jobs has caused additional discontent. Generally, the demand for labour has gone up through new projects, e.g. in project management or in the construction sector. However, locals (from Northern Uganda) are frequently dissatisfied claiming that most employment generated is taken up by national or international staff. In one instance, host community members staged a protest, when an international NGO hired a large number of staff from other parts of the country at the start of a new project.

[1] Summers, 2017a.

[2] Summers, 2017a.

1.2.2.3 PRESSURE ON NATURAL RESOURCES

1.2.2.3.1 ACCESS TO WOOD

In all the settlements, wood is one of the most sought after natural resources, for both the refugee and the host communities for building shelters and for each communities' daily domestic energy needs mainly for cooking. It is also an income generating resource for both host communities, who commonly sell wooden poles, and charcoal as a source of income for the households. However, with increasing influx of refugees into the hosting areas, evident rapid degradation of vegetation cover is being lost. The Local leaders report that, refugees and host communities have entered protected areas to extract forest resources for their livelihoods such as in Ocea Central Forest Reserve near Rhino Camp which was originally well protected but is now rapidly being degraded by refugees for supply of wood-fuel and construction materials. This situation is equally felt in areas of Kyangwali and Rwamwanja where nearby CFRs have been encroached by the refugees sometimes with sections of the host communities to harvest timber and other wood products. To-date, dwindling supply of wood resources continues to negatively affect the relationship between refugees and host communities.

1.2.2.3.2 LAND DISPUTES

Since the civil war, Northern Uganda has been affected by disputes and conflict regarding land rights. During the civil war, large parts of the population were displaced. IDP and army camps were set up and public facilities were constructed on private land without compensating staff or obtaining permission. After the end of the fighting against the LRA, many IDPs returned to their villages only to find that them no longer existent. It was particularly problematic that former boundary demarcations did not exist anymore.[3] Therefore, the return of IDPs has been marked by land conflicts, which has in some instances even led to violence. The research revealed that the lack of demarcation of boundaries of the camp and of agricultural land was one of the key factors leading to disputes within and amongst the host communities and also with the refugees.

1.2.2.3.3 LIVESTOCK THEFTS AND KILLINGS

Refugees from Rhino Camp and Bidibidi settlements reported that livestock theft was common in areas where refugees settled closer to the roads. Those from the neighboring host community villages of Ocea and Ariwa reported having their livestock stolen from grazing land south of the main road. Host communities also report that, when their pigs occasionally wander into the refugee settlements and since a number of refugees are Muslims, their pigs are simply killed since Muslims consider pigs as unclean animals which brews conflicts.

In contrast, refugees expressed more fear about encountering host community members while herding their livestock. This has forced many refugees to graze their animals within the confines of the settlements. However, having clearer and separate grazing areas for both communities could prevent thefts and also reduce the likelihood of confrontations between the refugees and host communities.

1.2.2.3.4 CONFLICTS OVER ACCESS TO WATER

[3] Weyel, 2017.

Access to clean water in the refugee settlements is limited. Given the location of the settlements access to clean waters is still a challenge for the women and children. Women have to walk long distances to find clean water for domestic consumption. The drought in Isingiro has also affected the water supply of the refugees in Rwamwanja refugee settlement which is located in Isingiro district. Long distances to water sources also puts the security of women and girls at risk as it is during such activities that they are more at risk to sexual assault. In Kiryandongo settlement, there has already been bloodshed along ethnic lines: a refugee from the Nuer tribe was murdered at a borehole after a fight over water broke out with a group of ethnic Dinkas.[4] Some observers argue that it is only a matter of time before more violence occurs in the refugee settlements.[5] This limitation is not only restricted to refugee settlements but also affects the host communities most of whom have non-functional water facilities (Figure 2).

Figure 2: Non-functional borehole in Pawol areas near Rhino Camp, Madi Okolo areas.

1.2.2.3.5 ALLEGED THEFTS OF CROPS BY REFUGEES

Host community villagers in Moyo and Lamwo areas reported that stealing of crops was one of the major problem between them and the refugees. According to them, during the rainy season and right before harvest, refugees come to their lands at night to steal their crops. A Food Security and Livelihood assessment conducted by ACTED in early 2015 in Lamwo and Kitgum established that, that about 72% of host community members' main source of food was their own agricultural production, therefore,

[4] Summers, 2017a.

[5] Summers, 2017a.

stealing of crops is a significant threat to their food security. This is a major problem as it adds to the erratic rain patterns of the last few years which have already affected harvests.

1.2.2.4 CONFLICTS OVER DELIVERY OF SOCIAL SERVICES

Of late, the huge refugee population into the country in the refugee hosting areas such as in West Nile has put major strains on services in those areas which were already quite overburdened and/or lacked proper investment. Such a huge population influx on already over-burdened services could threaten a severe weakening of these systems over the medium to long-term. Conflict over service provision and access could divide host and refugee communities and lead to exclusion, worsening key indicators, especially those related to literacy, child and maternal mortality, and malnutrition. Though emergency response has pushed services to improve via a rush of emergency funding to health and education, these services are undoubtedly still strained by the sheer number of new residents. For example, according to the District Education Officer for Yumbe District, there are 34 primary schools for 60,000 students.

1.2.2.5 CONFLICTS OVER LIVELIHOODS SOURCES

With a long-term settlement one of the most likely outcomes for the majority of refugees, finding sustainable livelihoods outside of subsistence agriculture for even a minority of people will be a challenge. While skilled South Sudanese who were working in the health or education sectors may find an easier route into employment, the large number of unskilled workers will disrupt livelihood markets for casual labor in the sub region. This could cause anger and resentment among host communities, especially those in larger towns or big cities, who already had little opportunity for regular work. However, conflict potential around livelihoods is not limited to blue collar jobs. The scale-up of humanitarian and development programming will necessitate hiring new workers, many of whom may come from outside the refugees' settlements due to higher educational qualifications. Already there has been conflict between refugees and host communities for jobs as casual laborers in the refugee response. The possibility that Ugandans from outside West Nile or even other skilled East Africans may settle to take skilled jobs with NGOs may lead to local discontent and a feeling among West Nile residents of falling further behind the rest of the country.

1.2.2.6 SEXUAL AND GENDER BASED VIOLENCE

Sexual and gender-based violence (SGBV) is among the most serious protection concerns and priorities in Uganda refugee operation. It is manifested in various forms including rape, sexual assault, domestic violence, early and forced marriages, denial of resources and harassment. Violence occurred in the refugees' home country, during flight and in Uganda. For many reasons, SGBV incidents remain seriously underreported. Since January 2016 more than 2,867 females and 227 male SGBV cases have been reported in areas of Nyakivale in Insingiro of which, 20% involving children below the age of 18 (UBOS, 2016). In host communities and refugee settlements alike, a number of refugee women still experience Sexual and SGBV[6]. Over 78% of refugee women both in the settlements and urban centers continue to experience domestic violence mostly at the hands of men. Rape, defilement, forced marriage are the most common forms of violence against refugee women and girls. Many girls without adult supervision have found themselves in sexually risky situations and those who have been coerced into sexual acts have received minimal support from the authorities. Sexual and Gender based violence pose a security threat to women and girls in refugee settlements making it difficult for them to participate in various

[6] *Centre for Policy Analysis (CEPA) 2017: The State of Refugee Women and Children in Uganda, Kampala.*

activities. Sexual violence especially is not only limited to home environment but school, hospitals and other public spaces in which the refugee women and girls engage.

1.2.3 ISSUES RELATING TO HIV/AIDS

Conflict, displacement, food insecurity and poverty offer fertile ground for the spread of HIV/AIDS amongst both refugees and the host communities. It is noted that, as the physical, financial and social status of these communities continue to be a challenge, their usual coping strategies increasingly become less effective rendering them socio-economically vulnerable to poverty and STDs and HIV/AIDS. Therefore, addressing HIV-related needs in the context of host communities and refugee situations requires a change in the thinking of the authorities. In view of these, it is critical that, during this time both the refugees and the host communities receive all necessary HIV-related services without focusing only on refugees as the practice sometimes tended to focus. Failure to provide these interventions could be very harmful to both refugees and the surrounding host populations which sometimes manifests in different dimensions in the society.

1.3 THE PROJECT

In response to the impacts of forced displacement on refugee hosting countries and communities in HOA, the proposed operation is a multi-country development response by the respective Governments of Djibouti, Ethiopia and Uganda. The proposed regional operation addresses the unmet social, economic and environmental needs of the local communities both host and displaced (refugees and returnees) in targeted areas of the three proposed project countries.

As stated, refugees and refugee-hosting communities are poorer and more vulnerable in Uganda with the settlement areas suffering from lower agricultural productivity and greater environmental degradation due to poor climatic and soil conditions and/or overuse. In addition, the basic social services delivery is weak and economic opportunities are limited due to the remoteness of the settlements and the poor infrastructure. These areas are also prone to a higher prevalence of malaria, respiratory tract infections, diarrhea and preventable diseases among children. Given that the refugee hosting areas are also among the poorer and less developed regions in Uganda, refugee presence further undermines the coping abilities of host communities in the settlement areas, further exacerbated by limited social capital, less diverse livelihoods and low levels of assets.

1.4 PROJECT CONTEXT

Despite its rich endowment in human, social, and natural capital, the HOA region is plagued by a complex history of weak governance, insecurity, increasing environmental degradation, entrenched poverty and a range of persistent development and protection challenges. Conflict remains endemic in the region. The complex cultural, social, and political nature of these conflicts is compounded by the demographic shifts both due to population growth and peoples' movement, imbalanced service provision, increasing contestation over scarce natural resources, and harsh climatic conditions including frequent droughts and floods. In a region with an estimated 242 million inhabitants, the HOA hosts over 8.7 million displaced persons, including, over 6.5 million internally displaced persons (IDPs) and about 2.2 million refugees. The majority of the displaced are children and women, with many female-headed households. Displacement in HOA has been compounded by migration within and outside the region driven by a number of natural and man-made reasons including a young population that faces unemployment and alienation.

1.5 PROJECT JUSTIFICATION

1.5.1.1 VULNERABILITY OF HOST COMMUNITIES

It is established that, refugee camps/settlements tend to be in relatively under-developed and marginalized areas, compared to rest of the host country. In addition, the basic social services delivery is weak and economic opportunities are limited due to the remoteness of the settlements and the poor infrastructure. Such areas are also prone to a higher prevalence of malaria, respiratory tract infections, diarrhea and preventable diseases among children. It also established that, the protracted displacement of refugees tends to further exacerbate the situation of the host communities with competition over scare social services, economic opportunities and environmental and natural resources leading to growing incidence of conflicts and clashes between host communities and refugees and sometimes amongst host communities themselves. Therefore, eenhancing the productive capacities and coping mechanisms of the host populations is seen as an important step to safeguard a very much needed asylum space for refugees in the host countries in the HOA.

1.5.1.2 GROWING NUMBERS OF REFUGEES

Uganda is the third largest refugee-hosting country in Africa. As a result of ongoing conflicts and instability in the DRC, Somalia and South Sudan, Uganda is currently hosting estimated 1,381,207 refugees and asylum seekers in its 11 districts mainly in the north, south, south west and in the central region in the country. For instance, Yumbe hosts the largest number of refugees (estimated close to 300,000 refugees). Refugee numbers in Uganda are among the highest ever. This population no doubt, needs support in terms of access to social services and means of livelihoods.

1.5.1.3 NEED FOR COORDINATED SECURITY RESPONSE

In June 2015, a regional study entitled “Forced Displacement and Mixed Migration in the Horn of Africa” was completed. It reinforced the regional nature of forced displacement with clear regional ‘spill-over effect’ of the violence and insecurity within a country. When refugees’ cross international borders, neighbouring countries that host these refugees directly bear the consequences of that violence and insecurity. This calls for coordinated regional response between humanitarian and development partners as a pre-requisite for reaching development solutions for improving their prospects.

1.5.1.4 ACCESSIBILITY ISSUES

Most areas hosting refugee settlements are located in remote corners of the country with problems of access and limited transport which makes it difficult for women and children to travel to health centers, markets and even to schools especially secondary schools (CEPA, 2017) largely due to their low/limited income sources. Limited access to good transport facilities has an impact on the kind of opportunities they are able to access for their economic, education, health and information socio-economic empowerment which are all critical for their full enjoy their human rights.

1.5.1.5 DELIVERY OF HEALTH SERVICES

Women and children in both the refugee settlements and host communities have limited access to health infrastructure. The two settings are characterized by large population in relation to the available services and long distance from basic services. Rwamwanja refugee settlement located in Kamwenge district hosts 57,579 refugees and has only one health center–Rwamwanja Health Center III. Given the structure of the population and the vulnerability of women and children, the refugees and host communities find difficulty accessing the much needed health services due to distance and long hours

required to spend at the health center to get treatment. Given the nature of women's work and socialization; the burden of domestic work and some economic activities such as farming is carried by women with in the communities they don't have the luxury to spend long hours on one task meaning they will forfeit health unless it is an emergency which also constraints access to services by GBV survivors.

1.5.2 PROJECT DEVELOPMENT OBJECTIVE

The Project Development Objective (PDO) is to improve access to basic social services, expand economic opportunities, and enhance environmental management for communities hosting refugees in the target areas of Uganda. The proposed regional project will embed the essential features of ensuring citizen participation and engagement in identifying and prioritizing developmental needs, including socio-economic infrastructure and livelihood opportunities to improve self-reliance of host communities; improving social cohesion between refugees and host communities; increasing citizen voice and role in development decision making; and eliciting greater demand for social accountability.

The operational approach will be Community Driven Development (CDD) involving:

a. building grassroots institutions;
b. ensuring the voice of all communities is heard in decision making;
c. strengthening decentralized government administrative functions; and
d. investing in public service delivery and social mobilization to enhance social cohesion among beneficiary communities.

1.5.3 PROJECT COMPONENTS

The Proposed Development Objective is to improve access to social services, expand economic opportunities and enhance environmental management for host and forcibly displaced households in the targeted areas of Djibouti, Ethiopia and Uganda.

1.5.3.1 COMPONENT 1: SOCIAL AND ECONOMIC INVESTMENTS

The component will provide investment funds that together with community contributions both in cash and kind, as feasible; will help expand and improve service delivery, and infrastructure for local development including the construction/expansion of schools, health centers, water supply, and all-weather roads. As appropriate, this component will also include interventions addressing pervasive protection challenges including response and/or prevention initiatives addressing varying forms of gender-based violence (GBV). Investments will be identified, prioritized, implemented and monitored by beneficiary communities. The investments will be determined following a process of information dissemination and sensitization, and community mobilization, creation of inclusive community based organizations followed by mapping of social and economic infrastructure and resources to identify potential gaps and underserved populations. The process will bring together community representatives both from host and displaced populations in particular women, youth and female-headed households; representatives of community/traditional organizations, the local governments and the humanitarian and developmental agencies operational in the area. The creation of an Area-based development plan along with priority social and economic infrastructure, to be supported under the project will be an important output of the community engagement process. This plan would also be integrated into the planning and budget development processes of all agencies involved. Specific role for communities in implementation, monitoring and oversight will be designed to ensure community ownership, transparency of processes and accountability of the implementing actors.

1.5.3.2 COMPONENT 2: SUSTAINABLE ENVIRONMENTAL MANAGEMENT

In almost all of the hosting areas, the large number of refugees has resulted in environmental degradation and loss of vegetation cover. The unmet energy needs of the displaced and the host communities has resulted in the harvesting of fuel wood and construction wood, denuding the areas which is also a cause of tension between the displaced and host communities. Denudation and deforestation have resulted in erosion from wind and water, and that the precondition to restoration will be measures countering erosion processes. A comprehensive package of measures will be identified based on: (i) analysis/mapping/typifying and prioritizing of damage, (ii) developing options for remediation approaches and methodologies, including cost intensity; (iii) selection of intervention areas, considering demand/priority, and available techniques/ budget. For example, some remediation would consist of constructing or rehabilitating physical structures for water catchment management such as check-dams, and water harvesting structures; and biological measures like afforestation. In addition alternate energy sources like solar stove or alternative fuel like kerosene will be explored. The proposed interventions will be innovative and technologically sound, particularly with respect to energy and water management.

1.5.3.3 COMPONENT 3: LIVELIHOODS PROGRAM

The component will support the development and expansion of traditional and non-traditional livelihoods of the poor and vulnerable households to build productive assets and incomes. A thorough mapping of existing productive livelihoods including agricultural, agro-pastoral and pastoral, will be undertaken based on consultations with target households accompanied by a technical and market analyses to understand the potential for each of the major livelihoods, the opportunities along the value chain and required inputs in terms of the information, finance, technology, tools, and technical assistance. The process to be followed includes community mobilization, formation of producer/livelihood collectives to achieve efficiencies of scale for accessing both input and outputs markets, and forging private sector linkages. A further mapping of potential livelihoods will also be undertaken focused on resource and market availability which will essentially support skill-enhancement training, employment and/or entrepreneurship development, especially for youth. For the major livelihoods, technical assistance will be made available to communities either through training of implementing agency staff and/or private sector partnerships. Given the large youth population among the beneficiaries, skills enhancement for jobs and employment will also be explored based on market needs and skills gap assessment. Livelihoods programs targeting women and female-headed households as an integrated component of GBV interventions will serve both as a means of prevention (i.e. reducing women's vulnerability and potential exposure to violence or high risk environments) and as a means of longer-term support for those affected by violence.

1.5.3.4 COMPONENT 4: PROJECT MANAGEMENT INCLUDING M&E AND REGIONAL AND NATIONAL INSTITUTIONAL SUPPORT

The project will finance the planning, implementation, and technical oversight of program activities; and effective social and environmental safeguards management, financial management, and procurement. The arrangements for project coordination will be determined during preparation through relevant government agencies at the national, sub-national and local levels will be involved in the implementation process with necessary capacity building support. The following activities will be included: Strategic Communication, Monitoring and Evaluation arrangements – Management Information System (MIS), independent process monitoring, and outcome/impact evaluations at midterm and end of project; and measures for enhanced transparency and accountability; and

development learning to around policy and practice of forced displacement. In addition, a USD 5 million Grant will support a regional Secretariat Forced Displacement and Mixed Migration, and a regional Knowledge generation, dissemination and learning agenda.

1.5.4 FINANCING

The total estimated Uganda DRDIP costs are based on an IDA allocation for an overall estimated budget of US$ 50 million over a Five-Year period (Table 1).

Table 1: Indicative Project Financing for Uganda

Project Components	Project cost (US$ million)
1. Social and Economic Services and Infrastructure	
a. Community Investment Fund	27.5
b. Capacity Building for Local Planning and Decentralized Service Delivery	2.5
Sub-Total	**30**
2. Sustainable Environmental Management	
a. Integrated Natural Resources Management	6.5
b. Access to Energy	2
Sub-Total	**8.5**
3. Livelihoods Program	
a. Support to Traditional and Non-Traditional Livelihoods	6.5
b. Capacity Building of Community-Based Organizations for Livelihoods	1.25
Sub-Total	**7.75**
4. Project Management and Monitoring and Evaluation	**3.75**
Total project cost	**50**

(Source: World Bank Project Appraisal Document, 2016)

1.5.5 SALIENT PHYSICAL CHARACTERISTICS RELEVANT TO THE SAFEGUARD ANALYSIS

The project will support interventions designed to improve livelihoods and access to basic socio-economic services in selected districts. The salient physical characteristics from the project components relevant to safeguard analysis relate to project Component 1:

a. socio-economic Investments which entail civil works and/or construction/expansion of schools, health centers, water supply, and all-weather roads;
b. sustainable environmental management activities which will be identified based on analysis/mapping and prioritizing of environmental degradation;
c. developing options for restoration approaches and methodologies, including cost intensity;
d. selection of intervention areas, considering demand and available techniques and or budget;
e. some remediation would consist of constructing or rehabilitating physical structures for water catchment management such as check-dams, and water harvesting structures**;** and biological measures like afforestation;
f. Alternate energy sources will be explored; and

g. livelihoods Program will support the development and expansion of traditional and non-traditional livelihoods of the poor and vulnerable households to build productive assets and incomes.

The infrastructure works under component 1 will pose civil works/ construction related impacts including health and safety considerations. Component 2 & 3 are expected to be positive through alleviating pressures on the poor that lead to unsustainable exploitation of natural resources and environmental degradation. Therefore, by their nature, project components 1, 2 and 3 may have limited and localized negative environmental and social impacts. The community sub-projects may involve limited land acquisition and displacement of land-uses and/or livelihoods. The potential environmental and social impacts can be adequately managed by integrating environmental and social due diligence into the sub-project cycle. Because of the overall limited likely environmental and social impacts, the project is rated as EA category B.

2 THE ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

2.1 OBJECTIVES AND SCOPE OF ESMF

2.1.1 OBJECTIVES OF THE ESMF

The objectives of the ESMF are to:

a. establish clear procedures and methodologies for the environmental and social screening, detailed assessment and implementation of subprojects to be financed under the project;
b. specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social concerns related to project investments;
c. determine the training and capacity building needs; and
d. establish the budget required to implement the ESMF.

2.1.2 PURPOSE AND SCOPE OF ESMF

Since the exact locations for the sub-projects are not yet known with certainty at this time, this Environmental and Social Management Framework (ESMF) provides guidance on how environmental and social aspects shall be identified, assessed and managed. The purpose of the ESMF is to ensure that environmental and social management is integrated into the development cycle of individual subprojects. The ESMF identifies the policy triggers for the project, the screening criteria of sub-projects, the environmental and social impacts for the likely subprojects and the mitigation measures to mitigate the identified risks, assessment of the institutional capacity of the implementing agencies and measures for capacity-filling gaps, and an estimate of the budget needed for the implementation of the ESMF.

Therefore, the detailed guidelines and procedures in this ESMF will be important for assessing potential environmental and social impacts of subprojects, help the implementing agencies in screening subprojects' eligibility; determining their environmental and social impacts; identifying appropriate mitigation measures to be incorporated into the sub-project; and specifying institutional responsibilities for implementing preventive, mitigation and compensation measures, and monitoring and evaluation.

2.2 UPDATING THE ENVIRONMENT AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

In February 2016, Government of Uganda through the Office of the Prime Minister (OPM) prepared an Environmental and Social Management Framework (ESMF) for the Regional Operation on the Development Response to Displacement in the Horn of Africa. The ESMF and Resettlement Policy Framework were reviewed and disclosed by both the National Environment Management Authority (NEMA) and the World Bank. Since then, implementation arrangements for the project are nearly complete to enable the project rollout.

However, due to the high influx of refugees into the areas of Northern and West Nile regions, it has become necessary that, some main refugee hosting districts of; Koboko, Lamwo, Moyo and Yumbe be included into the project. The new refugee hosting districts are within the region where government through the World Bank has a number of socio-economic interventions such as Northern Uganda Social Action Fund Phase 3. The ESMF had been prepared against project focus then whose initiative covered two interrelated pillars namely; vulnerability and resilience, and economic opportunity and integration to address key drivers of instability and promote development in Horn of Africa.

2.2.1 THE KEY TASKS OF THE ASSIGNMENT

Review and take cognizance of the existing ESMF of DRDIP Project and the Pest Management Plan therein to understand the scope and necessary additions level of detail required for the additional districts to the Regional Operation on Development Response to Displacement in the Horn of Africa Uganda Project ESMF. In updating the ESMF the consultant/s should be cognizance of the need for brevity and the avoidance of duplication and repetition (the ESMF Report should contain a maximum of 80 pages, with relevant details presented in Annex).

a. Updating environmental and social management tools (including screening procedures, checklists, Environmental and social Management Plans, chance finds procedure, environmental and social reporting formats, grievance redress mechanisms, etc.) in the ESMF in line with the DRDIP project activities. The update should draw lessons from the implementation of ESMF of NUSAF III project;
b. Assessing and updating broad social risks and impacts beyond land acquisition such as potential inter-community conflicts, gender based violence, child abuse, and social risks associated with temporary labor influx caused by civil constructions (if any) and propose mitigation measures;
c. Undertaking stakeholder consultative meetings with the key agencies (local and district levels) to document their input and experience in the use of environmental and social tools in other recent projects and what they would expect to be incorporated in the ESMF for DRDIP. Key findings of stakeholder consultations in the additional four districts have been mentioned in the ESMF and details are in Annexes 2-5;
d. Identify additional capacity needs for the implementation of the ESMF under the Regional Operation on Development Response to Displacement in the Horn of Africa –Uganda Project, propose and cost capacity building program;
e. Propose training for the key user/implementing agencies on the use and operational modalities for the Regional Operation on Development Response to Displacement in the Horn of Africa – Uganda Project ESMF;
f. Take account of additional views of World Bank on environmental and social safeguards requirements and incorporate comments throughout the preparation of the draft ESMF and the subsequent final ESMF; and
g. Update the environment and social screening forms/template to include a balanced E&S concerns including mitigations.

2.2.2 METHODOLOGY FOR ESMF PREPARATION

The ESMF has been prepared in accordance with applicable World Bank safeguard policies and Uganda environmental and social impact assessment guidelines, and involved data literature reviews; field reconnaissance studies, public consultations and discussions with relevant sector institutions, including districts, implementing partners, refugees and their host communities.

2.2.2.1 LITERATURE REVIEW

By and large, the key documents reviewed were; the project ESMF of 2016 which was the subject of this update assignment. Other documents reviewed were District Developments Plans (DDPs) for the four districts of Koboko, Lamwo, Moyo and Yumbe as well their respective UBOS Statistical Abstracts for 2016.

2.2.2.2 FIELD VISITS

In addition to previous visits for 2016 ESMF preparation, the update study took to visit areas of host communities close to refugee settlements of; Bidibidi Refugee Settlement in Yumbe, Lobule in Koboko, Palabek in Lamwo and Palorinya in Moyo. In each of these areas, two meetings were held with sections of the host communities and their leaderships in each of the areas. Site inspections were also done to check aspects such as public infrastructures such as roads and water supply/sources, schools, health centers and ecological aspects.

2.2.2.3 CONSULTATIONS

During the update studies for this ESMF, two consultative meetings were held with staff of the Department of Refugees (DOR) and NUSAF 3 Secretariat in the Office of the Prime Minister (OPM). The Team held a meeting with the Senior Principal Settlement Officer and the Senior Monitoring and Evaluation Officer in DOR premises along Sir Appolo Kaggwa Road, Kampala to discuss host communities and refugee issues from a lead agency perspective. A meeting was also held with NUSAF 3 Secretariat with the Director and the Environmental and Social Safeguards Specialist in their offices in Kampala to seek clarification on their collaboration with DRDIP in the implementation arrangements of the project. The team also met Safeguards Staff of World Bank Country Offices in Kampala to clarify on focus of the study alongside other salient aspects in study.

In addition, the update process saw the Team hold meetings with NEMA, District political and technical staff (NDO, DEOs, CDO, water officers, agriculture, engineering, physical planners, public health and probation officers) in the districts of Koboko, Lamwo, Moyo and Yumbe in their respective districts as well as two (2) community meetings with the host communities in each of the areas surrounding refugee settlements. Furthermore, four meetings were held with the Settlements Commanders in the four districts to discuss issues of conflicts between refugees and host communities and socio-economic challenges host communities face and what could be viable intervention options/scenarios amongst others.

It is important to note that, in the earlier study, meetings had been held with the Ministry of Water and Environment (MoWE) especially its Departments of Water Resources Regulations and Rural Water Supply; National Environment Management Authority (NEMA). Ministry of Works and Transport (MoWT) especially its Environmental Liaison Unit (ELU), Ministry of Education and Sports (MoE&S), Ministry of Health (MoH), Ministry of Gender Labor and Social Development (MoGLSD), Ministry of Agriculture Animal Industry and Fisheries (MAAIF). The Consultant also held meetings with NGOs active in humanitarian interventions especially Oxfam, Save the Children and World Vision.

The initial phase of this study saw meetings between the ESMF/RPF consultant meet with; Refugee Desk Officers in the respective regions, district political and technical officials (Resident District Commissioners-RDCs and Chief Administrative Officers-CAOs respectively), District technical Officers i.e. District Agricultural Officers (DAOs), District Environment Officers (DEOs), Community Development Officers (CDOs), District Engineers, Lands Officers and District Physical Planners, Extension Workers in Arua, Adjumani, Isingiro, Hoima, Kamwenge, Kiryandongo, Koboko, Kyegegwa, Lamwo, Moyo and Yumbe districts where the project is to be implemented. Discussions groups with members of marginalized and vulnerable groups were consulted in the process. Particular attention was paid to the needs of vulnerable groups especially those below the poverty line the elderly, women and children, child headed families and other disadvantaged groups (people with special needs- PSNs).

3 BASELINE ENVIRONMENTAL AND SOCIAL INFORMATION

An attempt has been made to document the key baseline environmental and social settings relevant to the project as summarized herein.

3.1 ADJUMANI

3.1.1 LOCATION

Adjumani district hosts up to 67,000 refugees in 8 different camps as Nyumanzi, Mireyi, Alero 1 and 2, Location and size Adjumani is one of the districts in the north-western region of Uganda. It is bordered by Moyo district in the North, Arua and Yumbe in the west, and Amuru District in the south and east. It has an average altitude of 1200m above sea level. Adjumani District headquarters are situated in Adjumani TC, Central Parish, Molokpoda village. Adjumani district has a total area of about 3128km^2 of which land area is 3081.2km^2.

3.1.2 TOPOGRAPHY

Adjumani district lies at an approximate altitude ranging from 900-1500m above sea level. It is principally gentle undulating land merging into rock outcrops. The southern part of the district, especially the area occupied by Ciforo Sub-county comprises of highlands dropping into broad flat-bottomed valleys while the north stands at a low slope gradient.

3.1.3 CLIMATE

The climate of Adjumani district is tropical in nature with moderate rainfall and temperature. The rainfall pattern is bimodal with annual rainfall varying between 750 mm to 1500 mm. The rainfall seasons fall between April to June and August to November, with peak rainfall usually experienced in May. Dry conditions are experienced from December to March. However, over the past five years parts of the district have experienced unusually long dry spells with low and unpredictable yearly rainfall. This has widely been attributed to cycles in climatic conditions that have also affected the Nile water level. The most affected areas are the sub-counties of Adropi, Ciforo and Dzaipi. Ofua and Pakele are wetter and cooler. The annual mean temperature ranges from 19^0- 36^0C. The area has humidity levels of over 80% in most months, which reduces to below 50% during the dry season afternoons especially from December to February.

3.1.4 VEGETATION

Adjumani is endowed with considerable vegetation cover. Permanent wetlands with a variety of vegetation particularly papyrus occupy the banks of R. Nile (Albert Nile). Seasonal swamps also occupy a sizeable area of the district. The Arawa highlands and the equatorial forest of Zoka, in Ofua sub-county, dominate the southern part of the district. Other areas are predominantly savannah woodland and grassland with grasses ranging from 0.5-2.0m high.

3.1.4.1 FORESTRY RESOURCES

To fully utilize forestry resources in the district there is need to plan, promote and mobilize resource. In order to protect the fragile ecosystems 32 nursery beds have been established and maintained and there exist 7 registered commercial tree growers**.** Adjumani has a total of 6,741 acres of natural forest land, while plantations take only 574 acres of the district land. The area in hectares under forests for both the Central Forest Reserve (CFR) and Local Forest Reserve (LFR) is 6303. The proportion of land under Central Forest Reserves (CFR) is higher than the Local Forest Reserves.

3.1.5 POPULATION

The 2014 Population and Housing Census established the total population of Adjumani District (East Moyo county) at 231,623, of which 52.2% were female and 47.8% were male. This conforms to the country situation where there are more female than males. Pakele sub-county has the highest population in the district, while Arinyapi Sub-county has the lowest. The total land area for Adjumani District is 3,128km^2 and its population density was 74persons/km^2 per km^2 of land in 2014. It is believed, the population density has increased from 16 persons/km^2 in 1980 to what it is now.

3.1.5.1 AGE COMPOSITION

The census data reveals that the bulk of the population in Adjumani are children under 18 years which constitutes 58% of the total population higher than that at national level of 56%, followed by the children under 15 years which constitutes 49%, the third were the Adults above 18 Years constituting 42% of the population, followed by the youth which constitutes 23% of the total population and the least being the elderly which stands at 3% of the total population lower than that at National level of 4.6%. Generally, the District population is young.

3.1.5.2 ETHNICITY

The census 2014 shows national population represents a number of ethnic and tribal groups with Madi being the single largest group comprising 90 %, followed by the Lugbara of 4.3%. The Southern Sudan tribal groups (Madi, Kuku, Dinkas, Acholi Bor, Zande) make up about 95 % of the refugee population, which is 25.1% of the district population. Ethnic groups are organised around the Institution of the patrilineal clan in which clans are made of several lineages that divide themselves into families and households. The households are composed of a nuclear-type family. The relationship between the ethnic groups is jovial.

3.1.6 POVERTY DISTRIBUTION IN ADJUMANI DISTRICT

Poverty has many different dimensions, ranging from material well-being (basic needs of like nutrition, good health, shelter, education etc.) to lack of human rights, citizenship or social networks. Economic factors such as low income, lack of assets, access to markets or public services can lead into poverty. The findings shown in table 3.8 indicate that the incidence of poverty was highest within Adjumani TC.

Table 2: Poverty distribution by sub-county in Adjumani District

Sub county	Individual Headcount Index (% inds. Below Poverty Line)
Adjumani TC	68
Adropi	65
Ciforo	63
Dzaipi	53
Ofua	65
Pakelle	62
Pachara	53
Ukusijoni	65
Arinyapi	65
Itirikwa	63

(Source: UBOS, 2012/2013)

3.1.7 ENERGY FOR COOKING

Table 3 presents the distribution of households by the main source of fuel used for cooking during 2012 census. Firewood was the most commonly used source of energy for cooking in the country with 88%. It was also the most commonly used source of energy in the rural areas accounting for 96% of the entire source of cooking energy in the rural areas. The urban population used charcoal as the main source of energy for cooking.

Table 3: Source of energy for cooking by setting of residence

Nº.	Source	Rural	Urban	Total
01.	Firewood	95.9	37.8	88.2
02.	Charcoal	3.6	59.1	11.0
03.	Electricity	0.2	0.5	0.3
04.	Paraffin	0.1	1.5	0.3
05.	Others	0.2	1.1	0.2
		100.0	110.0	100.0

(Source: UBOS, 2012-2014)

As for energy for lighting, *tadooba* (paraffin candle) was the most common used source of energy used for lighting in the country with 81%, of which 85% was used by those residing in the rural areas. The urban population used paraffin lantern as the main source of energy for lighting.

3.1.8 HEALTH FACILITIES

3.1.8.1 ADJUMANI DISTRICT HOSPITAL

This is the main referral point for the district and some areas of neighboring districts like Moyo (Obongi) and Amuru (Pabbo). There are inadequate supplies and equipment, including key diagnostic equipment and supplies. The theatre lacks adequate CS sets and other reproductive health supplies. The delivery ward lacks delivery equipment and protective gear. Key essential drugs such as misoprostol and magnesium sulphate were lacking. Staffing levels were low, with only two medical doctors. There is only one ambulance.

3.1.8.2 NYUMANZI HV II

Nyumanzi HC II is a government run HC II run by two technical health workers and conducts and OPD, and emergency deliveries, and EPI. Currently the health center serves a population of 25,000 refugees and 5,000 Ugandan nationals who still access services there. There is need to increase the capacity and scope of services of this health center.

3.1.8.3 MORBIDITY AND CAUSE OF ILL HEALTH

This focuses on the frequency of disease, illness, injuries, and disabilities in a population within a district. Table 4 shows that Malaria has been the highest ranked cause of morbidity followed by cough or cold, trauma and intestinal worms.

Table 4: Proportion of ten leading Causes of Morbidity

Nº.	Disease	Percentage (%)
01.	Malaria	34.0
02.	Acute Respiratory Infection (colds and coughs)	15.0

03.	Intestinal worms	6.0
04.	Trauma	12.0
05.	Acute diarrhea	5.4
06.	Acute Respiratory Infection (pneumonia)	8.0
07.	Urinary Tract Infection (UTI)	4.8
08.	Skin diseases	4.6
09.	Ear infections	4.5
10.	Others	5.8

3.1.9 HIV/AIDS CONTROL (PREVALENCE, CONTROL AND TREATMENT)

According to the health sector strategic plan (HSSP III), HIV/AIDS is one of the communicable disease that account for over half of the total burden of disease are leading cause of ill health and mortality in Uganda. The overall objective for the communicable diseases cluster is to reduce the prevalence and incidence of communicable diseases by at least 50% as per the MDGs and NDP target. Service availability for HIV/AIDS has almost doubled in 2012-2013, to 50% from 26% recorded in 2009.

3.1.10 WATER AND SANITATION

3.1.10.1 LATRINE COVERAGE

Latrine coverage is used as a proxy to measure for access to appropriate sanitation facilities. In 2013 the number of households with access to covered pit latrine stood at 87%. Latrine coverage in the district has slightly increased from 67% in 2010 to 68% in 2013. However, the availability of the hand washing facility is still below the district target of 71% which should be in line with the national aspirations.

3.1.10.2 SAFE WATER COVERAGE

A reliable water source is one capable of supplying its beneficiaries, a minimum of 20 litres *per capita* per day as per the WHO recommended standards. According to the 2012 population census 98% of the people in the district can access water within a reasonable walking distance of up to 5 kms (Table 5).

3.1.11 EDUCATION

Based on the District Development Plan for Adjumani district for the period is characterized by low completion rates at both primary and secondary levels. The average literacy of the population in the district aged 10 years and above is 65.0% which is below the national average of 70.0%. Generally, the literacy rate among the urban population is higher at 77.0% than the rural population at 64.0% but all these are below the National average for rural and urban at 88.0%. However, there exists disparity in literacy rates between males and females which are 78.0% and 53.0% respectively. Adjumani district has a total of 80 primary schools of which 66 are government grant aided and 14 are Private/Community primary schools. There are 6 government-aided secondary schools and 06 private secondary schools. Currently 66 government aided primary schools receive UPE Capitation grants. Of the government grant aided schools, over 95% have permanent structures while some are currently benefiting from construction and rehabilitation programs but Government and its partners.

3.1.12 ENVIRONMENTAL DEGRADATION

According to the Adjumani District Forestry Officer, **an estimated 15 million trees have been cut by both the host communities and the refugees but only around 1 million have been planted to replace**

them which is a big environmental imbalance. No gazetted forest degradation can be associated to refugees or host communities for now if the rate at which non gazetted vegetation is being cleared is not checked, then after these are depleted those that are gazetted will follow suit. About 85 hectares of trees have been established but their management may not be sustainable because these are in small scattered portions managed by individuals.

3.1.13 WATER AND SANITATION

The main water supply technologies in the district are deep boreholes, shallow wells and protected springs. Boreholes are spread throughout the district while springs are found mainly in southern part of the district. There are 646 boreholes in the district (both deep and shallow), 17 protected springs and 157-yard taps. Of the 646 boreholes, 50 are situated in Adjumani Town Council and 596 in the nine sub-counties. Functionality of the boreholes stands at 92% while latrine coverage stands at 84% for the district. Functionality has not reached 100% because some water points do not have active committee members and therefore are not collecting funds regularly. For water points where the committees are still active, they endeavor to hold meetings and collect money regularly. However, what they collect is still very low and not all households contribute to the Operation and maintenance funds. In some instances, the money collected is not accounted for properly, thereby discouraging others form making their contributions.

3.1.14 GENDER ISSUES

Gender equity is a critical building block in sustainable development in any society. However, there are a lot of gender issues which are not mainstreamed in development programmes/activities in the district. Employment status of men and women in the district departments at senior level reveals that there is high gender disparity standing at 57.2%. This reflects the low level of education and little priority accorded to the girl children. Further still the fewer number of women at senior levels translates into gender biases and insensitivity. There is dominance (70% men and 30% women) in local leadership positions especially in project management. Contrary, there is low participation and commitment of men compared to women in the sustenance of local development initiatives in the community. Most women (95%) are prone to domestic and sexual gender based violence compared to men (5%). It has been observed that there is low participation of men (20%) in both provision of care and support to children.

In the district, most women (95%) do not own productive resources (land, animals etc.) compare to men (5%). Other gender issues include; low participation of men (approx. 900 males &3000 females) in providing health care services to children compare to women, more boys (50.9%) enrolment than girls (49.1%) in schools at upper levels, low participation of women in deciding on community facilities and their locations compare to men (35%-65% of female in water users committee, 100% of decisions are made by men in the district water office.

A number of factors, mainly cultural in nature has denied women access to education or forced them to drop out of school. UBOS survey (2014) puts the illiterate rate among women at 47% and that of men at 22%. This indicates that most women are general illiterate in the district compared to their counterparts, the men. The rural women are worse off in this situation with their illiteracy standing at 49% compare to the urban ones at 33%. This trend is due to the traditional attitude that gives preference to boys‟ education than girls‟ education where girls are expected to get married off at an early age for source of wealth in form of bride price. This partly explains the gender imbalances in the enrolment of both the

boy and girl children both at higher primary and secondary level. To date, the primary enrolment of boys compares to girls stands at 16,372 boys (52%) compare to 14,915 girls (48%) in 2009.

3.1.14.1 SEXUAL AND GENDER-BASED VIOLENCE

Sexual and gender-based violence (SGBV) refers to a range of actions by which an individual is exploited because of her/his sex or gender. This includes physical, emotional, psychological and socio-economic abuse such as rape, female genital mutilation, domestic violence, forced marriage, exploitation, threats, confiscation of money or identity cards, and restrictions on freedom of movement and liberty (UNHCR, 2007). For instance, some of the forms of SGBV cases recorded by police from both refugees and host communities in the district of Adjumani include; defilement, rape, early marriages, indecent assaults, and domestic violence. However, amongst the Dinka population, marriage of girls below 18 years is culturally acceptable while the Uganda laws labels such as defilement. Therefore, due to the differences in the culture and legal regimes both in the host communities and refugees, perception of a practice can be viewed as violation of rights which triggers conflicts. This shows that, gender and rights of women are strongly influenced by the culture and tradition of both the refugees and host communities (CEPA, 2017).

3.1.15 VULNERABILITY

Women remain economically marginalized: among Ugandans, 90% of all rural women work in agriculture, as opposed to 53% of rural men. As a result, women in both refugee and host communities are disproportionately affected by changing livelihood patterns, conflict, natural disasters and climate change. It is known that low education levels among girls is one of the factors contributing to early marriage, with ensuing complications for maternal health. In Adjumani, both within the host communities and in the refugees' areas, boys are preferred over girls on a number of aspects which leads to their marginalization with respect to allocation of resources and decisions. Such treatment makes girls remain marginalized and vulnerable unable to gain education as compared to boys, limited access to development options and to make and take decisions concerning their rights.

3.2 ARUA DISTRICT

3.2.1 LOCATION

Arua district lies in the North-Western Corner of Uganda. It is bordered by Maracha district in the North West; Yumbe in the North East; Democratic Republic of Congo in the West; Nebbi in the South; Zombo in the South East; and Amuru district in the East. In total the district covers an area of 4,274.13km2, of which about 87% is arable. It is located 520 km from Kampala and only 80 km from the South Sudan Border.

3.2.2 GEOMORPHOLOGY

The geomorphology of the wider Arua consists of a monotonous Madi vast plain with occasional rising abruptly from it termed as zone of tours and inselbergs. At the Nile, Rift Valley faults are seen at about 300 meters in height. Rift Valley deposits occur and are backed by a series of scarps arranged in an echelon, which separate the Rift Valley plain from the Madi Plain. Large scarps in the West of the project area, above which is the West Nile Plateau in tur stop the plain. This succession of plains is largely due to Rift Valley movement hence low erosion surfaces have been established, the Madi Plain which is part of the African end of tertiary surface, and another principal erosion surface which is the older Gondwana surface is what characterizes the geomorphology of the project area.

3.2.3 CLIMATE

The project area has a bi-modal rainfall pattern with light rains between April and October. The wettest season normally August and September receives 120mm/month. The average total rainfall is 1250 mm per year. The mean monthly evaporation ranges from 130-180 mm. In the dry season (December-March) temperatures in this part of the country remain high throughout.

3.2.4 VEGETATION

The dominant vegetation consists of savannah woodland and the common tree species are Shea nut butter tree, locally called "awa" in Madi Language or "Kumura" in Lugbara (*Vitellaria paradoxa* formerly *Butyrospermum paradoxum*), Oli (*Acacia species*), Adu/Emeku (*Combretum species*), among others. The vegetation has not been fully described before however, the western higher altitude areas have higher tree vegetation cover than the eastern and is where the National Forest Authority (NFA) Central Forest Reserves (CFR) are located. The common grass species include spear grass (*Imperata cylindrica*) and elephant grass (Napier grass, Uganda grass) (***Pannisetum purpureum***).

It is noted that, the presence of refugee settlements has had an environmental impact on land in Arua and West Nile as a region. The host areas have suffered impacts of charcoal burning and tree cutting for set up of shelters. According to the LCV Chairman for Arua District, the continued existence of refugees has degraded the forest resources and whatever interventions come to support refugees, there should be components for environmental restoration.

Figure 3: Typical vegetation set up in countryside in Arua

3.2.5 DEMOGRAPHY

As at 2016, the district had an estimated population of 820,500, of which 36,731 9 (4.5%) were refugees. By May 2017, Arua hosted 151,039 refugees, accounting for 18 percent of the district population. The refugees, mainly from South Sudan are of diverse ethnic backgrounds; Dinkas, Kuku, Nuer, Kakwa, Madi, and Siluk and have close ethnicity with the locals who are Kakwa, Madi, Alur and Lugbara. This partly explains the peaceful coexistence in the community. Arua promotes the government's exemplary refugee settlement model that allows refugees to interact freely and set up investments, which provides an opportunity to harness their potential to accelerate local economic development. Generally, the

refugee and host communities enjoy a cordial relationship, which offers a favorable environment for doing business.

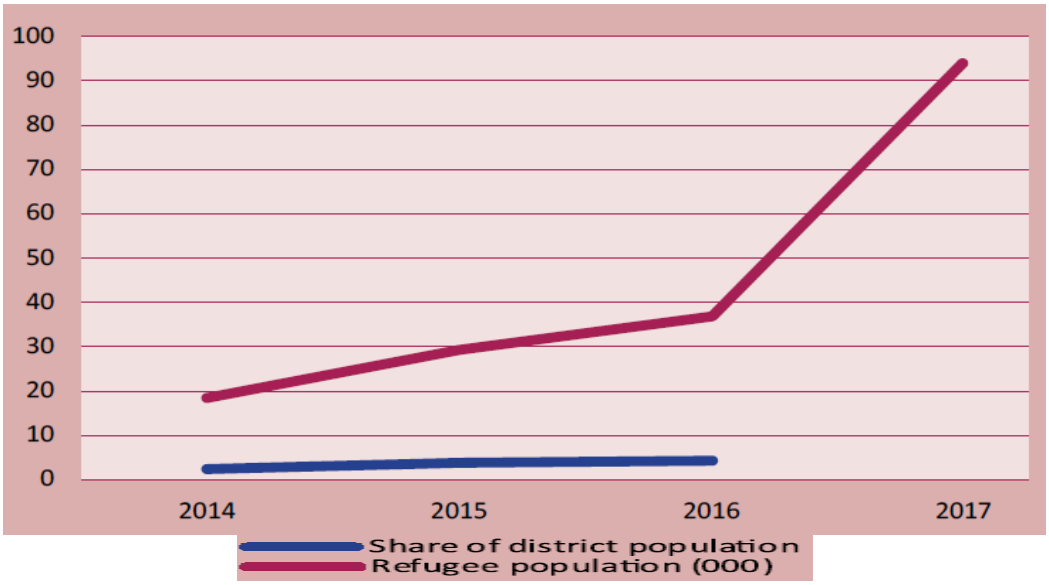


Figure 4: Arua population composition ***(Source: UNDP, 2017).***

3.2.6 WATER AND SANITATION

3.2.6.1 WATER

The water supply in Arua district is inadequate not only in the refugee settlements but also in the host communities. The safe water access rates in Arua on sub-county basis is 42 % in Pawor Sub-County to 95 % in Okollo Sub-County. Arua has 2,579 domestic water points which serve a total of 653,573 people – 592,053 in rural areas. 364 water points have been non-functional for over 5 years and are considered abandoned. It is important to note that, the district is witnessing rapid growth with its critical challenge being safe water coverage. Its major water supply is from River Enyau system which is increasingly being affected by growing water demands largely due to growing numbers of upstream users exacerbating the flow conditions during the dry season.

3.2.7 EDUCATION

Arua District has a total of 311 Government Grant aided primary schools and 48 Licensed Community Schools. Registration at the beginning of the year stood at 362,000 pupils but by the end of year, attendance dropped to 227,000 pupils causing a net non-attendance of 135,000. At the beginning of the year, boys stood at 185,000 while the girls stood at 175,000. Of the 175,000 girls, 121,000 were from the lower classes of P1-P4. Of the 135,000 children that dropped out, the percentage drop out stood at 68% for girls and 32% for boys. Arua District has a total of 480 permanent classrooms. Taking 40 pupils per classroom. Arua District has a total of 32,000 desks that means it can only sit 96,000 pupils. A total of 266,000 pupils sit on the floor. Most of the schools (about 98%) have no staff houses with about 2% of the staff houses being of a temporary nature. To-date there are 30 permanent houses. This means 5,337 teachers are not staying in permanent houses.

3.2.7.1 SCHOOLING STATUS

According to the Socio-economic conditions survey report, only 41% of the eligible school going population aged 6–24 are in school; 3% are temporarily out of school, 28% have left school while 28% have never attended school. It shows that the levels of school attendance in the district are very low.

3.2.8 LITERACY LEVELS

According to UBOS 2014, the literacy rate in Arua district was at 48% compared to a national average of 54%. On a gender disaggregated basis, the literacy rates were 65.4% for the male population and only 28% for the female population, these figures are now 77% and 46% for men and women respectively. However, literacy is not all there is to education, acquisition of skills is important. The latter is indicated by the proportion of the population that proceed to higher levels of education. It is also evident that, out of those who can read and write, very few have attained education levels higher than primary seven. Moreover, as the same time, only 4% and 2% of men and women respectively have attained senior six levels. Illiteracy and low educational attainment is still a problem in the district and this has adversely affected success of many programmes.

3.2.9 THE GIRL CHILD

With the implementation of the UPE Policy, enrolment of the girls to school has been addressed. The retention of the girls in schools up to the level when they are able to compete favorable with boys in life still remains a challenge. Girls are still vulnerable and this affects their education. Early marriage, defilement etc. are some of the issues that need to be addressed. UBOS 2014 census indicates that at the time of census, 14,622 of the girls aged 10–19 years in Arua were already married and 79 in the same category were already widowed. Divorce rates are also high for those girls. According to the census report, divorce rate was highest for females in the 20–29 years age group with a total of 3,108 cases. Therefore, this reveals that the Girl child is exposed to many dangers like defilement, child marriages, early contraction of diseases including HIV/AIDS exploitation (child labor) unequal opportunities in education, rape etc.

3.2.10 HOUSEHOLD SANITATION

Household sanitation is quite poor. Statistics shown under the water and sanitation Sector indicate very low coverage of pit latrine coverage and clean and safe water sources. Community involvement in water and Sanitation Programmes is very low. The district largely lacks adequate and safe sanitation provisions with dysfunctional pit latrines, open defecation and untreated waste water disposal posing both health and water pollution risks.

3.2.10.1 MORTALITY AND MORBIDITY PATTERNS

The common causes of morbidity and mortality are the same as in the rest of the country. These include peri-natal and maternal related conditions, malaria, acute respiratory infection (ARI), HIV/AIDS, diarrhea. These constitute over 60% of the burden of disease in the district. Yet these diseases are easily preventable or death from them can easily be averted. Other important diseases include tuberculosis, malnutrition (under nutrition), anemia, helminthiases, trauma/accidents, skin infections, mental health, cardiovascular diseases. Immedicable diseases like measles continue to cause significant morbidity and mortality. Endemic to Arua diseases like plague, schistosomiasis, trypanosomiasis, onchocerciasis and Burkitt's lymphoma continue to exert a significant disease burden on the district.

3.2.11 LAND OWNERSHIP

The land ownership and user rights in Arua and other refugee hosting districts in West Nile region (Moyo, Adjumani, Arua itself and Yumbe) is vested with the clan under customary arrangements. Under this tenure system, land under a given clan is divided/portioned to families such that, a given family will continue to occupy and use a given portion of land as assigned allocated by the clan. Though a family under a clan has ownership and user rights over a piece of land given by the clan, they have no rights to sell it unless expressly authorized by the clan.

On matters of hosting refugees, once a piece of land is identified as suitable to host refugees, OPM will end enter a Memorandum of Understanding (MoU) with such a clan to allow refugees be settled on their land under terms that will be spelt in the agreed in the MoU. From this ESMF study, the communities willingly offer their lands to OPM for hosting refugees with hope that, once refugees settle on their land, they come with benefits which the host communities can tap such as humanitarian food, improved infrastructure such as roads, water, schools and general development opportunities. The refugees are given the right to use the land but not to own it. Each refugee household or family is allocated a piece of land measuring 10x30m to construct a house and use the rest for other livelihood purposes.

From stakeholder consultations, the host communities live in harmony with refugees without serious conflict over land save for cases of crop raiding by livestock from either side i.e. refugees and host communities. The host communities report that, in late 1980s and early 1990s, they were hosted in South Sudan the time Uganda was insecure, secondly, they are of same tribal ethnicities hence, there is a spirit of brotherly hood amongst refugees and host communities. It is also noted that, refugees are free to hire pieces of land within the host communities to cultivate more food under arrangements with the land owners.

3.3 THE ECONOMY

The economy of Arua depends mainly on agriculture which employs over 80% of the households. Of those employed in agriculture, 86% are engaged in the crop sector, 0.6% in animal rearing, and 0.9% in fishing. Both food and cash crops are grown. The major food crops include cassava, beans, groundnuts, simsim, millet and maize. Tobacco is the major cash crop and is the main source of livelihood for majority of the population in the district. There is renewed interest in the promotion of coffee production in many areas of the district now. With the total production volume of 275,994 metric tonnes of major crops, Arua has a strong agricultural raw material supply base for value adding agro-processing industries. Other non-agricultural activities include: general retail and whole sale, metal and wood fabrication, art and crafts production, fish farming and livestock farming. Tobacco is also grown extensively for income generation. Honey production and trade is a known income generating activity.

3.3.1 TOBACCO PRODUCTION

The common variety of tobacco crop introduced in Arua district by tobacco companies is the Flue Cured Tobacco (FCT) which is grown in host communities around refugee hosting areas of Rhino Camp (Omugo, Ocea). The FCT tobacco is dried in burns (houses) using wood (that is burnt) to produce heat channeled through a metallic pipe system within the burn house to distribute heat for drying the leaves (Figure 5). Tobacco production is labor intensive, with the work starting from seed bed preparation through planting, weeding, harvesting and curing and to cut costs famers mainly depend on family labor. It is noted that, though the tobacco companies used to supply tree seedlings to the farmers to raise their own woodlots, most farmers never planted woodlots and continued to rely of wild wood resources for curing tobacco which now blamed on rapid environmental degradation in the areas.

Figure 5: Tobacco Kiln in rural areas of Arua close to the refugee settlements.

3.3.1.1.1 BEE KEEPING

Bee keeping is also undertaken by individual households or groups in the area as a source of family income. There were more male bee farmers than female farmers probably because traditionally male famers participate in bee hive construction than females. The members of the association owned the hives collectively and the harvested honey is sold locally and to the central processing areas such as Ediofe Catholic center. A key challenge faced by groups involved in apiary is reportedly low level of colonization of the hives by the bees which is partly attributed to insect bee predators that visit the hives.

Figure 6: Local been hive in Ofua areas, Rhino Camp Refugee Settlement

Figure 7: Improved bee hive being set up in the rural areas

3.4 HOIMA DISTRICT

3.4.1 LOCATION

Hoima District is located in the mid-western region of Uganda. It shares boarders with Masindi and Buliisa Districts in the North, Kyankwazi District in the East, and Kibaale District in the South. The district stretches to the national boundary of DRC in the Western. The District Headquarters is situated at Hoima Municipal Council, a road distance of about 220 km from Kampala. It has risen to become a major destination for the country thought after investment following the discovery of crude oil. The district has a total area of 5,735.3km^2 with a land area of 3,612.17km^2. The western border is completely covered by Lake Albert amounting to 2,123.13km^2 of water.

3.4.2 CLIMATE

3.4.2.1 RAINFALL

Hoima District has a sharp variation in rainfall amounts mainly due to variations in the landscape. The landscape ranges from low-lying Rift Valley floor to the rift escarpment and to the raised hill ranges. The Rift Valley floor lies in a rain shadow and has the least amount of rainfall. The district receives a bimodal rainfall pattern with totals ranging from about 800 mm in the Lake Albert flat rising rapidly the further away East above the Escarpment to between 1250-1500 mm per annum before tapering off to 1000mm in the Eastern border areas of the District. The peak periods are between March-May and September-December. However, the rainfall pattern has become more erratic and less predictable. In general, the second peak rainfall (August-November) is higher than the early peak.

3.4.2.2 TEMPERATURE AND HUMIDITY

Temperatures are moderate averaging 18-30^{0}C with the hottest spot of the district lying in the Rift Valley to the West. Although this is a dry belt area it has potential for livestock keeping and Lake Fishery. Climate change and variability are the important factors impacting on the district agriculture and environmental sustainability.

3.4.3 DEMOGRAPHIC INFORMATION

According to population and housing census 2014 provisional results, Hoima District is among the most populated districts in Uganda, with total population was 573,903 persons, comprising of 49.95% males (286,705) and 50.04% females (287,198). The findings show that the distribution of the population by Sub County is uneven. Among the rural sub-counties, Kyangwali is the most populated with a population of 97,366 persons, followed by Kigorobya with 68,402 persons and Kabwoya with 63,118 persons. Kahoora Division, in Hoima Municipality, was most populous among the Urban Divisions. On the other hand, Kigorobya Town Council had the smallest population of 5,867 persons.

Refugees are hosted in Kyangwali refugee settlement located in the South West of the district. Given its proximity to Eastern Congo, more than 80% of the settlement's population are Congolese. Hoima promotes the government's exemplary refugee settlement model that allows refugees to interact freely and set up investments, which provides an opportunity to harness their potential to accelerate local economic development. Generally, the refugee and host communities enjoy a cordial relationship, which offers a favorable environment for doing business.

3.4.3.1 POPULATION DENSITY

The Population density of Hoima was only 69 persons/km^2 in 1969, but has since increased to 160 persons**/**km^2 according to the 2014 Census. The population density for the District has increased overtime from 69 persons/km^2 in 1969 to 72 in 1980, 74 in 1991 and 95.4 in 2002 while its 2014 density shot to 160 persons/km^2.

3.4.3.2 HOUSEHOLD POPULATION

In 2014, the total number of enumerated households was 125,907 district-wide. The mean household size in Hoima is 4.5 persons and this gives a total household population of 565,189. The non-household population in Hoima District constitutes a very small component (1.5%) of the total Population, which is the case at national level. The non-household population is predominantly male dominated with 61% being males, giving a Sex Ratio of 159 males per 100 females, compared to 99% for the household population.

3.4.3.3 POPULATION GROWTH, FERTILITY RATE AND MORTALITY RATE

During the period 2002-2014, the population of Hoima increased from 343,480 to 573,903representing an increase of 230,423 persons over a period of 12 years. This gives a growth rate of 4.27%, which is slight decline from the rate of 4.73 which was observed between 1991 and 2002. Hoima's high rate of population growth is mainly due to the high fertility levels (over six children per woman) that have been observed for the past four decades, combined with a faster decline in mortality levels, reflected by a decline in Infant and Childhood Mortality Rates as revealed by the Uganda Demographic and Health Surveys (UDHS) of 2006 and 2013.

The total fertility rate (TFR) for Hoima District has remained high at an average of about 7 children per woman, which is the same at national level. This is mainly due to high birth rates amongst the reproductive population. 21.6% (123,963) of the population are women of childbearing age (15–49 yearsThe Infant Mortality Rate declined from 121 to 76 deaths per 1,000 live births between 2006 and 2014 while under 5 mortality rate declined from 91 to 85 deaths per 1,000 live births over the same period. These indicators could be further improved with the high levels of immunization for BCG (95%), Polio 3 (88%), DPT 3 (85%) and measles (80%). The maternal mortality ratio as of 2006 was 510 deaths per 100,000 live births. This has declined to 437 deaths per 100,000 live births in 2014. The improved mortality indicators are a result of improved social service delivery.

3.4.3.4 HOUSING CONDITIONS

The UBOS 2014 census report revealed that only 19% of the dwelling units were made of permanent roof, floor and wall materials. The most common type of materials used for construction of the dwelling units were mud and pole for the wall (52%), iron sheets 67% or thatch (31% for the roof and rammed earth (72%) for the floor. Anecdotal evidence shows there has been a general improvement in the materials used for construction of dwelling units. There has been a decline in the number of households staying in dwelling units made of mud and pole walls, with rammed earth for the floor and an increase in households with iron sheets for the roof.

3.4.4 VEGETATION RESOURCES

The vegetation of the district can be broadly classified into forest, savannah, grassland and swamps. Human activities have had a great influence on the natural vegetation in the district, such as deforestation, wetland degradation, river pollution and many others.

3.4.5 ECONOMIC ACTIVITIES

About 90% of the whole population of Hoima district lives in rural areas, socio-economic welfare depends almost largely on the effective and efficient use of its substantial agricultural resource base. Subsistence farming with minimal inputs is the main system practiced, while market oriented cultivation other than coffee and rice is negligible. The above pattern of agricultural practices is reflected in very low average incomes in Hoima District, the annual average income per capita is estimated to be USD 554, representing almost 75% of the national average. In this situation, while the incidence of hunger is not common, 24% of the rural population in Hoima district is estimated to live below the poverty line. Majority of the people (over 70%) are subsistence farmers who live marginally which poses challenges to sustainable development of the communities. Women play a major role in productive pursuits, including crop and livestock production, processing and small enterprise operation, as well as in domestic and social activities. Rural women will be the predominant target group due to their responsibilities in interventions related to health welfare and household nutrition.

3.4.6 ACCESS TO FUEL SOURCES

The fastest growing obstacle to food security amongst both host communities and refugees is inaccessibility of fuel sources, particularly firewood and reflects the risk posed to women who collect it. As a result of overuse, forest resources within both the vicinity of refugees and host communities are rapidly being depleted forcing women to venture farther away from their homes to collect firewood (Norris, 2013).

3.4.7 HEALTH SERVICES DELIVERY

Hoima District Local Government is committed to facilitating the attainment of a good standard of health for all the people of Hoima district in order to promote a healthy and productive life enshrined in the district vision. The goal of the Health Sector therefore is to reduce morbidity and mortality from the major cause of ill health as a contribution to poverty reduction, economic and social development of the people of Hoima. Hoima District Health service delivery is implemented at five levels under the following facilities; 1 Regional Referral Hospital, 3 HCIVs, 20 HCIIs and VHTs. The district also has 9 private not for profit health facilities and 4 private for profit health facilities. This is in addition to services provided by Health implementing partners including; Infectious Diseases Institute (IDI), Meeting Point, HUDIPU, Eco-Agriculture, UNASO, CARITAS, THETA, among others. The information available suggests that the highest mortality in Hoima is caused by malaria, followed by respiratory infections, anemia, AIDS, meningitis and dysentery. Although the Health indicators in the district have improved over the years, most indicators are still below the national average. These indicators could be further improved with the current high levels of immunization for BCG (95%), Polio 3 (88%), DPT 3 (85%) and measles (80%).

3.4.8 WATER AND SANITATION

3.4.8.1 WATER

The current rural water supply coverage is 74.2%. Therefore, it is assumed that the percentage safe water coverage in the district only reaches approximately 74.2%, but with wide disparities between the different sub-counties. With Buseruka Sub County being the least served with 39.1% due to being the area along the lake shores with poor rock formation. Other sub-counties with low safe water coverage

include Kyangwali and Kigorobya with coverage of 47.47% and 54% respectively (Table 5). However, in some areas some of the boreholes that have been drilled have saline water leaving piped water systems as the only viable options for such areas. The functionality of the existing facilities is at 74%. There is a negative attitude by communities in some areas towards contributing to the maintenance of these facilities.

Table 5: Safe water coverage by sub-county as of 2015

No.	Sub-County	Water Coverage (%)	Latrine Coverage (%)	Hand washing (%)
1.	Buhanika	102	68.7	19
2.	Kyabigambire	83.3	69	17
3.	Kitoba	86.4	81	37
4.	Kigorobya	54	67	19
5.	Bugambe	75.7	68	19
6.	Buseruka	39.1	57	16
7.	Kyangwali	47.47	59	12
8.	Kiziranfumbi	86	78	29
9.	Buhimba	84.6	79.5	16
10.	Kabwoya	64.2	58	19
11.	Hoima Municipality		76	27
12.	Kigorobya Town Council		65	28
	District	**74.2**	**69.32**	**21**

3.4.8.2 SANITATION

The latrine coverage of the district as of 30th June 2014 was 71.32%. The district hand washing coverage is at 21%. The recent LQAS survey conducted in February 2012 particularly studied hand washing practice among men (15-54) years, women (15-49) years and mothers of children 0-11 months and the results showed very low levels that is 13.2%, 7% and 12.2% respectively.

3.5 ISINGIRO DISTRICT

3.5.1 LOCATION

Isingiro District is located in southwestern Uganda. It lies between Latitude 1 - 30^0 south and 0-30^0 north Longitude 30-20^0 east and 31-20^0. Its altitude is at 1800m above sea level. It borders with the United Republic of Tanzania in the south, Rakai District in the east, Ntungamo District in the west, Mbarara District in the North and North West and Kiruhura District in the North. It has a land area of approximately 2564.2 sq km. Most of the land area is characterized by high hills and steep valleys.

3.5.2 TOPOGRAPHY

Isingiro's scenery is characterized by steep hills and deep valleys especially in the sub-counties of Nyakitunda, Kabingo, Kabuyanda, Ngarama and Kashumba mostly characterize the terrain of the District. Other areas are characterized by gentle slope hills and low land areas for the sub counties of Mbaare, Endinzi, Masha and part of Birere.

3.5.3 CLIMATE

The District enjoys equatorial climate and it receives average rainfall of 1200mm, temperature normally range from 17-30^0C. It has two main rainy seasons during the months of March to April and September to November in each calendar year. Some areas however, have recently been faced with dry spells

especially in Masha S/C and Kikagate. Some parts of Bukanga are also sometimes unfortunate as they get hit by hail storms especially at the beginning of the September to November wet rainy season.

3.5.4 VEGETATION

The district's ecological system is prone to chronic drought and the terrain is characterized by bare hills and rangelands. Thorny bushes and trees, grassland savannah, scattered swamps and valleys, and bare hills with stone deposits characterize the District vegetation. The soils are mainly of clay, late rite loam, and sandy nature. The District natural resources include fertile soils in almost all sub-counties, presence of Lakes Nakivale, Mburo, Kakyera and Oruchinga, availability of water springs in the sub-counties of Nyakitunda, Kabuyanda, Kabingo and Birere and greater Tin deposits in the Sub-county of Kikagate.

3.5.5 POPULATION

The population of the district is projected from 374,100 in 2008 to 385,500 people as of 2012/2013. The 1992 and 2002 censuses indicate 226,365 people and 316,025 respectively. According to 2002 census Isingiro County had 66 percent of the population and Bukanga 34% with an average Population growth rate of approximately 3.2 percent per annum. The population density of Isingiro District has risen from 104 persons/km^2 to 124 person/km2 as of 2012/2013 projections. It's also imperative to note that, much as the population density of Isingiro is below the national one (127 persons/km^2), the district has a lot of inhabitable high lands, wetlands and lakes. A vast land area of about 135km is also preserved as a refuge and settlement camp.

3.5.6 DWELLING UNITS

Information in the table indicates that 87% of the household heads stay in main houses. Table 6 shows information on types of dwelling units by sex of household head. Information in the table indicates that 87% of the household heads stay in main houses.

Table 6: Summary of housing units in the District

Status of Dwelling Unit	Male Head	Female Head	Total	Percentage of Total
Permanent	2,676	663	3,338	4.96
Semi-permanent	4,808	1,080	5,888	8.73
Temporary	46,122	12,074	58,196	86.32
TOTAL	**53,605**	**13,817**	**67,422**	**100.00**

3.5.7 EDUCATION

Isingiro district has 189 government and 132 private primary schools 9 more government schools. It also has 14 government and 132 private secondary schools as well as single primary teachers' training college and a technical institute. The District has two private technical institutions. According to 2014 Population and Housing Census, of the people aged 6 years and above, 8.5% completed P7, 0.3% completed S 6, 1% completed certificate or diploma while 0.07% completed degree and above. Of the people aged 10 years and above, 67% are literate and 33 percent are illiterate. The majority of the illiterate people fall in the age group between 18-44 years. On distance to nearest primary school, it is reported that, 47.9% of the households travel a distance of 1-5 km while 17.6% travel a distance more than 5km to the nearest Primary School.

3.5.8 HEALTH

3.5.8.1 HEALTH CENTERS

Isingiro district has 3 health Sub-districts namely Bukanga, Isingiro North and Isingiro South. The distribution of Health Centers is considerably fair with each sub-county each having a health center III and each Sub-district has a Health Center IV. However, Isingiro South has more health centre IIs than other Sub-Districts. Of the Health Center IIs, 32 are run by government and 2 by NGOs. And of the 15 Health Center IIs, 11 are run by Government and 4 by NGOs. The information also shows that Kabingo is needier as it just has 3 HC IIs and just 5 drug shops. Kabuyanda looks better off than the rest as in addition to having Health centers at all levels; it also enjoys the majority number of drug shops. The district in total has 282 beds, 103 of these being in maternity wards. The general wards have 42 beds, male wards 29, female wards 35, medical 4 and pediatric 69.

3.5.8.2 HEALTH INDICATORS

Health indicators for the district include: safe water coverage at 35%, number of health centers -53, staffing levels –42%. Malaria remains the major killer responsible for 44.5% of the deaths, HIV/AIDS prevalence is 5.9% generally and 7.2% among those who tested in 2012, IMR is 83/100 and MMR is 506 deaths per 100,000 mothers giving birth. Malaria remains the major killer responsible for 44.5% of the deaths, HIV/AIDS prevalence is 5.9% generally and 7.2% among those who tested in 2008, IMR is 83/100 and MMR is 506 deaths per 100,000 mothers giving birth.

3.5.8.3 HIV/AIDS SITUATION

Table 7 below summaries the HIV/AIDS situation in Isingiro District. It includes numbers and statistic measures on control, prevention, prevalence, service availability and utilization as well as PMTC. There are 18 Centers in the District offering HIV/AIDS services and care. Most of the centers offer general HIV/ AIDS care, PMTCT and Voluntary Counseling and Testing. Under the PMTCT Programme, 9350 new mothers attending ante-natal care were tested for HIV results, 207 were found to be positive and 91 of them are now getting Niverapine therapy.

Table 7: HIV/AIDS Scenario in Isingiro district

Nº.	**Category of services**	**Target**	**Received Services**
01.	Centers carrying out comprehensive PMTCT/HCT	17	18 centers functional
02.	New ANC mothers receiving PMTCT services	21,074 counselled	9,350 tested
03.	Prophylactic Administration of ARVs	207 pregnant HIV positive	91 received Nevirapine tablets
04.	HIV counselling and testing for non-pregnant women	3,101 counseled	1,815 tested
05.	Children and men		131 HIV positive
06.	HIV/TB	258 HIV positive mothers, men and children	72 confirmed with tuberculosis (28%).
07.	Accredited Anti-Retroviral Treatment Centers	05	02
08.	PHAs receiving ART	300	185

(Source: UBOS, 2012/2013).

3.5.9 POVERTY

In Isingiro district, the absolute poverty line is considered to be approximately 21,626 and 20,308 Ug. Shs per adult monthly for urban and rural area respectively. The percentage of individuals below the poverty

line in the district is averaged at 28% with some sub counties going into extremes of 20 percent to 35 percent. The poverty gap index is also high in the district and within all the Sub-counties. The poverty gaps index measures the depth of poverty and also gives a guide on the extent at which current resources need to be increased so as to help the poor population reach the poverty line. That shows, the poverty gap index in Isingiro being at 8% which implies that the depth of poverty in the district is high.

3.5.10 WATER, SANITATION AND HYGIENE

3.5.10.1 SAFE WATER COVERAGE

The District faces acute problem when it comes to safe water coverage and access (Table 8) which affects both the refugees and the host communities. The District has a safe water coverage at only 35% which is the households which have access to safe water supply. Kabuyanda S/C had the highest coverage which is due to the gravity flow schemes and the protected springs that have been constructed there recently. The problem of access to safe water is dictated by the terrain of the area in which, cheap source cannot be constructed in some areas and thus, the need for certain types which are expensive.

In the drought of 2016/207, a number of livestock died in the district due to starvation following prolonged drought in the area. There were media reports of people selling cows at as low as Ushs. 20,000 and more than 20,000 head of cattle were grossly emaciated (Figure 8) and could hardly stand. Water scarcity in Isingiro district has put women in Katembe and Kyarugaju parishes at risk as they travel long distances to look for sources in the cattle corridor. Residents in the areas say a number of women have been waylaid on their way to water points and raped. To cope with the water supply challenge, water interventions put up as of 2015/2016 include 117 GFS, 57 protected springs, 272 boreholes/shallow wells, 28 valley tanks and 847 household water tanks. ***In all there will be need to put up some water tanks/valleys tanks in this project to cope with water stress by both livestock and human consumption.***

Figure 8: Emaciated cows in a farm in Isingiro district after 2016/2017 drought (Photo: Isingiro Agriculture report, 2016/2017)

Table 8: Safe water coverage by sub-county in Isingiro

Sub-county	Percentage (%)
Endiizi	01
Kashumba	03
Ngarama	03
Rugaaga	03
Birere	07
Kabingo	03
Kabuyanda	10
Kikagate	03
Masha	02
Nyakitunda	02
Total	

3.5.10.2 SANITATION

In the district, the latrine coverage in 2014 was 87%. However, field interviews indicate that latrine coverage in Nakivale and Oruchinga refugee settlements as well as in the host communities is still low at an average of 60%. The soil structure of Nakivale and Oruchinga does not support the traditional latrine structures. The refugees have resorted to building their latrine in anthills which remains a challenge to the elderly and the disabled who can hardly access latrines which are sometimes erected on tops of anti-hills (Figure 9).

Figure 9: A latrine built on anthill in Isingiro areas.

3.5.11 ECONOMIC ACTIVITIES

Agriculture is the dominant economic activity in the district alongside keeping long-horned cattle. It provides employment for 72% of the labor force in the district though most of it is largely of a subsistence nature which is generally characterized by the engagement in crop production and livestock rearing and other associated activities mainly for 'own consumption'. Subsistence farming is usually associated with risk, uncertainty (especially when based on seasonal rains) and low productivity. Subsistence farmers produce primarily for own consumption but may sell some of the produce.

3.5.12 SOURCE OF COOKING FUEL

UBOS 2014 indicates that, the use of clean energy sources as a source of light or fuel for cooking in the District was limited to a small percentage of Households. Table 9 shows source of cooking fuel by sex of household head. Information in the table reveals that about 96% of the households use firewood a source of cooking fuel. With respect to source of lighting fuel by sex of household head, it is established that, about 88% of the households use paraffin candles (*Tadoba*) as source of lighting fuel.

Table 9: Sources of fuel for cooking at households in the district

No.	Fuel for cooking	Male head	Female head	Total	Total (%)
01.	Electricity	38	4	42	0.06
02.	Gas	23	9	32	0.05
03.	Paraffin	326	92	418	0.62
04.	Charcoal	1,885	624	2,509	3.72
05.	Firewood	51,162	13,055	64,217	95.25
06.	Cow dung or grass (reeds)	86	28	114	0.17
07.	Biogas	0	0	0	-
08.	Other	85	5	90	0.13
	Total	**53,605**	**13,817**	**67,422**	**100.00**

3.6 KAMWENGE DISTRICT

Kamwenge District lies in Western Uganda, it is bordered by Kasese district in the west, Kabarole in the north west and extreme north, Kyenjojo and Kyegegwa in north and north east, Kiruhura in the east, Ibanda in the east and south east and Rubirizi in south west. The district covers a land area of approx. 2,439.4km^2. Kamwenge is made up of two counties and one municipal council.

3.6.1 DEMOGRAPHY

The population of Kamwenge in 1991 was 201,654 and increased to 263,730 in 2002. In 2014 it was 414,454, the projection for 2015 is 427,200 and the midyear projection for 2016 is 442,600 people. Population distribution in the district varies from Sub County to sub county due to environmental factors such as vegetation, topography, government policy, the level of soil fertility and historical factors and even the level economic activities. It is also partly attributed to issues of migration and the influx of refugees.

3.6.2 CLIMATE

Kamwenge receives bimodal rainfall (March–May and August- November) estimated at 700-1,400mm annually with temperatures ranging from 20-25^{0}C. August-November is the main production season for agricultural activities in the district which is characterized with high rainfall.

3.6.3 VEGETATION AND SOILS

The vegetation of Kamwenge is typically savannah grassland, shrubs, and some pockets of forests with black loam, sandy and clay as the main soil types. Forestry cover remains intact in Kibale and Kakasi Central Forest Reserves; otherwise most of the natural forests which were not under government ownership were depleted and are now farmlands. Most of that the natural vegetation remains protected in the protected areas such as Katonga Wildlife Reserve and Queen Elizabeth National Park though the protected areas are prone to wild fires during the dry seasons of the year.

3.6.3.1 ETHNIC COMPOSITION AND CULTURAL SET UP

The dominant ethnic compositions in Kamwenge district are the indigenous Batagwenda and Batoro as well as the newly settled Bakiga, Bahima, and Banyankore. Rwamwanja became a refugee Settlement in 1962/64 and all the refugees were of Rwanda origin who all left the Settlement in 1994. While the host community has learnt to live in harmony with no apparent conflict, the refugees are bound together by the refugee status they find themselves in.

3.6.3.2 MATERNAL AND CHILD HEALTH AND NUTRITION

Although Kamwenge is in a better-off region of the country, the maternal and child health and nutrition (MCHN) situation is concerning. In Mid-Western Sub-Region, 44% of children under 5 are stunted, 3% are wasted, and 16% are underweight. Almost four out of ten have anemia (39%). In the two weeks preceding the 2011 DHS survey, almost a fifth (19%), over a fourth (39%) and almost a fifth (17%) of children had diarrhea, a fever and acute respiratory infection symptoms respectively. About 60% of children receive all basic immunizations by 2 years of age. The nutrition and health situation of women is closely associated with that of their children. Women in the Mid-Western Sub-Region have a high total fertility rate (6.4 children per woman), with an inter-birth interval of 31 months. Together with frequent pregnancies, the factors support a cycle of under-nutrition of women and children. Slightly over a fourth (27%) of married women are using any modern form of birth control. Most (96%) pregnant women receive some antenatal care from a skilled provider, but only 56% of births are delivered by a skilled provider. Access to iron supplements, deworming supplements and long-lasting insecticidal nets among pregnant women is inadequate.

3.6.3.3 WATER SANITATION AND HYGIENE

Poor conditions and behaviors related to water, sanitation and hygiene (WASH) are known contributors to malnutrition and illness in Western Uganda. In Kamwenge District specifically, a third (34%) of households have unimproved or unprotected water sources, and 84% of households have unimproved or no toilet facility (UBOS 2014). Only a fifth (22%) of households have hand washing stations, and only a third (32%) of those hand-washing stations have soap and water

3.6.4 POVERTY AND DEVELOPMENT IN KAMWENGE DISTRICT

Overall, poverty incidence in Western Region dropped by over half (58%) from 2005/2006 to 2012/2013, the largest decline (in relative terms) of all four regions. Poverty reduction was driven largely by growth of the agriculture sector, driven in turn by high food prices on national and world markets, increases in the area under cultivation, and to a lesser extent the adoption of improved agricultural technologies. Development-related indicators for Kamwenge District, as well as for Mid-Western Sub-Region and Western Region where Kamwenge is located indicate that, poverty in the district is fueled by high fertility rates. Kamwenge District's total fertility rate of 6.9 births per woman is higher than Uganda's rate of 6.2 births per woman, which is already one of the highest in the world (UBOS 2012, GoU Higher

Local Government 2009). A little over a third (37%) of children 6-12 years of age are currently attending school. Most (85%) households practice subsistence farming. The majority of households live in homes with non-permanent walls (83%) and floors (78%), with unimproved or no toilet facilities (84%).

3.6.5 LAND USE

Land-use and socio-economic characteristics Land in Kamwenge district is predominantly used for agriculture both animal husbandry and crop husbandry. 85% of households, i.e. 75,679 out of 89,068 households in the District are engaged in subsistence agriculture. The highlands of Kitagwenda county especially Kicheche sub county are used for coffee and millet growing while bananas and other food crops like beans, maize, cassava, ground nuts and rice grow on slopes and lowlands as well as in the rift valley. The same areas support livestock rearing. The rest of the land is under agro-forestry establishments for the middle-income earners and general human settlements like schools and rural growth centers. On the other side of Kibale county land is used for the production of maize which is both food and cash crop for over 80% of the households and similar food crops as in Kitagwenda County. The coming of Congolese refugees affected cattle keepers in the area as they were displaced and had to relocate to other places within and outside the district. Land in the refuge settlement is now used for agricultural production especially maize, beans and Irish potatoes; the area has become business centre attracting traders from the whole country.

3.6.6 FOOD SECURITY

Kamwenge District suffers from widespread chronic food insecurity. A study of chronic food insecurity in Uganda in 2015 found that in Mid-Western Sub-Region, where Kamwenge District is located, almost two thirds (62%) of the population suffers from mild (28%), moderate (17%), or severe (17%) chronic food insecurity (FAO Uganda 2015). The nutrition situation is also concerning: The Uganda Demographic and Health Survey for 2011 found that in the Mid-Western Sub-Region 44% of children under 5 were stunted, 16% were underweight, 3% were wasted, and 39% of children 6-59 months of age were anemic.

3.6.7 LIVELIHOODS OF UGANDANS IN KAMWENGE DISTRICT

According to the national livelihood zoning exercise, one livelihood zone encompasses all of Kamwenge District (the Central and Southern Maize and Cassava Livelihood Zone)[7] which is a low-productivity zone in the southwest of Uganda's cattle corridor. About two thirds (65%) of households in Western Region report that their main economic activity relates to agriculture, forestry and/or fishing, and over half (55%) of the working population reports that they are engaged in subsistence agriculture, often in combination with other income generating activities (UBOS, 2014). The figure is even higher for Kamwenge District specifically, where fully 85% of the population reports that subsistence farming provides the main source of livelihood. Farming in the district is dominated by bimodal smallholder subsistence production. Better-off households grow crops and livestock products for consumption and sale, and purchase food. Poor households obtain food via their own production, purchase, and exchanging labor for food; and earn income from sale of crops, labor, firewood, and charcoal.

[7] *USAID 2016, Opportunities to Provide Refugees and Ugandans with Alternative Livelihood Activities in Uganda's Kamwenge District*

Relatively little information is available regarding off-farm income generating activities in Kamwenge District. For the third of households (35%) that report that their main economic activity is not subsistence farming, the households reported engaging in: trade (11%), manufacturing (7%), transportation and construction (3% each), and various other services (13%). Trade includes commerce in food crops, cash crops (especially coffee and cotton), and non-food items. Business enterprises present in Kamwenge District include fishing, apiary production (beekeeping), livestock production enterprises (cattle, dairy cattle, goats, pigs, poultry), horticulture and fruit production. Finally, the abundance of riverine and wetland resources in Kamwenge, such as Lake George, the Mpanga River, Rushango River, and others, support artisanal fishing and fishing-based enterprises.

3.6.8 CROP PRODUCTION IN KAMWENGE DISTRICT

The average amount of land put under cultivation by households in Kamwenge District was 0.8 ha (2.0 acres) in 2008 (UBOS 2014). Multiple land tenure regimes co-exist. Smallholder farmers in Western Region access their land via formal ownership with a lease or certificate (37% of households), ownership under customary law (37% of households), accessing land communally and sharing with others (5% of households), and other mechanisms (23% of households) (UBOS 2014). Climate conditions are considered to be broadly favorable for crops, water, and pasture in Kamwenge (GOU Higher Local Government 2009). Rainfall in Kamwenge District is relatively abundant at 1,200 mm/year, although rainy seasons are perceived to be increasingly erratic (GOU Higher Local Government 2009). Figure 2 presents the Ugandan seasonal calendar.

3.6.9 ENERGY

The main power source for domestic needs in the host communities is firewood for cooking. Kerosene/paraffin and firewood continue to be the main source of energy for lighting for most households. There were a few homesteads with solar panels mostly for lighting and charging phones. Multiple challenges are associated with the collection, supply and use of fuel for cooking, lighting and heating purposes especially on the women who face risks of rape while in the wild picking firewood. The firewood demand, primarily for cooking, but also for heating water and for lighting is permanently continuous and its impact on the vegetation will be progressively manifested with time (Figure 10).

Figure 10: Typical open fire place in host communities

3.7 KIRYANDONGO

3.7.1 LOCATION

ÂKiryandongo district is located in the mid-western part of Uganda, with its headquarters 218 Km from Kampala. It borders Nwoya District in the North, Oyam in the North East, Apac in the East, Masindi in the South and South West and Buliisa in the North West. The District has a land area of 3,624.1 km^2 of which 1,747km^2 is arable. Kiryandongo refugee settlement is located near the town of Bweyale in Kiryandongo District, Western Uganda and hosts refugees predominantly from South Sudan and Kenya.

3.7.2 POPULATION

The 2014 Population and Housing Census recorded Kiryandongo population at 266,197 of which, 133,701 (50.3%) are males and 132,496 (49.7%) are females. The population density stands at 74 persons/km^2. UBOS 2014, reveals that Kigumba sub-county in Kiryandongo District had the highest number of household (9,260) and population (45,250) with Masindi Port with the lowest number of households (1,165) and population (4,810) in the district. The findings further revealed that, out of the 4 sub-counties in Kiryandongo district, Mutunda, and Kiryandongo had more females than males. To provide comparison, the total number of household for Census 2002 and total population projection for 2009 from the Census 2002 benchmark has been included.

3.7.2.1 HOUSEHOLD POPULATION BY AGE GROUP

UBOS 2014 reveal that, in all the sub counties, the children in the age group 6-17 years take on the highest percentages of 35 percent in the District and the highest concentration is to be found in Kiryandongo S/C (36%) with the least recorded in Mutunda S/C (34%). Age groups 18–30 years (youth) and infants (age group 0–5 years) follow with 22 percent overall. The adults 31–59 years are the third group (18%) where Mutunda/Kigumba S/Cs has the highest concentration at 18% while the least is 17 percent (Masindi Port and Kiryandongo S/Cs). The elderly (above 60 years) come last with 4%. The majority of people in Kiryandongo district are children representing a total of 57 percent for the whole district. Those aged 18 years and above represent 43 percent of Kiryandongo District population. Total population for Kiryandongo is 112,774.

3.7.2.2 MARITAL STATUS

The UBOS 2014 shows that, Kigumba sub-county registered the highest proportion of people who were never married (45.3%) and Masindi Port Sub County registered the lowest (36.5%) under this category. Among those who are now married, Masindi Port registered the highest proportion (50.7%) while Kiryandongo registered the lowest (43.4%). Masindi Port sub-county registered the highest proportion of persons that were married (12.9%) whereas Kigumba registered the lowest (9.9%).

3.7.2.3 OWNERSHIP OF LAND AND HOUSES

The Kiryandongo sub-county had the highest proportion of households owning land and houses (87% and 81% respectively) while Mutunda had the lowest proportion of households owning land (60.1%) and houses (85.3%). The highest proportion of households owning houses was instead in Masindi Port (92.4%). Kigumba had the highest proportion of households owning TVs (3.6%) and the lowest proportion was in Masindi Port (1.6%).

3.7.2.4 MAIN TYPE OF CONSTRUCTION MATERIALS

It shown that the highest proportion of households (69%) in Kiryandongo district use permanent materials as their construction material for walls, 68% use improved materials for roofs and 87% use natural materials for the floors as their construction materials. More households use permanent materials in the construction of walls in Kigumba S/C (73%) with the least reported in Masindi Port (45%). For roofing, people in Kiryandongo/Mutunda S/Cs use improved materials (72%) as compared to 60 percent in Kigumba S/C (the least). It is notable that 97% of households in Mutunda S/C use natural materials in the floor construction with the least reported in Kigumba S/C (79%) Figure 11.

Figure 11: Atypical hhomestead within Kiryandongo rural settings

3.7.3 SOURCES OF LIVELIHOODS

The majority of household members that were involved in agriculture was mainly from Mutunda (75.1%) sub-county while Masindi Port registered the least (45.6%) being engaged in agriculture. UBOS 2014 reports that, Mutunda sub-county had the highest percentage of people that were involved in trade (7.4%) and Masindi Port Sub-County had the least (1.1%). Manufacturing as a main economic activity was carried out in a very small scale with Masindi Port (1.3%) taking the highest proportion while the least was in Kigumba Subcounty (0.2%). Provision of Services as a main economic activity was mostly done in Masindi Port (16. 8%) and the least was in Kiryandongo (3.9%).

Other major activities carried out include livestock rearing and fishing. In particular, women engage in activities such as road-side groceries/vending, market vending, restaurants, hair care, and health care clinics. Men also engage in wholesale and retail merchandising, metal fabrication, carpentry work, motor vehicle repair workshops, taxi driving and *boda boda* (motorcycle and bicycle) for-hire transportation. A large percentage of the refugees (74%) are involved in economic activities, agriculture being the main activity at 50% and others being retail business and working as casual laborer to generate income.

3.7.3.1 AGRICULTURE

Kiryandongo has abundant natural resources including fertile land, water resources, able to support commercial agricultural production. Kiryandongo district has a land area of 3,624.1 km^2 which is largely arable with adequate surface and subsurface water reserves which can be harnessed and utilized for commercial agriculture and livestock. The findings from UBOS 2014 showed that the households in Kiryandongo district participated mainly in the growing of four major crops namely; maize (67.2%), beans (43.8%), cassava (45.8%) and sweat potatoes (20.7%). The highest proportion of household that grow maize was registered in Mutunda sub-county with 92.6% and the lowest was in Masindi Port with 31.5%. While for beans and cassava still the highest was in Mutunda with 82.7% and 72.3% respectively and the lowest was still in Masindi Port (10.9% and 16.7% respectively). For sweet potatoes, Mutunda still registered the highest growth proportion of 34.7% with the least being Masindi T/C (0.7%).

Coffee as a main cash crop is less grown in the district (2.6%) with Masindi Port being with the highest proportion of households (6.3%) that grew it while Kigumba subcounty had the least proportion. The category of the main food crops that registered the lowest proportion of growth in the district were rice (0.9%), Irish potatoes (0.2%), sorghum (5.1%) and bananas (6.4%). Masindi Port was the sub-county that had the highest proportion of household that grew rice (2.1%) and the lowest was Mutunda SC (0.3%). Irish potatoes were mainly grown in Kigumba and Mutunda SCs at a smaller rate of 0.3% in the two sub counties and lowest grown in Kiryandongo SC (0.1%) and Masindi port didn't grow at all (0.0%). Sorghum was highest grown in Mutunda SC (10.4%) and least grown in Kigumba (0.8%). For banana, the highest growing sub-county was Masindi Port (12.2%) and least grown in Kigumba SC at 0.9 percent.

3.7.4 HEALTH, WATER AND SANITATION

The health sector in the district has the following features:

3.7.4.1 KIRYANDONGO REFERRAL HOSPITAL

Kiryandongo Hospital is a government owned hospital with a status of a district hospital. It has a projected population of 400,000 with a service area covering the areas of Kiryandongo, Masindi, Nakasongola, Oyam, Apac, Amuru, and Nwoya District. It has a bed capacity of about 109 beds. Challenges faced by the hospital include: under staffing; under funding; inadequate infrastructure and unstable supply of electricity and electricity which have affected delivery of services.

3.7.4.2 DISEASES

The UBOS 2014 reports for Kiryandongo District Community Information System reveals that, of the persons that suffered from malaria, those below 5 years took up the higher percentage of 39%.Incidence of diarrhea among those aged above 5 years was least in Kiryandongo S/C (8%) and most in Masindi Port S/C (11%). As for those aged below 5 years, diarrhea affected more children in Masindi Port (18%) with the least incidence recorded in Kigumba SC (15%).

3.7.5 WATER AND SANITATION

The predominant source of water for drinking comes from boreholes (62%) followed by unprotected springs (14%), followed by protected water springs (10%), and then river, lakes, ponds and streams (8%) follows. All other methods fall at just 2.5 percent and below. More households in Masindi Port use borehole water (91%) with the least being Kigumba S/C (51%). The predominant source of water for household use comes from boreholes (45%) followed by unprotected springs (16%) followed by rivers,

lakes and springs plus protected springs (11%). All other methods fall at just 4% and below. Households in Masindi Port use boreholes more (53%) than the rest of the sub counties in Kiryandongo District.

3.7.6 EDUCATION

The highest education attained was categorized in 3 groups (primary, secondary and tertiary levels). Kigumba Sub County registered the highest population proportion of 1.9% and the lowest proportion under this category was in Masindi Port (0.2%). This result shows that by the time of the CIS exercise, most people in the district had stopped in primary and very few had gone beyond senior six.

3.7.6.1 SCHOOLING STATUS

Depicts the percentage distribution of schooling status by selected age groups at different administrative levels. Data collected was grouped into three age groups i.e. 6-12 years, 13-18 years and 19+. The schooling status was also grouped in three categories i.e. currently schooling, left school and never attended school. As for age group 19+, the biggest number of people who left school in both sub counties is about 68%. Findings also reveal that of the total population currently attending school; those under age group 13-18 take on the biggest percentage of above 68% in all the sub counties.

3.7.6.2 LITERACY LEVEL

Data was collected on the literacy level of all household members (aged 6 years and above) in Kiryandongo district and it was grouped into three age groups i.e. 10-12 years, 13-18 years and 19 years and above. It is observed that members who are 13–18 years are more literate (81%) than the rest of the other groups (65% and 40% respectively).

3.7.7 WATER AND SANITATION

The distribution of the households by the main water source for drinking shows, the predominant source of water for drinking comes from boreholes (62%) followed by unprotected springs (14%), followed by protected water springs (10%), and then river, lakes, ponds and streams (8%) follows. All other methods fall at just 2.5 percent and below. More households in Masindi Port use borehole water (91%) with the least being Kigumba S/C (51%). Households in Kiryandongo District travel between 0.5km to access water (40%). By and large, it is notable that, 7% of households in Kiryandongo district travel above 3km to access water. This means about 60% of households in the district travel beyond 0.5 km to access water.

3.7.8 TOILETS AND HAND WASHING FACILITIES

The overall distribution of those with a toilet facility is 85% in Kiryandongo District with the highest concentration being in Kiryandongo and Kigumba S/Cs (86% and 89% respectively) and the lowest registered in Masindi Port (75%). Availability of hand washing facilities is highest in Kigumba S/C (50%) and less hand washing facilities are to be found in Mutunda S/C (27%). Overall, 42% of households in Kiryandongo district own a hand washing facility.

3.7.9 ENERGY

UBOS 2014 data shows that, 63% of the households in Kiryandongo district use *tadooba* as the main source of energy for lighting while 91% reported firewood as the main source of energy for cooking. Kiryandongo S/C leads in use of *tadooba* and firewood with 90% and 96% respectively. Kigumba S/C depicts least use of *tadooba* with 46%. It is notable that least use of firewood was reported in Masindi Port (88%). Electricity is available in Bweyale Town, the health center and at the base camp in the

settlement but other parts of the settlement and surrounding sub-counties like Mutunda S/C do not have electricity. Fuelwood and charcoal are sourced from within the camp and in communities around. Refugees and host communities engage in charcoal burning which has led to massive cutting down of trees.

3.7.10 VULNERABILITY

This focused on children and is reported that, among all the sub counties in Kiryandongo District, 6% of the children are married. More working children are to be found in Mutunda Sub County (22%) as against 19% (the least) in Kigumba S/C. About 9% of children in 11 Kiryandongo District are out of school and Masindi Port has the biggest number (11%) among all sub counties with overall 9 percent of children out of school. Overall, about 0.1 percent of households are child headed households with Masindi Port reporting no case of child headed households.

3.8 KOBOKO DISTRICT

3.8.1 LOCATION

Koboko District is situated on the extreme corner of North Western part of Uganda. It is bordered by the Republic of South Sudan in the North, Yumbe District in the East, Democratic Republic of Congo in the West and Maracha District in the South. The district has a total land area of 820.8km^2, which is 316.9 sq. miles. It is 1,285m above sea level. It is at the point where three countries i.e. Uganda, Democratic Republic of Congo and South Sudan meet, this point where the three countries meet is called *"Salia Musala"* meaning the three cooking stones."

3.8.1.1 WATER RESOURCES

Koboko district generally lacks adequate surface and ground water resources. River Apa, Kaya at the Sudan boarder, Kechi, Ora and Kochi are the most important rivers in the district. They all have their source from Democratic Republic of Congo boarder which is a water shade and drain to the east mainly into rivers that empty into the River Nile.

3.8.1.2 WETLANDS

Wetlands cover 1.9% of the total District area. This allows water to stay in one place long enough to maximize infiltration and thus access to water supplies for plants. There is however significant encroachments on the few available wetlands for construction and crop cultivation particularly rice in the Urban and Rural set up respectively. Unless the trend is reversed, the District's wetlands are likely to be destroyed in the near future.

3.8.2 CLIMATE

Koboko district like other West Nile Districts has a bi-modal rainfall pattern with some dry spells in June and between November and March. The wettest months are normally August and September, which receive 120mm/month. The average annual rainfall is 1,250mm. The mean monthly evaporation ranges from 130mm-180mm. In the dry season (December-March) temperatures remain high (above 30^0 C) throughout. The district has been experiencing changes in the climate where the rainfall pattern has become unpredictable, in the past the district used to have two rain seasons running from March to June and from August to November every year, these days the district is experiencing prolonged drought which has grossly affected the first planting season in the district with very heavy rains in August-October which also does not favor crop production. The changes in climate can be attributed to the

negative human activities like encroachment into wetlands, removal of forest cover for cultivation and firewood as well as charcoal burning as major source of energy and poor agricultural practices.

3.8.3 VEGETATION

The predominant vegetation in Koboko District is savannah woodland with bushy forest cover found in the northern part of the District in the sub counties of Kuluba and Ludara and at the sides of Liru Mountains in Lobule. Midia Sub-county is generally flat and covered with bush shrubs. The district has a forest cover of 7,129 ha. Comprising of 5 gazetted forests with 3 local forests and 4 central forests mainly in the northern part of the District. The hills in the east have fertile soils around them that has led to people migrating to settle along the hill foots and slopes.

3.8.4 DEMOGRAPHIC/ POPULATION CHARACTERISTICS

3.8.4.1 1.2.3.1 POPULATION SIZE AND STRUCTURE

Koboko had a total population of 129,200 persons (65,400 females and 63,800 males) in 2002. Over a period of 12 years the population of the district has more than doubled from 62,337 to 129,200 in 2002 to 208,163 in 2014 of this, 37,825 leave in the urban areas while 170,338 leave in the rural areas. The current population density is at 305 persons/km^2 with 30,762 households compared to 20,034 in 2002.

Table 10: Koboko Population Growth for the period 1991-2014

Sex	Year		
	1991	**2002**	**2014**
Male	33,025	65,400	102,091
Female	33,805	63,800	106,072
Total	**62,337**	**129,200**	**208,163**

3.8.4.2 SEX COMPOSITION OF THE POPULATION

The sex ratio is generally defined as the number of males per 100 females which is an index for comparing the numerical balance between the two sexes in different population groups irrespective of the size, location and time reference. Overall, according to the 2002 census, there are 63,800 males compared to 65,400 females giving a sex ratio of 98 males per 100 females as compared to 97 males per 100 females in 1991. But according to 2014 Population and Housing Census, there were 102,091 males as compared to 106,072 females giving a sex ratio of 96 males 100 this shows that the number of males has dropped over the years.

3.8.4.3 POPULATION GROWTH

Koboko District average population growth rate has been 5.6% between 1991 and 2002 well above the national average population growth rate of 3.2%. This was much higher than the growth rate observed between 1980 and 1991. This increase could be attributed to the influx of refugees in the late 1990s that are living within the town. Another reason could be the fact that the county was insecure and many of the residence who fled to the neighboring countries had returned by 2002 census. But in 2014 the population of Koboko District rose to 208,163 as compared to 129,200 in 2002 this gives us a rate of 3.98% population growth rate in the district, which is above the national growth rate. Given the high growth rate, the district needs to expand substantially its entire infrastructure especially in education, health, and water supply in order to enhance the welfare of its population. This means increasing the

utilization of the natural resources that could easily lead to depletion of the scarce natural resources for the future generation.

3.8.5 MAIN ECONOMIC ACTIVITY

The livelihood of people in the district is dependent on agriculture which employs over 80% of the total population. Fertile soils and suitable climate combine to support the cultivation of a number of crops in most parts of the District. Both food and cash crops are grown in Koboko District. Tobacco is the major cash crop and is the main source of livelihood for nearly a third of the population in the district. It is grown mainly in the fertile highlands. The production of tobacco in the district has had a big impact on the environment due to forest degradation for firewood. Tobacco companies have not taken sufficient initiative to introduce improved tobacco curing barns which reduce firewood consumption by 70% which would help to conserve the environment.

3.8.6 HEALTH SERVICES

Koboko district has 16 Health Units of different categories with some being Government hospitals while others are owned by Non -Government Organizations. Many rural units require rehabilitation and equipping. Besides diseases, poor nutrition and low household sanitation has continued to be a growing health problem in the communities. The District has 1 District Hospital which has not started operating fully, 7 HCIII (among these is 1 PNFP), 8 HCII making total of 16, 2 VHTs per village for 394 villages (778 VHTs).

3.8.7 MORBIDITY AND CAUSE OF ILL HEALTH

Table 11 gives a summary of details on the frequency of disease, illness, injuries, and disabilities in a population within the district

Table 11: Disease burden (2014) Top Ten Diseases

Disease	Percentage (%)
Malaria	48%
Pneumonia cough or cold	18%
Intestinal worms	12%
Urinary tract infections	3.93%
Skin disease	3.24%
Gastro intestinal disorder	3.21%
Diarrhea Acute	3.19%
Ear, Nose and Throats(ENT)conditions	3.20%
Other Eye conditions	2.18%

Source: DDP, Kobobo 2015/2016

3.8.8 ENERGY

The main source of energy being used by the people of Koboko for cooking is wood fuel and such a need for *energy* for cooking has had a negative effect on the environment where a lot of trees have been destroyed for firewood and charcoal burning. During dry season a lot of people get involved in brick making which adds addition pressure of wood resources. Charcoal burning, brick burning, tobacco curing is all done using then traditional and inefficient energy technologies and methods.

In Koboko Town council private individuals who generate thermal electricity from certain engines supply the households with electricity which is mainly used for lighting their houses. Power from thermal generators is low because it often fluctuates which puts household appliances at a risk. In addition, the thermal engines are in poor condition as a result they produce a lot of noise and vibration.

3.8.9 LATRINE COVERAGE

From 2008- 2010 Koboko district had latrine coverage of 57% and had incidence of cholera outbreaks. This was an indication that there was collapse in effective delivery of health promotion activities. In 2011 a household sanitation campaign was launched and the latrine coverage increased accessed in 2012/2013 with the latrine coverage increasing to 85%. From 2013 Public health campaign was allocated for promotional activities and there have been fairly sustainable to around 73% against the national target of 74.9%.

3.8.10 EDUCATION SERVICES

Koboko District has 68 government aided primary schools with 27 private primary schools. There are 8 community primary schools not shown on the table making a total of 103 primary schools serving the community of Koboko. Table 12 shows the distribution of the schools with majority of the schools being in Koboko Town Council.

Table 12: Number of primary schools by ownership by Sub-county

Sub-County	Govt Aided	Private
Abuku	7	0
Dranya	5	0
Koboko Town Council	7	14
Kuluba	15	5
Lobule	11	2
Ludara	14	1
Midia	9	5
Total	**68**	**27**

Source: DDP, Koboko 2015/2016

3.8.10.1 GENDER MAINSTREAMING IN EDUCATION SECTOR IN THE DISTRICT

Education department is among key departments that provides one of basic services to a number of populations (Figure 12). It is therefore crucial to understand the enrolment by sex to provide basis for designing appropriate strategies. This shows disparity in the enrolment figures of boys and girls in the Government aided primary schools. Specifically, there are 29,135 male pupils and 25,679 female pupils representing 53% and 47% male and female enrolment in the year 2015. Therefore, there is low enrolment (47%) of girl child in upper classes as compared to enrolment of boys (53%). In addition, there is low retention of girl child in school and is largely attributed to the absence of sanitary facilities like wash rooms and sanitary pads.

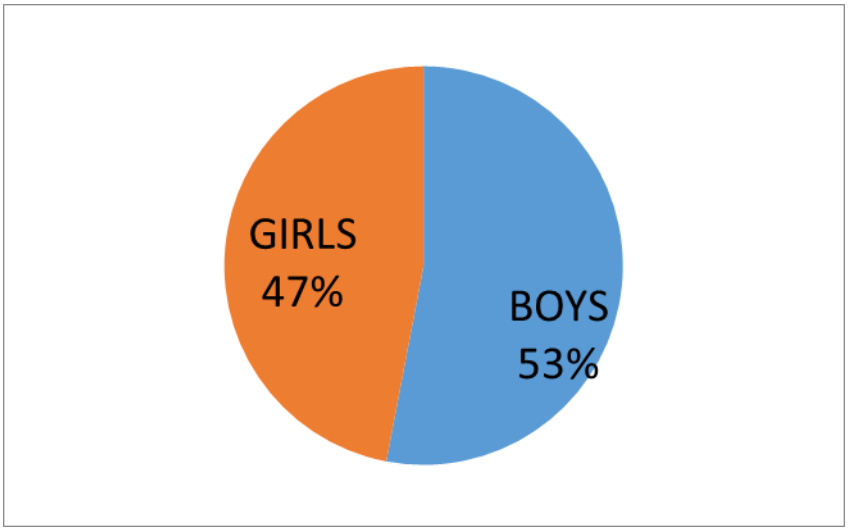


Figure 12: Percentage enrolment by sex in primary schools in Koboko District as of 2015

3.8.10.1.1 STRATEGIES TO ADDRESS THE GENDER DISPARITIES IN EDUCATION IN THE DISTRICT

These include:

a. The department of education will work towards increasing the girl child enrollment in upper primary school classes through continuous sensitization during school open days;
b. Provision of sanitary facilities such as sanitary pads in primary schools; and
c. The department will also support interventions directed towards strengthening girl child retention in school through construction of VIP latrines with wash room components. This will scale up management challenges related to maturation in girls.

3.9 KYEGEGWA DISTRICT

3.9.1 LOCATION

Kyegegwa District is located in Western Region of Uganda and bordered by Kibaale District to the north, Mubende District to the east, Kiruhura District to the south, Kamwenge District to the southwest and Kyenjojo District to the northwest.

3.9.2 POPULATION

The 2014 Population and Housing Census results reported Kyegegwa population of 281,637. 141,043 (50.1%) people were males and 140,594 (49.9%) were females. The reported population was 92 persons/km^2. Kyegegwa is one of the Ugandan districts that are hosting refugees from Democratic Republic of Congo, Rwanda and Burundi. The refugees are registered in a reception center, allocated plots of land in a refugee settlement and supported to build homes, farm and establish income generating business. This effort is in line with Uganda's transformational approach of making refugees in Uganda self-reliant and locally integrated with the host communities thus alleviating their restriction, lack and uncertainty.

3.9.3 ECONOMIC ACTIVITIES

The main occupation of the people of Kyegegwa is crop and livestock farming. Small scale farmers working on an average of two acres per household dominate the farming community. They cultivate mainly maize, bananas, beans, groundnuts, cassava, millet, potatoes, sweet potatoes citrus fruits and

pineapples for food and sale. A few large-scale farmers with farms of more than 6 acres are emerging, growing pineapples, citrus fruit, and bananas for the market. Other major income generating activities are: Aquaculture/Fish farming; Trade in agricultural produce and livestock; Beekeeping and honey processing.

Kyegegwa has abundant natural resources including fertile arable land covering a total area of 1,747 km^2. The district has fairly well distributed rainfall throughout the year with annual rainfall ranging from 1,200mm–1,500mm. The Temperatures range from 20˚C-25˚C in all parts of the district. Two rivers Katonga and Muzizi flow through the district. These rivers and the Ngata, Hapuyo and Kakabala Wetlands are sufficient water sources which should be sustainably harnessed to enable commercial agricultural and livestock production.

3.9.4 ENERGY

Fuel wood is the major source of fuel for cooking while solar is a major source of lighting. Dependence on fuel wood has put enormous pressure on the natural resources especially tress, leading to massive deforestation in and around all Settlement camps. Like many rural areas in Uganda, Kyegegwa rural communities rely on wood fuel as a source of energy for their cooking needs while enough and stable power is supplied for commercial and domestic use. The Kyegegwa Rural Electricity Cooperative Ltd, a four-year-old company, acquired a concession from Uganda Electricity Generation Company Ltd to manage and distribute power in the district.

3.9.5 MARKET INFRASTRUCTURE

One of the major sources of income in the district is the Rwensasi Market. This Market is located in Ruyonza Sub-county, 12km along Kyegegwa-Katonga road. The market, which has been in existence since 1998, operates on Thursday of every week accommodating approximately 500 traders and more than 1,000 buyers from all over Uganda. The commodities which are sold include: animals including cows, goats and sheep; hens, ducks and turkeys and general merchandise.

Rwensasi market is well established and its great business potential is assumed from the fact that it has provided market platform for a large number of livestock traders over a long period. Its service has grown and evolved to include traders who buy animals to supply a much wider regional market including Southern Sudan, Rwanda and Burundi. There is demand for modern facilities to be built and provided around this market. Investment opportunities exist in establishing abattoirs with facilities for cold storage, refrigerated transportation and other items used to preserve carcasses.

3.9.6 DEFORESTATION AND ENVIRONMENTAL DEGRADATION

Deforestation and environmental degradation in the whole of the Ankole sub-region has resulted from tree cutting for firewood, opening land for crop cultivation and using traditional farming methods, overgrazing herds of cattle, goats and sheep. The pressure of increased population of frequent entry and settlement of refugees from the neighboring countries has seriously contributed to this situation. Investment in large scale tree planting and large-scale tree nurseries is an opportunity for substantial income generation, reforestation and revival of the environment, creation of jobs that can diversify sources of income for the local communities.

3.9.7 SOCIAL CHALLENGES

Kyegegwa district is destination for refugees that enter from Tanzania, Burundi, Rwanda and DRC, and are hosted in the Kyaka Refugee Settlement. The presence of refugees impinges on food security and poses a strain on land and socio-economic services. There is potential risk for social unrest if the pressure on resources and opportunities is not addressed swiftly.

3.9.8 WATER SANITATION AND HYGIENE

There are 60 water sources: 31 shallow wells, 20 boreholes and 9 protected wells or springs as well as a water dam at Sweswe and a 7,500 litres mini water treatment plant. There are also 34 rainwater harvesting structures to boost water supply in the settlement. Base camp and all institutions rely on rain water harvesting during the rainy season and water trucking during the dry season. Distance to safe water points varies from zone to zone (village to village) from 50-2000m. Latrine coverage is around 78%. The families are also encouraged to dig communal pit latrines and are provided with a latrine digging kit including plastic slabs and treated poles.

3.9.9 HEALTH SERVICES DELIVERY

The most common disease in the host communities and refugees in Kyegegwa is malaria. AHA operates 2 health centers in Kyaka II: Bujubuli health center III and Mukondo health center II serving a catchment area of about 23,185 nationals (host communities) and 21,923 refugees each with around 10% of patients in Mukondo HC being Ugandan nationals and 55% at Bujubuli. AHA intervenes and supports awareness messages on HIV/AIDS, other communicable diseases, health promotion campaigns, and capacity building of Community Health Workers. As a result, there has been an improvement in ANC attendance, maternal child health and family planning response. All indicators in morbidity and mortality are also within accepted standard. Cases that need further management are referred to secondary and tertiary health facilities including Kyegegwa H/C IV, Fort portal district hospital and Mulago national referral hospital.

3.9.9.1 HIV/AIDS PREVALENCE IN KYEGEGWA DISTRICT

In Kyegegwa district, HIV/AIDS remains a social economic burden to the entire population, which has directly or indirectly affected them. The Young and energetic population is the most affected leading to reduction in the work force. District HIV/AIDS prevalence is 6.9% (sero behavioral survey).

3.10 LAMWO DISTRICT

The district has an area of 5,588.3km^2, of which 90% is arable. However, the district is sparsely populated with population density of 24.5 persons/km^2 and therefore, uses limited land in agriculture. The district area of about 90% is available fertile arable land. Given the sparse population density of 24.5 persons/km^2, the community uses a small land area for agriculture. There is therefore available land which can be exploited for commercial agriculture.

3.10.1 POPULATION

In 2016, the population of Lamwo District was estimated at approximately 137,948. The population of the district is young, with age group under 18 constituting up to 58.2%. This puts a great pressure on the working population. Based on UBOS Statistical Abstract of 2016, the population trend in the district can be summarized as follows: 2014 (census) 134,431, 2015 (estimates) 135,600 and in 2016 (estimates) 137,948.

3.10.2 ECONOMIC ACTIVITIES

The district experiences two rainy seasons from March to June and from August to November which favors continuous growing of crops thus, contributing to the communities' food security. Agriculture is the main source of livelihood of in Lamwo District. Typical crops grown are cassava, sorghum simsim, sunflower, rice and beans. There is also trading carried out in some parts of project areas. Crop farming is the main source of livelihood of the population. Cotton is the main cash crop and other cash crops such as sunflower, simsim, rice, millet, sorghum, Ground nuts and beans are growing in importance. Recently barley and wheat have also been introduced and are grown commercially. Livestock farming supplements crop farming.

3.10.3 CHALLENGES IN AGRICULTURAL PRODUCTION

3.10.3.1 POOR FARMING METHODS

The local population in Lamwo areas do not practice sustainable farming practices such largely shifting cultivation which involves slashing and burning of vegetation after which, crops are planted (Figure 13). This not only degrades vegetation but also renders the soils infertile after a few seasons of growing crops and also exposes the soils to agents of erosion. In addition, the locals use uncertified seeds. All these, not only degrades vegetation but also the soils rendering them infertile after a few seasons of cropping thereby exposing the soils to erosion.

Figure 13: Family clearing land through slash and burn for cultivation in rural areas of Lamwo

3.10.3.2 CLIMATE CHANGE CHALLENGES

Climate change is one of the major environmental concerns in the area. This is characterized by increasingly long drought spells and/or sporadic irregular heavy rains and flooding, and this has greatly affected agricultural production (Figure 14), by creating uncertainty among farmers as well as destroying their crops. Drought also affects the livestock in the area.

Figure 14: : Garden of maize in Palabek Ogili areas stricken by drought

3.10.3.3 IRRIGATION POTENTIAL IN THE NYIMUR RIVER AREAS

Areas of Lamwo border South Sudan with the Nyimur River one of the tributaries of the Aswa River forming the boundary. Over the previous years, the Aswa basin, both in Uganda and South Sudan, was plagued by armed conflicts, acute social insecurity and mass displacement of populations from rural areas towards more secure congregated settlements. This in turn led to mass abandonment of agricultural land, poverty and famine and high reliance on food aid. Nevertheless, the Aswa basin remains the potential host to a variety of livelihood systems including pastoral, agro-pastoral and pure farming societies. In light of the serious impacts of climate change in the area, the district leadership alongside the communities are proposing use of R. Nyimur waters for possible small-scale irrigation together with appropriate management interventions, to reduce the vulnerability of the riparian communities in Aswa Basin which is now prone to vagaries of rainfall variability. Such intervention will address the following:

(i) Mitigate the recurrent flooding and drying out problems by water storage and river regulation and thus allowing cultivation in the lowlands next to Nyimur River;

(ii) Create a large base for high productivity cultivation that will lead to a significant increase in local income, make available enough produce to influence positively the construction of agro-processing facilities and the access to markets and also make substantial impact on the wider economic life of the area;

(iii) Address poverty and lack of social development, which constrain agricultural intensification, through a labor intensive and participative approach coupled with training and support; and

(iv) Strengthen trans-boundary cooperation between Uganda and South Sudan in water resources development and management.

3.10.4 EDUCATION

Majority of the people living in the host communities are primary school drop outs. Some of the reasons that were cited as a result of early school dropout were early child marriages most especially among girl child, attitude of the parents towards education. There is no secondary school within the host community.

Schools that are within the host communities include; Apyeta Primary School, Padwat Primary school, Lugwar Primary School, Parachelle Primary School, and Akanyo Primary School.

3.10.1 POOR INFRASTRUCTURE

Poor tracks of roads with gaping holes were noted in the project area and this makes the roads vulnerable to soil erosion once it rains. The main means of transport in the area is by foot accounting for to 46% of the households while about 12.6% of the households use motorcycles. The remaining percentage includes private taxi and non-response. A part from roads, the area has challenges of safe and clean water supply energy and communication with some corners of the district do not have stable mobile telephone networks.

3.10.2 HEALTH

Common Diseases – In the host communities, malaria remains highly reported and this is partly attributed to communities not clearing bushy surroundings, plant crops so close to housing and not clearing mosquito breeding sites. Other common diseases are diarrhea, RTI, gonorrhea and syphilis. HIV/AIDS prevalence rate is at 3.6% in the district. There are HIV/AIDs that exist within the communities such as Voluntary Counseling and Testing, TB screening, offering ARVs and ARTs to people infected with HIV.

There are four health centers serving the host communities that is; Palabek Ogiri HCIII, Lugwar HCIII, Padwat HCIII, Paracelle HCIII and Apyeta HCII. There are Out-Patient Department services, community outreach activities such as immunization, sensitization and mobilization for antenatal care (ANC). There are also nutrition programs for mothers carried out by Ministry of Health. There are no ambulance services within the health centers. The main referral hospital is Kitgum hospital which is over 80km away

3.10.3 WATER, SANITATION AND HYGIENE

NELSAP 2017[8] reports that, nearly 71.5% of the population in Lamwo reportedly use improved water sources (70.8% and 0.7% use boreholes and protected springs)**.** However, despite this seemingly rosy picture on safe water coverage, a sizeable section of communities reportedly relies on unimproved water sources which increases the prevalence of waterborne disease and the burden of service delivery through increased demand for health care. Furthermore, the study adds that, about 62% of the population in the district reported that, there are times in the year when they experience water shortage especially in the months of January, February and December. Other challenges experienced in accessing water at household in the area include; rampant breakdown of boreholes, drying up of the water source especially during dry season, long distance travelled to water source, long queues at the sources, poor water quality, sharing of water sources with livestock, refugees and stream floods.

The common source of water for domestic use are boreholes. There are 786 existing boreholes out of which, 234 are not functional and 124 are abandoned. Water harvesting is also undertaken mainly in schools and health centers). There are also springs wells that are a source of water for the communities. The sanitation sector is involved in hygiene promotion in communities and institutions. The area has very low toilet coverage with most homesteads having dilapidated toilets that are mud walled and grass

[8] *NELSAP 2017: ESIA for Nyimur Multi-Purpose Water Resources Project in Lamwo.*

thatched (Figure 14) with average latrine coverage being at 52%. In most cases, the communities have poorly constructed pit latrines made of mud and wattle. Others still practice open defecation in adjacent bushes to their homesteads.

Figure 15: : Mud and wattle pit latrine in rural areas in Palabek areas

3.11 MOYO DISTRICT

3.11.1 LOCATION AND SIZE

Moyo District is located in the north-western corner, or West Nile region of Uganda. In total the district covers an area of 2,059 km^2, of which 192km^2 is rivers and swamps, 172km^2 is gazetted forest and game reserves. Approximately 78.9% of the districts' land is arable or suitable for cattle grazing and a population density of 115 persons per km^2. The distance from the district headquarters to Kampala via Arua and Gulu are 640 and 480km respectively.

3.11.2 TOPOGRAPHY

The District's Topography is characterized by low planes and rolling hills along the Nile River, at 900m above sea level rising to a series of hills and peaks. The highest peak is mountain Otze at 1500m above sea level. The Nile River bank rises sharply upwards producing a landscape characterized by plateaus, flat topped hills, inter sparse with deep valleys and giving rise to steep slopes. Drainage occurs towards the Nile, through a series of rivers, which are seasonal and mainly supplied by rainwater. These features provide beautiful sceneries for tourist attraction.

3.11.3 CLIMATE

Moyo District receives about 1267mm of annual rainfall. It has a distinct dry period that begins from December to February. November and March have moderate rainfall. The two major peaks in rainfall occur in April (short rainy season) and between August and October (major rainy season). Areas along

the Nile receive lesser rain than the rest of the district. The highest temperature recorded was 450 C in the months of January to February and lowest 29^0C in the months of August to October.

3.11.4 VEGETATION

The district has 28,365ha of Central Forest Reserve (CFRs), 20.0ha of Local Forest Reserve and about 44.0ha of Private Forest Reserve and 156,933ha of community forest reserve. But undoubtedly, there is reduction in these forests because they have been a source of all building materials (98% of the dwelling units are not permanent houses) and 99% of the households depend on wood fuel for their domestic energy needs. However, encroachment of forest areas and resultant deforestation is increasing. From 1985 to 2002 about 516.95ha of land cover in some forest reserves in Moyo District have been encroached. Deforestation is environmentally hazardous and also deprives people of the important values of forest to provide products.

3.11.5 SOCIO-ECONOMICS

3.11.5.1 POPULATION

Moyo District had a population of 194,778 according to the 2002 Population and Housing Census Report. The mid-year projection 2012 now puts the district's population at 382,400 of which 201,300 are males and 181,100 are females. The average annual population growth rate between 1991 and 2012 of the district was 7.7% compared to the national average annual population growth rate of 3.2%. Children below 18 years constituted 55% of the population and nearly half of the district population is below the age of 15 years. This population structure is expected to be youthful for the next 15 years and this poses a big population problem of high dependency ratio.

3.11.5.2 MAJOR ECONOMIC ACTIVITIES

According to the census report about 80% of the households in Moyo District depend mainly on subsistence agriculture as their main economic activity. Only 9.7% of the population was dependent on earned incomes and 0.4% on property income. The major crops grown include sweet potatoes, sorghum, cassava, simsim, groundnut, finger millet, maize, cowpeas and beans. Fishing is another main economic activity in the district. The Nile River is the main source of fish within the district.

3.11.5.3 GENDER ASPECTS

Gender imbalances still do exist in the district especially in ownership and access to productive assets such as land. Generally, women do not own nor control land. They only have access to the land but the decisions on what to produce and in what quantities remain the domain of men. Furthermore, although it is estimated that about 70% of the work force in agriculture are women they do not control proceed of neither whatever is produced nor what they sell in the market. Gender Based Domestic Violence (GBV) is also common. Although there is no clear statistics on this matter but from the crime rate in Moyo District for 2010 it is clear that assault, defilement and rape have been common and most of the assault cases were directed towards women. According to Uganda HIV Sero-Behavioral Survey conducted in 2014/2015 the HIV prevalence rate is also higher among women 7.5% than it is among men 5%.

The percentage of girls in total primary school enrolment is still low at only 48.9% for girls compared to 51.1% for boys as per 2009 school enrolment statistics. Although, this has improved, there is low retention which also exhibits gender disparity with about 45% of boys and 35% of girls completing primary seven. Girls also lag behind boys in grade promotion and learning achievements. The percentage of passes among boys in PLE stands at 95.1% for boys compared to 92.9% for girls mainly due to many

domestic works given to the girl child. According to Uganda Demographic Health Survey (UDHS) Report 2012 fewer girls are still enrolled at secondary level. The report shows that just one third of the girls who enrolled in primary are still in school at the age of 18 compared to half of the boys.

At household level, women's participation in decision making is low. Only about 35% of women in the district participate in making major household purchases and men believed that a husband should play the major role in making most household decision. These social vulnerabilities are as a result of demographic characteristics like age, disability, culture, unemployment as well as poverty and disaster.

3.11.5.4 EDUCATION AND SCHOOLS

Moyo District has 74 primary schools in total with community schools. Pupil teacher ratio stands at 1:45 slightly below the national standard of 1:50. The primary schools are more or less evenly distributed in the sub-counties and parishes unlike secondary and tertiary institutions (Table 13).

Table 13: Number of Educational Institutions by Type and Ownership

S/N	Facility	Ownership		Total
		Government	Private	
2	Primary schools	73	01	74
3	Secondary schools	6	11	17
4	Teacher Training College	01	00	01
5	Technical college	00	00	00
6	Vocational	00	03	03
7	Technical schools	01	00	01
	Total	**81**	**15**	**96**

Source: Moyo District Education Department

3.11.5.5 HEALTH

Under health, the district currently has a total of 38 health facilities namely (1 district Hospital, 1 Health Centre IV and 8 Health Centre III and 28 Health Centre II). Although about 90% of the households are within a 5km radius to a health facility, there are some households particularly in hard to reach areas who can hardly access health care services and this situation has been worsen with the erratic drug supply in most of the health facilities due to delay by National Medical Stores.

3.11.5.6 HIV AND AIDS ANALYSIS

HIV and AIDS continue to pose a big challenge to the development of Moyo District. Most people in Moyo District today know HIV and AIDS as a life threatening sexually transmitted infection. Every household has at least lost a member, relative, or a friend to HIV and AIDS. In spite of awareness about the scourge there exist a big gap between knowledge and desired behavioral change. The National Sero-behavioural Survey conducted in 2004/2005 puts the prevalence rate at 2.6% for West Nile region of which Moyo District is part. The District has tried to scale up efforts in providing HIV/AIDS services in most of its Health Centers.

3.11.6 POVERTY AND LIVELIHOOD ANALYSIS

The people Moyo view poverty as lack of means to satisfy basic material and social needs, as well as a feeling of powerlessness. There is gender and location specific variations in the way the local people define poverty. Source of monetary livelihood and comfort of accommodation like good sanitation are paramount in urban areas while possession of productive assets like land and livestock are more critical

in the rural areas. Women are concerned more with lack of land, water, family planning services resulting in large family size, lacking assistance, household food and poor welfare of children when they define poverty. Men relate poverty mostly to the inability to engage in meaningful employment and lack of productive assets. To the youth, the degree and extend of social connectedness and family welfare indicate the level of poverty. Therefore, the strategy to address poverty requires multi-faceted approaches.

The people of Moyo use a number of indicators that give meaning to the above characteristics. These indicators are generally grouped under material and non-material indicators. The most common material indicators include lack of food, clothing, shelter, money and inability to send children to school or for health services. In both rural and urban communities' men were more concerned about income and assets of production – land and livestock as material indicators. Women on the other hand were mostly concerned with assets for domestic use and consumption such as lack of food, bedding, gardens and spending much on treatment of children. The most used non-material indicators include sickly, elderly, beggar, lacking children for support, having dirty compound. Gender specific perceptions were apparent. Men were concerned about the quality of life of families such as naked children, quarrels in homes and none participation in family functions. The women's conception relates to the character of husbands such as lazy and drunkard husbands, and obligations of women pregnancy and travel long distance with produce.

3.11.6.1 SAFE WATER COVERAGE

The district in total has 977 safe water points including household connections and the safe water coverage declined from 61.4% in June 2010 to only 47.0% by March 2011 below the national average of 63.0% due to drying up of water sources following climate change and decommissioning of 40 water sources that are non-functional for a long period of times. This implies about 53.0% of the population in Moyo do not have access to clean and safe water. Table 14 below presents the safe water coverage by sub-county. Aliba and Gimara sub-counties have the worst safe water coverage below 20%. While Lefori and Itula sub-counties are average at only about 50%. This implies that more than 65% of the population from Aliba and Gimara sub-counties do not have access to clean and safe water and they are very far from reaching the national safe water coverage which stands at 63%. While the sub-counties of Moyo, Dufile, Metu and MTC have better safe water coverage above the national percentage. All these limits the people access to safe drinking water leading to ill health and increase in household poverty

Table 15: Safe water coverage and functionality by sub-county for 2010

Sub-county	Percentage of water coverage of Rural & Urban populations				
	2007 FY	2008 FY	2009 FY	2010FY	2011
Aliba	24.0	18.92	20.76	19	14
Gimara	12.3	13.97	18.8	17	13
Itula	62.9	49.77	56.43	83	51
Lefori	52.2	38.24	47.54	32	50
Moyo	57.9	44.41	51.07	79	64
Dufile	67.5	68.96	72.32	77	61
Metu	65.2	56.49	63.24	93	62
MTC	67.4	57.07	61.92	92	60
District Average (%)	**51.4**	**43.05**	**49.09**	**61.5**	**47.0**

(Source: DDP Moyo, 2017)

3.11.6.2 SANITATION STATUS

The sanitation coverage in the district has been fluctuating with changes in weather. It often improves during dry season and decreases during rainy season. The average household latrine coverage is 75.0%. While the average school latrine coverage is 88.5%. Girls have a lower coverage 67.2% compared to Boys 109.7% as shown in Table 16:

Table 17: Households & Schools Latrine Coverage per Sub-County

Sub-county	Percentage of people (households & Schools) with access to improved & basic latrines			
	Households	Schools Latrine Coverage		
		Girls	Boys	Average
Aliba	60	49.6	73.8	61.7
Gimara	53	63.7	89.4	76.55
Itula	69	83.7	111.6	97.65
Lefori	77	43.6	87.0	65.3
Moyo	85	70.9	130.3	100.6
Dufile	75	86.6	132.9	109.75
Metu	92	75.9	135.1	105.5
MTC	91	38.3	55.6	46.95
Average	**76.0**	**67.2**	**109.7**	**88.45**

(Source: DDP Moyo, 2017)

Over 25% of the households do not have latrines. Gimara and Aliba sub-counties have lower latrine coverage and even average safe water coverage. With the low safe water coverage, cases of diseases and poor health are common among the communities which are a typical characteristic of the poor.

The key poverty pocket in the district could be easily seen in the sub-counties of Aliba, Gimara, Itula, Lefori, Metu and Dufile. This is basically due to their remoteness, low coverage of social services and unfavourable weather patterns within their locality as in the above analysis.

3.11.6.3 INFRASTRUCTURE

The length of feeder roads net-work in the district is 166.5kms and about 115km which is 69.1% is motorable throughout the year while 51.5km which is 30.9% is not motorable. the district over the years has upgraded about 17.5kms of Community Access Roads (CARs) into district feeder roads thus increasing the total road length to about 184.0kms. The routine road maintenance has not been easy due to heavy rains experienced from August to November 2010. This has often resulted into floods destroying road surface and affecting social service delivery especially the road sections of Waka-Gborokonyo and Laropi-Paanjala which experience annual floods. Due to the poor road condition the cost of doing business in Moyo District is very high undermining the economic competitiveness. The prices of goods and services are higher in Moyo as compared to those in other places due to high transport cost incurred by the businessmen due to poor road condition from Gulu-Atiak-Moyo.

3.12 YUMBE DISTRICT

Yumbe district Yumbe district is located in the northwestern corner of Uganda with one international border: South Sudan in the North, on the southern and western side: Arua and Moyo and River Nile in the east. Yumbe district is a one county district known as Aringa County, and made up of twelve sub counties: Apo, Drajini, Romogi, Kuru, Kei, Odravu, Kochi, Kerwa, Kululu, Lodonga, Ariwa and Midigo; and one town council called Yumbe Town council.

3.12.1 TOPOGRAPHY

The District is generally flat, although in the eastern part there are several hills, and in the north, there are two hills namely Midigo and Kei. Most parts of the District are agriculturally productive except the eastern part of Romogi, Kuru and Odravu sub counties. The District has loamy soil. Gravels are evident in some isolated parts of Kuru, Romogi and Odravu sub counties. While towards the eastern part of the district along the Nile basin is sandy.

3.12.2 CLIMATE

Yumbe district experiences a purely tropical climate due to her location within the eastern topographical rainfall zone. Rainfall is bimodal in nature. The wet season starts from March till May. June is usually sunny. The wettest season occurs in the month of August, September and October whereas the dry season runs through from the month of December till early march.

3.12.2.1 RAINFALL

Rainfall, Temperature, Humidity and Winds Yumbe receives an average total rainfall of 1,250mm. The area experiences a two-seasonal rainfall, light rains between April and October. The wettest months are usually August-September with >120 mm/month. The period December-February is dry with less than 60 mm/month. The rain is associated with the northern and southern movements of the inter-tropical front. Mean monthly evaporation ranges from 130-180mm. The prevailing wind is from the east to the west with frequent windstorms during the dry season. Temperatures are generally high during the nights of dry seasons (Dec.-March) similar to those during day hours whereas during wet seasons, temperatures remain high during day and fairly low during the night hours.

3.12.3 LAND USE

The major land use patterns in the district are in terms of human settlement pattern which tends to be linear, scattered and clustered. The proportion of land under agriculture/farming in the district is estimated to be 2,411 km^2 (about 1.2% of total national area), of which, about 1,929km^2 is under agriculture (80.1%), 411.7km^2 under forestry and woodlands (7.1%) and wetlands and water bodies account for 70.2 km^2 (2.9%).

3.12.3.1 WET LANDS

The rivers in the district include; Kaya, Kochi, Kii, Woyi in Kei sub County, Kochi, Chere,Kechi, Araa, Limbe and Gogoyi in Midigo Sub County,Kochinga in Kuru Sub County,Dacha and Jure in Odravu sub County, Atu and Kochi in Drajini sub County, Kochi, Kenya in Romogi sub County and Kenya in Apo Sub County.. There are no significant swamps in the district and no lakes.

3.12.3.2 VEGETATION

About 80 percent of the total area of Yumbe is for agriculture, most of it is cultivated. Forestry and woodlands cover a very small part i.e. only 17.1% of the total area. The district has a total of 411.78 km2 of land under forestry and woodlands. There are three central forest reserves in the district; Mt Kei natural forest reserve which is also a conservation area, covers an area of 40,689ha; Lodonga forest reserve is a plantation which is being majorly cultivated by tobacco farmers YUMBE District Statistical Abstract for 2012/13 association to produce woodfuel and has an area of 106 ha and Koloa forest reserve with an area of 614 ha, has the same status with Lodonga forest reserve. The remaining part is either ungazetted community forests e.g. Ujiji in Odravu sub county, or woodlands.

3.12.3.3 FOREST COVER

The district has three gazette central forest reserves as on Table 19. However, based on UBOS 2014 report, the scenarios of district forestry coverage can be summarized in terms of:

a. Deforestation- estimated rates stand at 20% per annum;
b. Re-afforestation – estimated rates 15% per annum; and
c. Afforestation -estimated rates stand at 10% per annum.

Table 18: Status and size of Forestry by type

Nº.	Name of Forest	Area (Ha.)
01.	Mt Kei	40,689
02.	Kulua	681
03.	Lodonga	106

3.12.3.4 AGRICULTURE

Agriculture is the major economic activity in Yumbe district. The majority of farmers are small holders who grow both perennial and annual crops. The perennial crops include Banana, Coffee, and Tea, while the annuals include maize, sweet potatoes, beans, cassava and groundnuts. Crop production is the major agriculture activity in Yumbe district. It occupies 72% of the farming households. Most of them grow tubers especially cassava and potatoes which are the main staple food in the district. Cassava is normally grown together with either ground nuts or beans and on average a household would grow half --an acre in a year. Cassava and potatoes constitute 46% of the Crop farming households. The second largest crops grown are cereals including sorghum, millet and maize to supplement their food. Millet and sorghum are normally inter-planted while maize goes with beans or ground nuts. Cereals growing are done in 25% of the crop farming households and are on average grown on three quarters of an acre per household per annum.

3.12.3.5 POPULATION

Yumbe District population in 2013 is projected to be 589,500 people, where there are 306,100 males (51.9%) and 283,400 females (48.1%). About 94% of the population live in rural areas where as only about 6% live in the urban areas. It has a population growth rate of 7.9% making it one of the highest in Uganda and is attributed to high fertility rate of 7.1 and low mortality rates. To date, the district population is predominantly youthful with the elderly population (65+ years) constituting a meagre 3%. The district is predominantly comprised of Muslims (77%) followed by Catholics (14%), Anglicans (8%), Pentecostals 0.7 (0.3%). Yumbe district hosts the Bidibidi refugee settlement with an estimated refugee population 270,000 as at March, 2017 and covers an estimated 250km^2. Bidibidi refugee settlement is situated across 5 Sub-counties namely; Romogi, Kululu, Kochi, Odravu and Ariwa. Most of the population in Bidibidi refugee settlement is female (53%) and children (68%)2. Therefore, most households are female headed.

3.12.3.6 POPULATION DISTRIBUTION

The distribution of population by age and sex is among the basic types of information needed for planning. Analysis of educational requirements, labor force projections, household composition and migration for example, would not be complete without considering information on age and sex. Sex and age composition of a population has significant implications for the reproductive potential, human resource, school attendance, family formation, health care and other service delivery in general.

3.12.4 POPULATION DENSITY

Yumbe district with its area of 2,411km^2 has therefore, the population density of about 209 persons/km^2 of its land.

3.12.5 POVERTY DISTRIBUTION IN YUMBE DISTRICT

Poverty has many different dimensions, ranging from material well-being (basic needs of like nutrition, good health, shelter, education etc.) to lack of human rights, citizenship or social networks. Economic factors such as low income, lack of assets, access to markets or public services can lead into poverty. According to the 2012 population and housing census analytical report, about 86.1 percent of the people in Yumbe district are engaged in subsistence farming using simple tools like hoes, pangas and axes. They grow food crops like maize, cassava, beans, ground nuts and simsim among others. Some of the farm produce is sold to purchase other items like salt, soap and school fees. Some households' rear goats, sheep cows, birds, rabbits and in some non-Muslim families they also rear pigs. Major cash crops in the district include tobacco and cotton which is grown by few people.

Tobacco growing is widely practiced in Yumbe District and entails significant tree cutting for curing and this affects the environment. The labour for tobacco growing is mainly drawn from family members irrespective of age, where child labour is exploited. Marketing of tobacco crop is predominantly done by men who make unilateral spending decisions. This in the end leaves the rest of the household members without a say in the allocation of household resources. There are pockets of the poor people across both the rural and urban areas. The report indicated Apo Sub County as being the poorest, followed by Drajini and Kuru Sub-counties.

According to the Yumbe District Livelihoods Support Programme appraisal report, 89% of the population is poor. This means that the majority of the population falls under chronic poverty and transitory poor (moving or descending into poverty) which is manifest in terms of:

a. Households who have one rough meal per day;
b. Households with houses built with mud and wattle and grass thatched roofs;
c. Big family size, with polygamous marriages widely spread, family sizes average at about 12 members each;
d. Low education level of household heads;
e. A high percentage of the household heads have less than four years of formal education;
f. High likelihood of widowhood. Life expectancy in Yumbe district is 47 years for women, and 43 years averaging at 45 years;
g. Polygamy, the predominant faith in Yumbe district being Islam (77%) with a common belief among the followers that one is allowed to marry up to 4 wives, reinforces the practice of polygamy as a norm within the community; and
h. Alcoholism and exclusions from community activities.

3.12.6 LIVELIHOOD OPPORTUNITIES IN YUMBE DISTRICT

3.12.6.1 LIVELIHOOD OPPORTUNITIES IN THE WIDER DISTRICT

Source of Livelihood Agriculture is the dominant economic activity of the country. The sector provides employment for 72% of the labor force. However, most of the agricultural activity is of subsistence nature. This is generally characterized by the engagement in crop production, stock rearing, and

associated activities mainly for own consumption. Subsistence farming is usually associated with, risk and uncertainty (especially when based on seasonal rains) and low productivity. Table 20 gives a summary of the main sources of livelihood (in percentage) for households in Yumbe district.

Table 19: Percentage Distribution of the main sources of household livelihoods in Yumbe

No.	Economic activity	% Contribution
01.	Subsistence Farming	86.1
02.	Earned income	08.0
03.	Property income	01.4
04.	Others	4.5

3.12.6.2 EDUCATION

There are 2 private owned primary schools, 42 Community founded, 43 Muslim, 23 catholic and 14 church of Uganda founded schools, making a total of 114 primary schools in the district. Also, there are 3 technical schools in the district evenly distributed in the sub counties of Odravu, Lodonga, and Romogi. There are 5 government secondary schools, 6 communities and 8 individual/privately owned secondary schools, giving a total of 18 schools in the district.

3.12.7 ENVIRONMENTAL DEGRADATION

The fairly high population growth rate of about 4.3% per annum has huge effect on the original vegetation of the district. There is massive deforestation particularly on privately owned land, where over 80% of the districts tree resources are. This is closely followed by wetland degradation as a result of cultivation of crops. Other threats are soil erosion whose magnitude and impact has never been quantified. Woodlands are being cleared for agriculture, to provide construction materials and to provide wood fuel which is used by about 99% of the population. This has further enhanced the deforestation rates. Encroachment on forest lands in form of land for cultivation and grazing leaves the land bare. All the above and other factors have led to continued decline in forest area coverage.

3.12.8 GENDER

Gender dimension in the district is largely male dominated in a number of sections of economy and decision making which is summarized as follows:

a. Ratio of girls to boys in primary education: 101:100
b. Ratio of girls to boys in secondary education: 112:100
c. Ratio of men to women in policy decision making issues is 1:5
d. Proportion of seats held by women in lower local government councils and higher local government councils is 40%
e. Proportion of women having rights to own property (land, household property etc. no data)
f. Number of bye-laws in favor of widows is 1N^{o}.
g. Number of domestic violence cases handled by probation/gender office and police are 11 as of October, 2017
h. Number of women groups with objective uplifting status of women are 34

3.12.8.1 SAFE WATER COVERAGE AND SANITATION SITUATION

The percentage of safe water coverage in Yumbe is estimated to be at 33.7 percent based on a source man- ratio of 300 people per borehole 300 people per shallow well, 200 people per protected spring and 150 people served per Gravity Flow Scheme tap. It is also based on the functional water sources at the time of spot check as at July 2017 (Table 21). On sanitation indicators, the percentage of households

using hand washing facilities accounted for 3% while that with kitchen and bathrooms stood at 94%. On the other hand, none of the households especially in the urban areas is connected to sewerage line.

Table 20: number of safe water sources by type

No.	Water source	Number
01	Boreholes	364
02	Shallow wells	97
03	Protected springs	33
04	Tap water	301
	Total	**795**

4 POLICY AND LEGAL FRAMEWORK

This section summarizes applicable policy, legal and administrative framework within which, this ESMF has been prepared.

4.1 THE POLICY FRAMEWORK

4.1.1 NATIONAL POLICY FRAMEWORK

4.1.1.1 THE NATIONAL ENVIRONMENT MANAGEMENT POLICY-NEMP, 1994

The key policy objective NEMP is enhancement of the health, quality of life and promotion of long-term, sustainable socio-economic development through sound environmental and natural resource management and use; and optimizing resource use. ***This is consistent with a rage of safeguard provisions such as World Bank OP 4.01 which requires Environmental Assessment to be conducted on project as well as IFC PS 1 which equally requires ESIA to be conducted on projects. On the basis of these, preparation of this ESMF is in compliance with all these safeguards requirements.***

4.1.1.2 NATIONAL WATER POLICY, 1999

The policy stipulates *inter alia:* the first priority in water resources allocation will be the provision of water in adequate quantity and quality to meet domestic demands. ***Access to safe and clean water supply is one of the basic necessities of humanity which is consistent with IFC Sustainability Guidelines which lauds need for sustainability in interventions. This Project is planned to ensure provision of adequate household water needs for both the refugees and host communities which is at tandem with a number of such safeguards.***

4.1.1.3 THE NATIONAL LAND USE POLICY

The overall policy goal is to achieve sustainable and equitable socio-economic development through optimal land management and utilization in Uganda. ***The policy recognizes amongst others, the need for the protection and sustainable use of land resources through conducting environmental assessments and implementation of measures outlined in such assessment studies. This is consistent with World bank safeguards policy on Environment Assessment (OP 4.01).***

4.1.1.4 NATIONAL POLICY FOR THE CONSERVATION AND MANAGEMENT OF WETLAND RESOURCES, 1995

The Policy has established principles by which wetlands resources can be optimally used and their productivity maintained in the future and end existing unsustainable exploitative practices in wetlands. All proposed modifications and restorations on wetlands shall be subject to an ESIA, the result of which shall determine whether such restoration or modification shall proceed and if so to what extent. ***This ESMF has measures for controlling degradation of wetlands and controlling their siltation in line with Bank safeguards policy OP 4.04 Natural Habitat.***

4.1.1.5 RENEWABLE ENERGY POLICY FOR UGANDA

The overall objective of the Renewable Energy Policy is to diversify the energy supply sources and technologies in the country. In particular, the policy goal is to increase the use of modern renewable energy from the current 4% to 61% of the total energy consumption by the year 2017 Government's

Policy Vision for Renewable Energy is: To make modern renewable energy a substantial part of the national energy consumption. ***This ESMF outlines mechanisms of ensuring the use of renewable energy by the refugees and host communities including improved stoves.***

4.1.1.6 THE NATIONAL HIV/AIDS POLICY, 2004

The policy provides the principles and a framework for a multi-sectoral response to HIV/AIDS in Ugandan's world of work. The policy applies to all current and prospective employees and workers, including applicants for work, within the public and private sectors. It also applies to all aspects of work, both formal and informal. ***The project will have to mainstream HIV/AIDS interventions into its plan, Projects and activities.***

4.1.1.7 NATIONAL AGRICULTURAL POLICY 2013

The overall objective of the agriculture policy is to achieve food and nutrition security and improve household incomes through coordinated interventions that focus on enhancing sustainable agricultural productivity and value addition; providing employment opportunities, and promoting domestic and international trade. ***MAAIF will have to provide extension services through the respective District Agricultural Officers to ensure that farmers and host communities adopt modern agricultural production skills. Farmer field schools, demonstration gardens will be utilized as an effective way to encourage adoption of best practice agricultural technologies. The gardens will showcase agronomic best practices including using improved varieties of maize, beans, rice and cassava. In addition, this ESMF includes a Pest Management Plan to guide use of pesticides.***

4.1.1.8 THE NATIONAL CULTURAL POLICY, 2006

The National Culture Policy, 2006 complements, promotes, and strengthens the overall development goals of the country. Its specific objectives include amongst others, the need to promote and strengthen Uganda's diverse cultural identities and to conserve, protect, and promote Uganda's tangible and intangible cultural heritage**.** ***This ESMF outlines Chance Finds Procedures to ensure protection and conservation of any PCRs that will be encountered during project implementation.***

4.1.1.9 THE Occupational HEALTH AND SAFETY POLICY

This policy will be especially relevant for Occupational Health and Safety (OHS) of the workers and the public in the implementation of the project components. ***Its focus on safety and wellbeing of workers in work environment makes it consistent with IFC PS2 which concerns labor and working conditions as well as IFC PS 4 which also looks into issues of community health safety and security. These are all important considerations in the project implementation and operations.***

4.1.1.10 THE NATIONAL SANITATION POLICY FOR UGANDA, 1997

This Policy seeks to promote safe disposal of human excreta by any appropriate means, promote proper management of solid and effluent wastes and enhance the development and maintenance of safe water chain. It also seeks to promote behavior change regarding sanitation amongst ***others which is consistent with National Environment Act Cap 153 regarding abatement of pollution. Therefore, the project focus on WASH interventions especially with respect to pit latrine and water supply will all improve hygiene at household and institution level.***

4.1.1.11 THE NATIONAL ACTION PLAN ON GENDER BASED VIOLENCE (GBV)

Findings on the National Situation Gender Based Violence Analysis (2010) revealed that, Uganda has much Gender Based Violence which afflicts both females and males. The findings further indicated that, GBV issues in Uganda originate from institutionalized male dominance as opposed to female subordination, leading to unequal power distribution in the home and the society plus resultant GBV violations based on male dominance and male superiority tendencies. Therefore, the Action Plan on Gender Based Violence has specific actions that operationalize the Uganda National GBV Policy (2011-2015) through:

a. Reducing rates of GBV incidences reported by GBV Intervening stakeholders;
b. Reducing rates of GBV in the Uganda households, institutions and communities due to increased female Empowerment and decreased subordination tendencies;
c. Ddecreasing the influence of harmful and negative traditional values and beliefs at all levels;
d. Decreasing root causes of GBV incidences, more specifically patriarchy/male dominance tendencies in the Uganda society;
e. Iincreasing male involvement and participation in curbing GBV incidences at the household, institutional and community levels;
f. Increasing coordination and collaboration networks on GBV interventions; and
g. Increasing capacities for effective intervention provision by the GBV stakeholders.

4.1.1.12 UNIVERSAL PRIMARY EDUCATION 1996

Universal Primary Education (UPE) is one of the Government of Uganda's main policy tools for achieving poverty reduction and human development by providing facilities and resources to enable every child to enter and remain in school until completion of education which makes education equitable in order to eliminate inherent disparities and inequalities. This Policy makes education a basic right. However, though the UPE programme has resulted in increased enrollment, it has share of challenges in the delivery of quality primary education through sudden drop in education quality indicators, such as higher pupil-teacher ratio, the pupil-classroom ratio, and pupil-textbook ratio. ***In a nutshell, schools both in refugee and host community areas are characterized by inadequate and overcrowded classrooms which amongst others, is among the interventions this project is focused on addressing.***

4.2 NATIONAL LEGAL FRAMEWORK

4.2.1 THE CONSTITUTION OF THE REPUBLIC OF UGANDA, 1995

The right to a clean and healthy environment is enshrined in Article 39 of the Constitution of Uganda, 1995 as well as integration of people in the development process. In particular, the Constitution guarantees a range of basic human rights to the people of Uganda which include: gender balance and fair representation of marginalized groups in development process; protection of the aged; the right to development; access to clean and safe water; basic medical services; and access to education. ***These are some of the fundamental socio-economic aspects which are key for sustainability of mankind and the plan under the project to focus its interventions on classrooms construction, water supply, construction of pit latrines is all consistent with the constitutional obligations in the laws of Uganda.***

4.2.2 THE NATIONAL ENVIRONMENT ACT, CAP 153

Section 20 of this Act obliges every developer to undertake an environmental assessment for projects listed in the Third Schedule of the Act. ***One glaring gap in this Law with reference to the World Bank and related safeguards is that, it does not provide project categories as well as clear processes and procedures for***

ESMF preparation, review and approval. However, this ESMF has been prepared based on World Bank safeguards and NEMA accepts to review and disclose being a form of Environmental Assessment. However, this gap is being addressed in the reviewed National Environment Act.

4.2.3 THE REFUGEE ACT 2006

The legislation clearly enumerates the rights of refugees, as well as their obligations in Uganda. The law outlines the process to be used in determining refugee status and sets out how refugee situation can cease, once durable solutions have been found. ***Under this law, a range of refugees' inherent rights are to be guaranteed during the implementation of this project in terms of access to work, social services and means of production. The implementation of this project should be in line with ILO Core Labor Standards and IFC PS 4 amongst others and bearing in mind the rights and obligations of the refugees in terms of access to education, safe water supply and WASH facilities.***

4.2.4 UGANDA CITIZENSHIP AND IMMIGRATION CONTROL (AMENDMENT) ACT 2009

An Act to make provision for acquisition of citizenship of Uganda pursuant to the Constitution, to provide for the compulsory registration of all Ugandans and the issue of national identification numbers and the issue of national identity cards to citizens of Uganda; to regulate the issue of passports to citizens of Uganda, to provide for the regulation and control of aliens in Uganda; to repeal the Uganda Citizenship Act, the Immigration Act, the Passports Act and the Aliens (Registration and Control). ***This Act provides for Citizenship by naturalization in which, amongst others, the Board may grant to any alien citizenship by naturalization subject to the provisions of the Act. With respect to this project, this Act has a window of opportunity for refugees to be citizens through processes herein.***

4.2.5 CHILDREN ACT 1997

This Act consolidates the law relating to children and provides *inter alia* for the care, protection and maintenance of children. Section 8 of the Act prohibits the employment or engagement of children "in any activity that may be harmful to his or her health, education or mental, physical or moral development" ***which is in line with IFC PS 2 and ILO Core Labor Standards addressing non-employment of children. Contractors under this project are to ensure that, they do not engage in the employment of children in any of the works on the project.***

4.2.6 THE LAND ACT, CAP 227

The Land Act vests land ownership in Uganda in the hands of Ugandans as such, GoU through OPM secures an MoU with land owners before settling refugees on any land. In addition, the Act in its Section 44 obliges owners/occupiers of land to use it in accordance with a range of other laws. ***The Act and the Constitution of the Republic of Uganda all vest land ownership in Uganda to the hands of Ugandans and guide matters of land acquisition for development project through compensation which has to be fair, timely and adequate in line with IFC PS 5, and World Bank OP 4.12 which addresses involuntary resettlement. However, though no land acquisition is envisaged in the project, alongside this ESMF a Resettlement Policy Framework (RPF) has been prepared as a tool to guide any possible land acquisition incase such arose. It also imposes the need to restore the land after extraction of construction materials.***

4.2.7 LAND ACQUISITION ACT, 1965

This Act makes provision for the procedures and methods of compulsory acquisition of land for public purposes whether for temporary or permanent use. The Act requires that adequate, fair and prompt compensation is paid before taking possession of land and property. ***These provisions are meant to***

ensure that the process of land acquisition is in compliance with existing laws and that the affected persons receive fair, timely, adequate compensation. Therefore, where land need for land take is anticipated, these provisions will guide the process of compensation amongst others in the Project.

4.2.8 THE OCCUPATIONAL SAFETY AND HEALTH ACT, 2006

The Act provides for the prevention and protection of persons at all workplaces from injuries, diseases, death and damage to property. ***The key provision of this Act is safety and welfare of workers which is consistent with a range of safeguards policies such as ILO Core Labour Standards, IFC PS 2, 3 and 4. The ESMF provides for safety gear for workers during implementation of project activities especially for public works among other subprojects.***

4.2.9 THE EMPLOYMENT ACT, 2006

This Act spells out general principles regarding forced labor, discrimination in employment, sexual harassment and provisions to settle grievances. It further provides that, a child under the age of twelve years shall not be employed in any business, undertaking or workplace. ***No doubt, this law is consistent with a number of other laws employment subject such as: ILO Core Labor Standards, IFC PS 2 and 4 addressing labor and working condition and community health and safety and security. Therefore, project implementers will not engage any child workers at the project site at any one time during the project lifecycle.***

4.2.10 LOCAL GOVERNMENT (AMENDMENTS) ACT 2010

An Act to amend, consolidate and streamline the existing law on local governments in line with the Constitution to give effect to the decentralization and devolution of functions, powers and services; to provide for decentralization at all levels of local governments to ensure good governance and democratic participation in, and control of, decision making by the people; to provide for revenue and the political and administrative setup of local governments; and to provide for election of local councils and for any other matters connected to the above. ***At district, sub-county and parish level the project will be fully mainstreamed into existing structures. The relationship between the Local Government and Central Government under this project will be governed by a Memorandum of Understanding outlining the responsibilities of the respective parties.***

4.2.11 THE PENAL CODE AMENDMENT ACT 2007

It is an Act to establish a code of criminal law and with reference to this project, the aspect of interest is, **"Defilement of persons under eighteen years of age in which the Act provides that, a**ny person who attempts or performs sexual act with another person who is below the age of eighteen years commits an offence and is on conviction, liable to imprisonment not exceeding eighteen years or aggravated act, will be liable to suffer death. ***This is an issue in the refugee settlements in that, in South Sudan, the years of consent is 14 years as opposed to 18 years in Uganda. In this case, the Penal Code Act provisions are the ones observed and applied with respect to consent age. Therefore, workers on the project will be sensitized to avoid engaging in sexual relations with minors below 18 years.***

4.2.12 THE PLANT PROTECTION ACT (CAP 31)

The Act provides for the prevention of the introduction and spread of disease destructive to plants. Section 4(i) states "Every occupier or, in the absence of the occupier, every owner of land shall take all measures as he or she may be required to take by virtue of any rules made under section 3 and, in

addition, such other measures as are reasonably necessary for the eradication, reduction or prevention of the spread of any pest or disease which an inspector may by notice in writing order him or her to take, including the destruction of plants. ***These services governed under this Act will be implemented by MAAIF through the respective DAOs at the district level.***

4.2.13 THE AGRICULTURAL CHEMICALS (CONTROL) ACT, NO. 1 OF 2006

This Act was enacted to control and regulate the manufacture, storage, distribution and trade in, use, importation and exportation of agricultural chemical and other related matters. Under this Act, the requirement of packaging, labeling or advertisement of agricultural chemicals is relevant in pesticides management to prevent illegal activities related to mislabeling and mis-packaging. ***This Act is consistent with WB OP 4.09 on Pest Management through Integrated Pest Management as opposed to usage of agro-chemicals. In this case, a Pest Management Plan (PMP) has been developed to among others guide effective and efficient use of pesticides in Project.***

4.2.14 NATIONAL FORESTRY AND TREE PLANTING ACT, 2003

The National Forestry and Tree Planting Act 2003 is the main law that regulates and controls forest management in Uganda by ensuring forest conservation, sustainable use and enhancement of the productive capacity of forests, to provide for the promotion of tree planting and through the creation of forest reserves in which human activities are strictly controlled. ***Specifically, the Act will provide guidance for afforestation and other tree nursery subprojects under Project.***

4.2.15 HISTORICAL MONUMENT ACT, 1967

The Act provides for the preservation and protection of historical monuments and objects of archaeological, paleontological, ethnographical and traditional interest. Section 10(2) requires that any person who discovers any such object takes such measures as may be reasonable for its protection. ***This implies that the project will undertake the Chance Finds Procedures in addressing possible encounters of any archaeological resources during project implementation***.

4.2.16 NATIONAL ENVIRONMENT REGULATIONS

4.2.16.1 THE REFUGEES REGULATIONS 2010

In February 2010, the Government of Uganda issued new regulations to give effect to the 2006 Refugees Act. The legislation conforms to international refugee law and recognizes persecution on the basis of gender as grounds for asylum. ***The Project will be implemented while being cautious of the rights and obligations of the refugees as interpreted by these Regulations.***

4.2.16.2 ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 1998

The procedures for conducting EIAs are stipulated in the Regulations. The Regulations require environmental assessments to be conducted to determine possible environmental impacts, and measures to mitigate such impacts. At the end of the study, the environmental assessment report is submitted to NEMA to take a decision as to whether to approve or reject the project. ***The Guidelines also stipulate that the ESIA process will be participatory, that is the public will be consulted widely to inform them and get their views about the proposed project which in this case, has been undertaken to capture views of stakeholders for inclusion in the ESMF.***

4.2.16.3 THE NATIONAL ENVIRONMENT (AUDIT) REGULATIONS, 2006 (12/2006)

The Audit Regulations apply to environmental audits under the Environment Act, environmental audits under the ESIA regulations, voluntary environmental audits by the owner and any other audits as may be required or prescribed [Regulation 3]. ***The ESMF provides for the need for compliance Audits of the Project.***

4.2.16.4 NATIONAL ENVIRONMENT (WASTE MANAGEMENT) REGULATIONS, 1999

The National Environment (Waste Management) Regulations, 1999 apply to all categories of hazardous and non-hazardous waste and to the storage and disposal of hazardous waste and its movement into and out of Uganda. The regulations promote cleaner production methods and require a facility to minimize waste generation by eliminating use of toxic raw materials; reducing toxic emissions and wastes; and recovering and reuse of waste wherever possible. ***The Regulations oblige the Developer to put in place measures for proper management of waste.***

4.2.16.5 THE NATIONAL ENVIRONMENT (WETLANDS, RIVER BANKS AND LAKESHORES MANAGEMENT) REGULATIONS, 2000

This law, consisting of 4 Parts, describes management policy and directions for important wetlands, riverbank and lakeshore areas that exist in Uganda. Any development projects, within those registered areas need ESIA studies and permission to be granted by NEMA in accordance with Regulation 34 of this law. ***The Project will have to ensure that any subprojects to be established along riverbanks or in wetlands comply with the above regulations.***

4.2.16.6 THE NATIONAL ENVIRONMENT REGULATIONS (NOISE STANDARDS AND CONTROL), 2003

The National Environment (Noise Standards and Control) Regulations, 2003 Section 7 of these regulations requires that no person shall emit noise in excess of permissible noise levels, unless permitted by a license issued under these Regulations. Section 8 imparts responsibility onto the owner of a facility to use the best practicable means to ensure that noise do not exceed permissible noise levels. ***The project is obliged to observe these Regulations by instituting measures for minimizing noise in the project such measures include proper maintenance of equipment and providing workers with PPEs.***

4.2.16.7 THE NATIONAL ENVIRONMENT (STANDARDS FOR DISCHARGE OF EFFLUENT INTO WATER OR ON LAND) REGULATIONS 1999

The National Environment (Standards for Discharge of Effluent into Water or on Land) Regulations 1999, together with National Environment (Waste Management) Regulations of 1999 were put in place to ensure sustainable use of environment and natural resources across the country. Amongst others, under these Regulations, the standards for effluent or waste before it is discharged into water or on land shall be as prescribed in the Schedule of the Regulations

4.3 INTERNATIONAL ENVIRONMENTAL INSTRUMENTS RATIFIED BY UGANDA

Uganda is a signatory to several international instruments on environmental management. These are summarized in Table 22 below.

Table 21: International Laws and Conventions/Obligations applicable to Uganda

Convention	Objective
International Refugee Laws	The 1951 Convention Relating to the Status of Refugees and its 1967 Protocol; The 1969 Convention Governing the Specific Aspects of Refugee Problems in Africa of the Organization of African Unity (OAU) (for

Convention	Objective
	operations in Africa only) the 1984 Cartagena Declaration on Refugees.
International human rights laws	International Covenant on Economic, Social and Cultural Rights of 16 December 1966; the International Covenant on Civil and Political Rights of 16 December 1966 and its two optional protocols; the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment of 10 December 1984 and its optional protocol; the Convention on the Rights of the Child of 20 November 1989 and its two optional protocols; the International Convention on the elimination of all forms of racial Discrimination of 21 December 1965; and the Convention on the Elimination of All Forms of Discrimination against Women of 18 December 1979 and its optional protocol.
International humanitarian law and the law of neutrality	Includes the four Geneva Conventions of 12 August 1949 and the two protocols of 8 June 1977. The law of neutrality especially the 1907 Hague Convention Respecting the Rights and Duties of Neutral Powers and Persons in Case of War on Land is also useful in countries neighboring armed conflict.
International criminal law	Includes the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, and the Protocol against the Smuggling of Migrants by Land, Sea and Air, both of which supplement the United Nations Convention Against Transnational Organized Crime of 15 November 2000.
The African Convention on the Conservation of Nature (1968)	to encourage individual and joint action for the conservation, utilization and development of soil, water, flora and fauna for the present and future welfare of mankind, from an economic, nutritional, scientific, educational, cultural and aesthetic point of view.
The Ramsar Convention (1971) on wetlands of International Importance	to stop the progressive encroachment on and loss of wetland now and in the future, recognizing the fundamental ecological functions of wetlands and their economic, cultural, scientific and recreational values
The Protection of World and Cultural Heritage convention (1972)	to establish an effective system of collective protection of the cultural and natural heritage of outstanding universal values
The Convention on the International Trade in Endangered Species of Wild Flora and Fauna (CITES 1973)	to protect certain endangered species from overexploitation by means of a system of import/export permits
The Convention on the conservation of migratory species of wild animals (1979).	to protect those species of that migrate across or outside national boundaries
The Vienna Convention for the protection of the Ozone Layer (1985)	to protect human health and the environment against adverse effects resulting from modification of the ozone layer
Montreal Protocol on Substances that deplete the Ozone layer (1987)	To protect the ozone layer by taking precautionary measures to control global emissions of substances that depletes it.
The Basel Convention on the trans-boundary Movement of Hazardous Wastes and their disposal -1989	to reduce trans-boundary movements of waste subject to a minimum consistent to the environmentally sound and different effects of such wastes and to minimizing the amount and toxicity of hazardous wastes generated and ensuring their environmentally sound management
Convention on Biological Diversity- (CBD 1992)	to promote diversity and sustainable use and encourage equitable sharing of benefits arising out of the utilization of genetic resources
United Nations Framework	to regulate the levels of greenhouse gases concentration in the

Convention	Objective
Convention on Climate Change (UNFCCC, 1992)	atmosphere so as to avoid the occurrence of climate change on a level that would impede sustainable economic development, or compromise initiative in food production
United Nations Convention to combat Desertification (UNCCD, 1994)	to combat desertification and mitigate the effects of drought in countries experiencing serious drought and or desertification
The FAO International Code of Conduct on the Distribution and Use of Pesticides	The revised version of the Code, adopted in 2002, sets out a vision of shared responsibility between the public and private sectors, especially the pesticide industry and government, to ensure that pesticides are used responsibly, delivering benefits through adequate pest management without significant adverse effects on human health or the environment.

4.3.1 THE ILO CORE LABOR STANDARDS

The core labor standards are a set of four fundamental, universal and indivisible human rights which focus on ensuring amongst other; freedom from forced labor, freedom from child labor, freedom from discrimination at work, freedom to form and join a union, and to bargain collectively. These are the minimum 'enabling rights' people need to defend and improve their rights and conditions at work, to work in freedom and dignity, and to develop in life. ***These Standards are consistent with the provisions in the Constitution of the Republic of Uganda which prohibits forced labor in employment***.

4.4 WORLD BANK SAFEGUARD POLICIES AND EHS GUIDELINES

The Project is rated as a category B type and triggers the policies as summarized below:

Table 22: Summary of WB safeguards polices in relation to the project

Safeguard Policies	Triggered?		Remarks
	Yes	No	
OP 4.01 Environmental Assessment	√		DRDIP will involve expansion and improvement of service delivery which will include small infrastructure, construction or rehabilitation of physical structures for water catchment management such as check-dams, water harvesting structures, this policy is triggered as such works will call for some levels of Environmental Assessment which includes preparation of this ESMF.
OP 4.04 Natural Habitats	√		Component 2: Sustainable Environmental Management activities may involve forestry, water catchment management and thus likely encompass some natural habitats such as forests, wetlands, rivers, etc.
OP 4.09 Pest Management	√		Under Components 1 and 3 project activities are likely to involve the application of agro-chemicals (insecticides, herbicides, fertilizers, etc.). A Pest Management Plan (PMP) has been developed as part of the ESMF.
OP 4.10 Indigenous People		X	This policy is not triggered because none of the 7 additional districts in which DRDIP is to be implemented has any indigenous people. This determination is based on the known location of IP groups in Uganda and none of these groups are in the 11 project districts including the 7 additional districts.

OP 4.11 Physical Cultural Resources	√		This safeguard is triggered because project components are likely to have small-scale civil works/excavations which may occasion accidental discoveries of PCRs.
OP 4.12 Involuntary Resettlement	√		The project will not undertake any activities that will displace people. However, it will support small-scale infrastructure that might affect land holdings of individual farmers. While these interventions are yet to be identified, a separate Resettlement Policy Framework has been prepared and is to be disclosed prior to appraisal to address any land take issues which might arise.
OP 7.50 Projects on international waters	√		This policy is triggered because in areas of Lamwo, local leaders are of the view that, the project should support development of small-scale irrigation using waters from R. Nyimur which is shared water system with South Sudan.
OP 4.36 Forests	√		Activities under Component 2 are likely to have a positive impact on forests with the implementation of physical and biological measures for soil and water conservation and afforestation.
OP 4.37 Safety of Dams	√		The project will rehabilitate existing small-scale irrigation facilities and earth reservoirs/valley tanks less than 10 meters height. The project is likely to finance check dams or small earth dams for water storage and activities that may rely on the performance of an existing small dam.

5 STAKEHOLDER AND COMMUNITY CONSULTATIONS AND DISCLOSURE

5.1 OVERVIEW

The World Bank's Environmental Assessment Policy OP 4.01 provides that project-affected groups and stakeholders should be consulted about the project's potential environmental and social impacts during the ESIA process. The consultation process gives stakeholders and Project Affected Persons (PAPs) an opportunity to learn about the project, raise concerns, understand the potential effects, and comment on the project design as well as on the reports that are produced during each phase.

5.2 GOALS OF CONSULTATIONS

The primary goals of the consultation process are to:

a. Ensure transparency and meaningful involvement of stakeholders and PAPs in assessing and managing the potential environmental and socioeconomic impacts of the Project;
b. Help manage risks, concerns and public expectations through ongoing dialogue with stakeholders;
c. Improve decision-making, and build understanding by actively involving key project stakeholders and PAPs in two-way communication. Through this process, the implementing agencies will better understand the concerns and expectations of stakeholders and PAPs, and the opportunities to increase project value to the local community.

5.3 OBJECTIVES OF STAKEHOLDER AND COMMUNITY CONSULTATIONS

The consultations with stakeholders and communities were carried out to specifically achieve the following objectives:

a. To provide information about the project and to obtain stakeholder information on key environmental and social baseline information in the project area;
b. To provide opportunities to stakeholders and PAPs to discuss their opinions and any concerns respectively;
c. To solicit the stakeholders' views on the project and discuss their involvement in the various project activities;
d. To discern the attitudes of the community and their leaders towards the project so that their views and proposals are taken into consideration in the formulation of mitigation and benefit enhancement measures;
e. To identify specific interests of and to enhance the participation of the poor and vulnerable groups; and
f. To inform the process of developing appropriate management measures as well as institutional arrangements for effective implementation of the Project.

5.4 STAKEHOLDERS CONSULTED AND ISSUES RAISED

A number of stakeholders were consulted including OPM, UNHCR, Camp Commandants, District Local Governments, Line Ministries and Agencies as well as a number of NGOs operating within the refugee areas (Annexes 2 and 3).

5.5 **FUTURE** CONSULTATIONS

5.5.1 ISSUES FOR CONSULTATION

The project, its intended objectives, the location, enhancement mechanisms, its ownership as well as the need of public consultation have to be briefly discussed to the participants as well so that they can forward their views on these bases. **The CDOs and DEOs will have to refine and clearly indicate the issues that have to be pointed out and discussed during public consultations.**

5.5.2 CONSULTATION DURING MOBILIZATION AND SENSITIZATION

At this stage, OPM and Local Governments (LGs) will undertake awareness creation among the key stakeholders of the Project at national, district, sub-county and community levels. This will help create a good understanding of Project objectives, activities, access criteria, implementation modalities and inspire stakeholders to actively participate in Project implementation. The awareness creation will be done through electronic, print and traditional media, workshops, seminars and community meetings as an ongoing undertaking. The sensitization and mobilization campaigns are expected to initially stimulate community interest in the project support as well as promote effective stakeholder participation, transparency and accountability in Project implementation throughout the subproject cycle. The communities will express their interests in Project support in form of subproject interest forms (SPIFs) that shall be distributed free of charge. The distribution of sub-project interest forms will be the responsibility of the Sub County Chiefs, Community Development Officers or any other officers assigned the task. The SPIFs will be made available in public places e.g. sub-county headquarters, places of worship, trading centers, etc. The Sub-County Focal Person shall receive all SPIFs and register them in the SPIFs register to be opened in each the sub-county.

5.5.3 CONSULTATIONS ON TORS FOR ESIA AND RAPS

The intent of public consultation during scoping is to ensure that the ESIA takes full account of the priority concerns of project-affected people and other relevant stakeholders and identifies the full range of potential impacts. Once the ToRs for the ESIAs and RAPs are available in draft form and before they are finalized, the respective implementing agency will have to obtain community and stakeholders' inputs on the ToRs and particularly to check that no issue of concern to communities/stakeholders has been omitted in the scopes of assessments in the final ToRs. The Consultant will assemble appropriate materials, (maps, graphs, drawings, simulations, models, key environmental figures) disclose them in a manner acceptable to Bank policies (timely prior to consultation, in a form and language that are understandable, in locations accessible with reasonable effort to the groups being consulted) and organize venues which will enable the affected population to participate without excessive undue efforts. Suggested venues would be near the project sites ensuring accessibility to all affected people. After finalization of the ToRs, the respective implementing agencies will meet with representatives of the key stakeholders to review the final draft ToRs and receive feedback on any issues they feel are missing. **Terms of Reference for the follow-on ESIAs and RAPs will be reviewed and adjusted depending on the outcomes of this phase and will be final after this stage.**

5.5.4 CONSULTATIONS ON DRAFT ESIA AND RAP REPORTS

The second round of consultations will be held on draft environmental and social assessment documents and management plans to integrate stakeholder concerns into the final versions. Once the drafts of ESIAs are available, and before they are finalized, the Consultant will have to obtain stakeholders' inputs on the reports' conclusions and particularly on the mitigations and management plans. As far as public

disclosure is concerned, major initiatives to inform the public and interested parties about the Project may include the following:

a. Press advertisement describing the project and inviting interested parties to provide comments at a stakeholder workshop;
b. Disclosure of the Draft Final ESIA Report, including the Executive Summary, locally and via the World Bank *Infoshop*.

It is expected that the Draft Final ESIA reports, together with the respective Non-Technical Summaries will be disclosed locally for 30 days at the offices of the implementing agencies and the World Bank Infoshop. In order to make people aware of the disclosure of the Draft Final ESIA Report and RAP, an advertisement will be placed in one of the national newspaper which will also draw readers' attention to the date and venue of the proposed public meeting if any.

The consultation process with affected persons (APs) will include the disclosure of the resettlement policy framework through various meetings and distribution of informative material aimed at creating awareness among PAPs regarding their potential loss, entitlements and compensation payment procedures and grievances redress mechanisms. **After this stage, the respective reports will be revised accordingly and finalized.**

5.5.5 ONGOING CONSULTATIONS

It is also recommended that stakeholder engagement and consultation is carried out throughout the entire project implementation period, with a clear and systematic approach which helps the PM and its implementing partners identify and stakeholders, build and maintain a constructive relationship, more especially this directly affected. To this effect, OPM will be required to maintain long term and mutually beneficial open dialogue all the stakeholders including project affected persons, other interested parties during project implementation. This process will facilitate stakeholders to continuously have an opportunity to receive information on the project risks and impacts and management, raise questions, concerns, give feedback to the project implementation performance and also receive responses from the implementing team in a timely manner. Therefore, disclosure of information will also continue throughout project construction and operation. The primary emphasis here will be to assure stakeholders that the environmental and social mitigation, monitoring and management practices established in the RAP, ESIA and ESMPs are being implemented as per the guidelines required by Government of Uganda and the World Bank. The client will be required to develop a stakeholder engagement plan for systematic engagement. An annual report including stakeholder engagement performance will be prepared as part of the legal reporting process by the implementing agencies and shared NEMA and the World Bank.

6 ENVIRONMENTAL ASSESSMENT AND SCREENING PROCESS

6.1 OVERVIEW

The section below shows the steps necessary in the review and approval of future projects under the DRDIP. The key regulations for environmental and social assessment in Uganda include the National Environment Act Cap 153, and the National Environment (Environmental Impact Assessment) Regulations, 1998 define the role of ESIA as a key tool in environmental management, especially in addressing potential environmental impacts at the pre-project stage. The Regulations define the ESIA preparation process, required contents of an ESIA, and the review and approval process including provisions for public review and comment. The regulations are interpreted for developers and practitioners through the *Guidelines for Environmental Impact Assessment in Uganda (1997)***.** The steps below shall be incorporated in any future project preparation and approval process.

6.2 SCREENING OF PROJECTS

These in summary takes the following steps:

6.2.1 STEP 1: SCREENING OF PROJECTS

Screening is vital and will be the first step in the project cycle. The objective of the screening process is to rapidly identify those projects which have little or no environmental or social issues so that they can move to approval and implementation immediately. Screening will be carried out following a checklist that can be found in Annex 1.

6.2.2 STEP 2: ASSIGNING THE APPROPRIATE ENVIRONMENTAL SCREENING LEVEL

The project was categorized in PAD as EA B-Category that shall require partial assessment of subproject components using documented World Bank / GoU Environmental Screening Guidelines. The investment activities under Components 1, 2, and 3 have limited adverse environmental risks and impacts. One of the key gaps between the National Environment Act Cap 153 and the World Bank safeguards with respect to ESMF is that, the Act does not clearly provide for the preparation of an ESMF but following harmonization of the safeguards policies, under such circumstances, the World Bank Procedures are applicable on matters where such a gap is evident. Both Category A and ***Category B*** require the preparation of environmental and social management plans (ESMPs) and approved by the World Bank safeguard team and NEMA before their implementation. The effective use of the ESMF will be regularly reviewed and audited. In case a planned intervention would be categorized as A due to one or more major adverse impacts, it therefore cannot be funded under the DRDIP financing. The intervention will be either re-designed or re-submitted to the environmental screening process after re-design, or abandoned. Category A interventions are those for which the Screening for potential impacts concludes that changes to the design or the sitting/routing of facilities are required.

These changes may be needed to eliminate unacceptable adverse impacts such as:

a. Impact on a fragile eco-system,
b. Impossibility to drain run-off water from a water point site,
c. Impact on inhabited dwellings,
d. Impact on structures used for commercial activities or other businesses,
e. Impact on graves or other cultural resources (physical cultural resources),
f. Impact on land use and/or users.

Changes in the design of an intervention may include:

a. Re-siting of water point or of another program component,
b. Re-routing of a pipe-line,
c. Changes in the location of an effluent discharge,
d. Changes in processes used for raw water treatment or waste water treatment for instance to improve efficiency or to reduce land take.

6.2.3 STEP 3: CARRYING OUT ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

Since DRDIP interventions are largely category B type, they do not require ESIAs to be conducted. The initiation of the ESIA process in Uganda is marked by the submission of the Project Brief to the Executive Director of NEMA. The Project Brief is to contain essential information on the project in terms of amongst others; inputs and outputs and its sufficient information to allow the Approving Authority (NEMA), in consultation with the lead agencies, to *screen* the project, and agree on the levels of ESIA to be conducted.

Stakeholder engagement is an important element of the ESIA process. During the ESIA, the consultant in consultations with the Implementing Partner, will come up with a list of key stakeholders to be contacted during the study. The stakeholders will be informed of the project through writing and a request to meet them included in such a notice. The notice will include details of issues to be discussed during such a meeting. During the meeting, the consultants will capture all issues raised and try to respond to some queries while others will be taken up in later stages of the study.

NEMA as part of its review and decision-making process, forwards copies of the Project Brief to key Lead Agencies for review. However, in case an ESIA needs to be undertaken, the ToRs for the study will be prepared by the implementing agency/developer and reviewed and approved by NEMA. The ESIA report will identify and assess the potential environmental and social impacts for the planned activities, assess the alternative solutions, and will design the mitigation, management and monitoring measures to be implemented. The social impact assessment component of the ESIA process typically assesses the likely impacts that a project will have on intended beneficiaries and affected stakeholders. It will therefore identify, amongst other things, the PAPs, vulnerable/marginalized groups, different stakeholders and their interest in the project, participation processes and how these will be adapted to different social groups and stakeholders, social diversity including gender, understanding the role of informal and formal institutions at various levels, and the social risks beyond risks associated with social safeguards. The detailed process for conduct of the ESIA in Uganda is presented in Annex 10.

Where a Project Brief is to be prepared, and in accordance with Regulation 5 of the EIA Regulations, 1998, such a Project Brief is to contain amongst others, the following:

a. the nature of the project in accordance with the categories identified in the Third Schedule of the Act;
b. the projected area of land, air and water that may be affected;
c. the activities that shall be undertaken during and after the development of the project;
d. the design of the project including assessment of alternatives;
e. the materials that the project shall use, including both construction materials and inputs;
f. the possible products and by-products, including waste generation of the project;
g. the number of people that the project will employ and the economic and social benefits to the local community and the nation in general;
h. Issues of land ownership for the project;

i. Access and transportation of construction materials;
j. Availability and access to water sources;
k. Information on physical cultural resources in the areas of the project;
l. the environmental effects of the materials, methods, products and by-products of the project, and how they will be eliminated or mitigated; and
m. Any other matter which may be required by the Authority.

In addition to the above, it is currently a practice and requirement by NEMA to include details of stakeholder and public consultations in Project Briefs. If an ESIA study or the development of an ESMP is recommended, it will be undertaken by a registered ESIA Practitioner in accordance with the ToRs approved by NEMA. For projects including a range of small-scale infrastructure measures, a measure-specific Environmental and Social Management Plan (ESMP) will be developed.

6.2.4 STEP 4: PUBLIC CONSULTATIONS AND DISCLOSURE

Wide-ranging public and stakeholder consultations are helpful for a number of reasons: (i) ensure that people are made aware of the project and have the opportunity to comment on it (ii) improve responsiveness, accountability and transparency on the part of project management (iii) promote decision-making and (iv) increase cooperation between the community, government and its development partners during project implementation as well as enhance local ownership upon its handover. Initial meetings with stakeholders provide a forum not just for dissemination of information about the project and its potential impacts, but also constitute an important opportunity to hear people's concerns and take on board their recommendations to the extent possible in the project design. These stakeholder meetings also will lay a foundation for systematic consultation and participation of the community in all subsequent stages of the project's development.

All consultations will be documented in writing, and where the people accept, with photographs and/or video of proceedings. These would will then be filed in the project files. The opinion/suggestions made by the community/affected groups shall be incorporated in the ESMF and ESMPs. After clearance, the assessment reports shall be disclosed both in Uganda public libraries, websites and through the daily print media.

6.2.5 STEP 5: REVIEW AND APPROVAL

Once the ESIA study is concluded, OPM will submit ten (10) copies of the Environmental Impact Statement (EIS) to NEMA for their review and approval. Once submitted to NEMA, EIS becomes a public document and may be inspected at any reasonable time by any person. Within two (2) weeks from date of receipt of the EIS, NEMA is mandated, if it finds it necessary; to publicize receipt of the EIS, identify the concerned region and stakeholders, the places for inspection of the EIS, and makes copies or summaries of the statement available for public inspection. NEMA also sends copies of the EIS within 14 days from the date on which the EIS was received to relevant agencies and experts for comments. Some of the key agencies in this project include; MoAAIF, MoGLSD, MoH, MoWE, NFA and MoLG amongst others. Public comments and/or objections are submitted to NEMA within 3 weeks of receipt of the EIS. It is therefore, government policy to have the Statement disclosed by NEMA during the review process but the level of disclosure is at the discretion of NEMA.

6.2.5.1 NEMA'S CHANNELS FOR ITS PUBLIC DISCLOSURE PROCESS

NEMA sends the EISs to project lead agencies and for the general public, copies of the EIS are placed in public places such as public libraries, district libraries (where such exist), university libraries mainly

Makerere University College of Agriculture and Environment. At district levels, copies of the EIS are placed in the offices of the District Environment Officers where the public can access such documents for review and comment. Furthermore, NEMA places Notice about the ESIA study in main print media papers, in particular in New Vision and the Daily Monitor. The Notice includes amongst others, details of the project and where its ESIA report can be accessed by the public. In addition, NEMA airs announcements about some of its the projects through television and radio in both English and local languages in the areas of the project. All review comments on the ESIA are relayed to the Executive Director NEMA through email or written comments delivered to his office.

Based on NEMA internal review process and taking into account, comments from the public, the Executive Director of NEMA will take a final decision regarding the project either issue an Approval Letter or Letter of Disapproval for the project. It is important to note that the full disclosure process above does not apply to all projects but only to major projects which involved major development. For category B projects, the Executive Director usually only receives comments from Lead agencies, which are consolidated to inform the decision on the project.

Following internal review of the ESMP by OPM -DRDIP, ESMP will be forwarded to NEMA for final review and clearance. If the Executive Director of NEMA is satisfied that the project will have no significant impact on the environment, or that, the assessment (Project Brief or ESMPs) discloses sufficient mitigation measures to cope with the anticipated negative impacts, he/she may issue EIA Letter of Approval for the project.

It is important to note that this review and approval process is to be carried out in parallel with the review and approval of the technical, economic, financial and other aspects of the projects by the Implementing Partner. Implementation of projects which have been subjected to ESIA studies cannot commence until Letters of Approval have been issued by NEMA. However, where in the opinion of the Executive Director, comments from the consultations need to be addressed in the ESIA, the ESIA consultant (through the developer) will be asked to improve the report and re-submit it to NEMA thereafter, an Approval Letter can then be issued.

6.3 OTHER ENVIRONMENTAL SAFEGUARD INSTRUMENTS AND GUIDANCE PROCEDURES

6.3.1 CHANCE FINDS PROCEDURE

The World Bank OP 4.11 on Physical Cultural Resources, states that; before proceeding with a project which entails the risk of damaging cultural property the project must:

a. Determine what is known about the cultural property aspects of the proposed project site. The government's attention should be drawn specifically to that aspect and appropriate agencies; NGOs or university departments should be consulted;
b. If there is any question of cultural property in the area, a reconnaissance survey should be undertaken in the field by a specialist. For the proposed project, implementation of the small scale civil works will take place in existing health units/centers/hospitals without known PCRs, and if any, such PCRs shall not be tampered with by the project, in any way. Projects that have the potential to have adverse impacts on cultural property include;

(i) Projects that includes large scale excavations, movement of earth, flooding of an area for creation of a reservoir, demolition, and other surficial environmental changes, and
(ii) Projects that may cause unplanned project-induced developments (e.g. squatter settlement).

6.3.1.1 STEPS TO BE TAKEN UPON IDENTIFICATION AND/OR EXPOSURE OF UN-KNOWN PCRS

During construction or through accidental exposure, a cultural heritage site or items of archaeological interest may be identified. As soon as this occurs, the contractor or sub-contractor shall undertake the following procedure to avoid any further damage:

a. The person or group (identifier) who identified or exposed the cultural heritage site or item archaeological interest must cease all activity in the immediate vicinity of the site.
b. The identifier must immediately inform his/her supervisor of the discovery;
c. The supervisor must ensure that the site is secured and control access. For this, install temporary site protection measures which include securing with warning/reflective tape and stakes, avoidance signs around the site;
d. The supervisor must inform relevant Employer personnel especially the HSE Manager;
e. Establish a localised no-go area needed to protect the Chance Find.
f. The responsible site manager must be requested to perform an assessment in order to determine whether the Chance Find is cultural heritage and if so, whether it is an isolate or part of a larger site or feature;
g. Subject to the direction of the Cultural Heritage Specialist, artefacts are to be left in place;
h. No tangible cultural heritage shall be removed unless specific conditions are met;
i. If materials are collected they will be placed in bags and labelled by the Cultural Heritage Specialist and transported to the nearest cultural heritage/archaeology research authority/centre. Project personnel are not permitted to take or keep artefacts as personal possessions;
j. The Cultural Heritage Specialist will document the Chance Find through photography, notes, GPS coordinates, and maps (collect spatial data) as appropriate;
k. If the Chance Find proves to be an isolated find or not cultural heritage, the Site Manager will authorise the removal of site protection measures and activity in the vicinity of the site can resume;
l. If the Specialist confirms that that Chance Find is a cultural heritage site, they will inform the relevant cultural heritage/archaeology body and initiate discussions about treatment;
m. Prepare and retain archaeological monitoring records including all initial reports whether they are later confirmed or not. The record will include coordinates of all observations to be retained within the Project's GIS system (ArcGIS) or equivalent;
n. Develop and implement treatment plans for confirmed finds using the services of qualified cultural heritage experts. The Cultural Heritage Specialist will coordinate this.
o. If a Chance Find is a verified cultural heritage site, prepare a final Chance Finds report once treatment has been completed;
p. While investigation is ongoing, co-ordinate with on-site personnel keeping them informed as to status and schedule of investigations, and informing them when the construction may resume; and

q. If mitigation is required, then rescue excavations will be undertaken by the Cultural Heritage Specialist, except in the case that the chance find is of international importance. Archaeologists with the appropriate expertise in these areas (e.g. hominid remains) addressing more specific finds will be appointed.

6.3.1.2 MONITORING

During construction, where relevant the protection of cultural/archaeological sites identified by the local community will be monitored to ensure their protection. Any chance finds will also be recorded and

monitored; and audit undertaken to ensure that the guidance set out in the chance finds procedure was followed.

6.3.1.3 TRAINING FRAMEWORK

During the Project induction meeting, the Contractor and Subcontractors will be made aware of the presence of the on-call Cultural Heritage Specialist. Here, cultural heritage training will also be undertaken. The objective of cultural heritage training is for the Contractor and Subcontractors to manage potential impacts to known and unknown cultural heritage sites by facilitating the identification and reporting of potential Chance Finds encountered during construction works. This can be carried out through a Toolbox Talk.

The Contractor HSE Manager is responsible for providing training through a Toolbox Talk for all construction staff. The Toolbox Talk shall address:

a. Defining Chance Finds;
b. Identifying Chance Finds in the field;
c. Explanation as to why protection measures need to be put in place (avoid environmental harm and avoid prosecution/ legal penalties);
d. The steps to be taken upon identification and/or expose;
e. Do's and don'ts; and

Roles and responsibilities of construction Contractors and Subcontractors in the process and the roles and responsibilities of the Cultural Heritage Specialist.

6.4 GRIEVANCE REDRESS MECHANISM

6.4.1 IMPORTANCE OF GRM

The Grievance Redress Mechanism (GRM) will provide a way to provide an effective avenue for expressing concerns and achieving remedies for communities, promote a mutually constructive relationship and enhance the achievement of project development objectives. It has been learned from many years of experience that open dialogue and collaborative grievance resolution simply represent good business practice both in managing for social and environmental risk and in furthering project and community development objectives. In voicing their concerns, they also expect to be heard and taken seriously. Therefore, OPM has to assure people that they can voice grievances and the project will work to resolve them without bias. The project GRM will be augmented by the World Bank's Grievance Redress Service, which provides an easy way for project-effected communities and individuals to bring their grievances directly to the attention of Bank Management. The GRS will ensure that complaints are directed promptly to relevant Bank Task Teams and/or Managers for review and action, as appropriate. The goal is to enhance the Bank's involvement, responsiveness and accountability. The GRS is described in detail in Section 6.4.2 below.

6.4.2 PROJECT GRIEVANCE REDRESS MECHANISM

DRDIP will borrow from the NUSAF -3 grievance mechanisms which has a well-established GRM from community to the highest level at the District. There are Community Monitoring Groups (CMGs) are established in each Parish comprised of several villages to promote social accountability at the community level. The CMGs constitutes by 5 democratically elected members of proven integrity (5

members of the beneficiary community (who are neither members of the Community Project Management Committee (CPMC) nor Community Procurement Committee (CPC). Where possible, the Chairperson and/or the Secretary of the CMG are literate. The composition of the committee members includes at least 40-50% of women. In addition, where there are PWDs committees, these are also encouraged to be established-to promote the social inclusiveness in the project.

Social protection coordination committees at parish level under community based department structure in Local governments also work with communities to handle grievances at parish level. The CMGs with the Social protection coordination committees are required to meet at least twice every month to resolve grievances presented to them and reports submitted to the Sub-county CDO every month to enable the sub county review both solved and unsolved complains for necessary actions. Grievances are monitored through the Community and Sub-county with guidance of the Community Facilitators and CDOs. Analysis of the grievances in the quarterly reports is done by the same team and feedback to communities and other relevant stakeholders is done monthly. All submitted complaints and grievances are added to a database/project files which are updated regularly. Each complaint and grievance is to be ranked, analyzed and monitored according to type, accessibility and degree of priority and reported on monthly basis.

6.4.2.1 SPECIFIC TASKS OF THE GO WILL

a. Set up a systematic process of recording grievances in a register ("Grievance Book") as well as electronically. The register shall be located in the Sub county implementation team office, community and shall be accessible to residents.

b. Both written and verbally communicated grievances shall be recorded.

c. Suggested categories are grievances regarding:

i. Replacement structure or land, and procurement of construction materials;

ii. Agriculture and crops;

iii. Livelihoods; and

iv. Valuation process and payment of compensation.

d. A database shall be prepared for recording and keeping track of the grievances and how they were resolved. The database shall be a 'living' document, updated weekly. It should also record the status of each grievance (date opened/in-process/closed). Access to making entries into the database should be restricted to the implementation team, but the general community should be able to use "Grievance Book"/ register to see the status of their complaints.

e. Grievance procedure shall be communicated to the people, the process for recording their complaints and the timelines for redress. Communication shall be done through a community meeting involving the resettled community. Pamphlets outlining the procedures and commitments of the grievance mechanism should be distributed to all households.

f. Grievances shall be raised at the regular implementation team meeting for discussion. Some resolutions will require coordination/ interaction with the local authorities, which the GO should follow up, while some would require intervention from OPM.

Provide a regular update on the status of grievances via the database, including reasons for delay, if any. This update shall be provided on a weekly basis. Also, clearly define grievances that will not be

entertained by the GO. These could be related to issues other than those linked to the resettlement and rehabilitation process

6.4.3 THE WORLD BANK'S GRIEVANCE REDRESS MECHANISM-RGM

6.4.3.1 GRS DEFINITION AND PURPOSE

The GRS is the World Bank's easy way to provide PAPs and communities an avenue to bring their complaints directly to the attention of Bank Management. The project-level GRM will remain the primary tool to raise and address grievances in Bank-supported operations except issues that cannot be resolved at the project level. The GRS facilitates corporate review and resolution of grievances by screening and registering complaints and referring them to the responsible Task Teams/Managers. The GRS undertakes the follow functions within defined time frame:

a. Receives complaints from stakeholders

b. Evaluates and determines their eligibility and category

c. Refers complaints to appropriate Task Teams/Managers

d. Follows up with Task Teams to ensure complaints are resolved

e. Refers PAPs to the Borrower or other parties where appropriate.

6.4.3.2 SUBMITTING A COMPLAINT TO GRS

Complaints may be submitted by one or more individuals, or their representatives, who believe they are adversely affected directly by an active (i.e. not closed) Bank-supported operation (IDA). A complaint may be submitted in the English or local language. Processing complaints not submitted in English will require additional processing time due to the need for translation.

A complaint can be submitted to the Bank GRS through the following channels:

By email: grievances@worldbank.org;

By fax: +12026147313

By mail: The World Bank, Grievance Redress Service, MSN MC 10-1018, 1818 H St NW, Washington,

DC 20433, USA and/or

Through the World Bank Uganda Country Office in Kampala – Rwenzori House, 1 Lumumba Avenue,

P.O. Box 4463, Kampala (U); Tel: +256 414 3022 00.

The complaint must clearly state the adverse impact(s) allegedly caused or likely to be caused by the Bank supported operation. This should be supported by available documentation and correspondence

where possible and appropriate. The complainant may also indicate the desired outcome of the complaint, i.e., how it may be resolved. The complaint should have the identity of complainants or assigned representative/s, and address contact details.

Table 23: Grievance Registration Form

Grievance Registration Form	
Reference Nº (assigned by Contractor):	
Please enter your contact information and grievance. This information will be dealt with confidential. Note: If you wish to remain anonymous please enter your comment/grievance in the box below without indicating any contact information – your comments will still be considered.	
Full Name of aggrieved person	
Anonymous submission	☐ I want to remain anonymous
Please mark how you wish to be contacted (mail, telephone, e-mail).	☐ By Mail (Please provide mailing address): By Telephone (Please provide Telephone number): By E-mail (please provide E-Mail address):
Preferred Language for communication	☐ … ☐ … ☐ Other, please specify:
Description of Incident or Grievance:	What happened? Where did it happen? Who did it happen to? What is the result of the problem?
Date of Incident/Grievance:	☐ One-time incident/grievance (date _____) ☐ Happened more than once (how many times? _____) ☐ On-going (currently experiencing problem)
What would you like to see happen to resolve the problem?	

6.5 PEST MANAGEMENT PLAN

Component 1 (a): Community Investment fund and Component 3 (a) will provide support to traditional livelihoods and may include support to veterinary care and agro-pastoralism activities respectively involving use of pesticides & acaricides, albeit in minimal quantities. A simplified Pest Management Plan (PMP) has been prepared for the proposed investments when applicable as part of this ESMF. The purpose of the PMP is to describe a Plan by which the project can promote and support safe, effective, and environmentally sound pest management.

6.5.1 PROCUREMENT OF PESTICIDES

The following criteria will apply to the selection and use of pesticides in activities under Project:

a. Pesticide financed under Project must be manufactured, packaged, labeled, handled, stored, disposed of, and applied according to standards that, at a minimum, comply with the FAO's guidelines on pesticides.
b. Consistent with World Bank OP 4.09, Project financing will not be used for formulated products that fall in WHO classes IA and IB, or formulations of products in Class II, if (a) the country lacks restrictions on their distribution and use; or (b) they are likely to be used by, or be accessible to, lay personnel, farmers, or others without training, equipment, and facilities to handle, store, and apply these products properly.
c. Project financing will not be used for any pesticide products which contain active ingredients that are listed on Annex III of the Rotterdam Convention (on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade), unless the Country has taken explicit legal or administrative measures to consent to import and use of that active ingredient.
d. Project financing will not be used on any pesticide products which contain active ingredients that are listed on Annex A & B of the Stockholm Convention on Persistent Organic Pollutants, unless for an acceptable purpose as defined by the Convention, or if an exemption has been obtained by the Country under this Convention.
e. Project financing will not be used for any pesticide products which contain active ingredients that are listed on Annex III of the Rotterdam Convention (on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade), unless the Country has taken explicit legal or administrative measures to consent to import and use of that active ingredient.

6.5.2 IPM PLAN

Key Elements - The elements of the IPM will include the following:

a. Preventing pest problems;
b. Monitoring for the presence of pests and pest damage;
c. Establishing the density of pest population, which may be set at zero, that can be tolerated or corrected with a damage level sufficient to warrant treatment of the problem based on health, public safety, economic or aesthetic threshold;
d. Treating pest problems to reduce population below those levels established by damage thresholds using strategies that may include biological, cultural, mechanical and pesticidal control methods and that shall consider human health, ecological impact, feasibility and cost effectiveness; and
e. Evaluating the effects and efficacy of pest treatments.

6.5.3 DECISION MAKING

Detecting a single pest under the Project will not always mean control is needed. A decision to use pesticides will be taken only as the very last resort and will also be based on conclusions reached from an agro-ecosystem analysis and trials. The decision will also depend on the number of pest and diseases found in the respective crop and the level of damage they are doing. If it is absolutely necessary to spray crops with pesticides, use of selective rather than broad-spectrum pesticides shall be strictly observed.

6.5.4 PEST MONITORING AND SURVEILLANCE

A process for the reporting and identification of unusual plants, animals and pests will be established to track and document all pest cases, be it minor or major in a pest inventory register. Pest surveys will be conducted on a regular basis to detect new infestations and will include the types, abundance, location of pest plants, date when first spotted or seen, and date when reported. This information will be

gathered from surveillance or monitoring system to be put in place, periodic surveys to be conducted and feedback from farmers/farm assistants. The data will be managed in a standardized way so that trends can be established. A rapid response process for the management of new infestations will be established to treat and manage new pest infestations as soon as they are identified.

Table 24: Summary of potential impacts of pesticides and their mitigation measures

Potential Impact	Proposed Mitigation
Contamination of ground water resources	• Conducting trials on relatively flat land with less than 2% slope reducing the possibility of run off and at a distance of more than 500m away from water sources
Effect of pesticides on non-target species	• Use pesticides that are systemic and narrow range and specific to sucking insects.
Effect of pesticides on grazing areas, settlements	• Spraying in n morning hours when weather is cool and less windy to reduce on spray drifts. • Locating trials or plots at distance of between 500-1000m away grazing areas or human settlements
Possibility of increasing resistance of pests to the pesticide	• Training of field staff responsible on recommended usage of the pesticide (Follow MSDS strictly)
Harmful effects on staff applying pesticides	• Provision and usage of safety clothing and working gear to staff
Harm to persons within the homestead where the chemical is stored	• Designation of a separate and secured storage room for pesticide • Warnings and notices to increase awareness (MSDS form provided)

6.5.5 TRAINING NEEDS

The Agricultural extension staff working with the project will assist and train farmers to be able to develop their IPM approaches to the management of pests and diseases. This will be done holistically from seed selection, land preparation, through planting and farm maintenance to harvesting and post harvesting issues. Farmers will be trained and encouraged to make detailed observations in their fields regularly so that they can detect early infestations and make the appropriate management decisions using agro-ecosystem analysis (AESA). In this way, it will be ensured that pest and disease problems do not escape notice and are not allowed to develop to the extent that they cause very severe damage and heavy crop losses. The decision to use chemical pesticides will be taken only as the very last resort as already indicated in the IPM principles above.

6.5.6 TREE NURSERY DEVELOPMENT

The aim of the training will be to equip participants with basic knowledge and skills necessary for the identification and management of tree pests and diseases. Specifically, the training should focus on recognition, interpretation and diagnosis of pest and disease problems in tree nurseries and plantations based on symptoms and signs and procedures of pest and disease sample collection, packaging and submission for laboratory diagnosis. Basic principles and practice of pest and disease management in tree nurseries and plantations

6.5.7 PESTICIDES USE TRAINING

The key training needs that have been identified among others include post-harvest handling of crops, storage, disposal as well as safe use and handling of pesticides. Training for “safer pesticide use” is a common approach to mitigate the potential negative health and environmental impacts of pesticides. This conventional approach will promote reducing health risks of pesticides by safer use of the products through training, use of protective equipment and technology improvements, as well seeking to reduce pesticide hazards via regulations and enforcement in addition to the training. A well-illustrated booklet on safe pesticide use designed for self-learning will be developed and distributed to farmers, Extension staff, stockists and their staff.

7 PROJECT ACTIVITIES, GENERIC IMPACTS AND MITIGATIONS MEASURES

7.1 PROJECT ACTIVITIES

The project will support interventions designed to improve livelihoods and access to basic socio-economic services in selected districts. The salient physical characteristics relevant to safeguard analysis relate to project Component 1: Social and Economic Investments which entail civil works and/or construction/expansion of schools, health centers, water supply, and all-weather roads. Component 2: Sustainable Environmental Management activities which will be identified based on: (i) analysis/mapping/typifying and prioritizing of environmental degradation, (ii) developing options for remediation/restoration approaches and methodologies, including cost intensity; (iii) selection of intervention areas, considering demand/priority, and available techniques/ budget. For example, some remediation would consist of constructing or rehabilitating physical structures for water catchment management such as check-dams, and water harvesting structures; and biological measures like afforestation. In addition, alternate energy sources will be explored. Component 3: Livelihoods Program will support the development and expansion of traditional and non-traditional livelihoods of the poor and vulnerable households to build productive assets and incomes. A thorough mapping of existing productive livelihoods including agricultural, agro-pastoral and pastoral, will be undertaken based on consultations with target households accompanied by a technical and market analyses to understand the potential for each of the major livelihoods, the opportunities along the value chain and required inputs in terms of the information, finance, technology, tools, and technical assistance.

7.2 POSITIVE PROJECT IMPACTS OF DRDIP INTERVENTIONS

Overall, the positive impacts DRDIP project can be summarized as follows:

7.2.1 IMPROVEMENT IN AVAILABILITY OF WATER AT HOUSEHOLD LEVELS

Availability of water both at the refugee settlements and host communities is dire with individuals accessing on average, 8-12 litres of water which is below WHO recommended amounts. Water availability constitutes one of the main sources of conflicts between the refugees and their host communities. **The Water harvesting** at institutional level will be an additional source to meeting institutional water needs.

7.2.2 LIVELIHOODS IMPROVEMENT

Given that the refugee hosting areas are also among the poorer and less developed regions in Uganda, refugee presence further undermines the coping abilities of host communities further exacerbated by limited social capital, less diverse livelihoods and low levels of assets. The combination of limited livelihood opportunities in the host community and imbalance of humanitarian assistance are the greatest challenges for promoting more coexistence. One of the positive contributions that DRDIP project can make to host countries is skills and knowledge that can be utilized for the benefit of local people. ***The project is geared towards increased opportunities for augmenting incomes from traditional and non-traditional livelihoods such hairdressing, tailoring, carpentry, catering and entrepreneurship. This will contribute towards improvement in household income of the refugee and host community.***

7.2.3 FOOD SECURITY AT HOUSEHOLD LEVELS

The construction of water storage facilities will guarantee availability of water at households in the host communities which can be used to address food production during drought periods and ensuring water availability for domestic use. It will also support water availability for livestock production amongst others. Furthermore, DRDIP will support creation of awareness on the need for sustainable livelihoods sustainability in the communities to guarantee income and food security.

7.2.4 IMPROVEMENT IN DELIVERY OF SOCIAL SERVICES

These will be in terms of the following considerations:

7.2.4.1 HEALTH

The health services are stretched and the refugee hosting areas are prone to a higher prevalence of malaria, respiratory tract infections (RTIs), diarrhoea and preventable diseases among children. Therefore, support to rehabilitate health facilities will bring about improved delivery of social services in terms of medical to host communities and better health at household levels. ***The project will have a long-term positive impact on health services available host communities. Renovation and construction of more health centres will enable the currently crowded healthcare facilities to provide new or improved services to patients. A key benefit to women is the opportunity to safely deliver children in an equipped medical environment.***

7.2.4.2 EDUCATION

Construction or improvement on classroom facilities will have large positive impact in the delivery of education services and improvement of learning environment. The host districts are constrained in terms of education facilities leading to over-crowding in classrooms amongst others. For instance, in Yumbe district, the pupil teacher ratio is in the region of 162:1. Therefore, by building new classroom blocks in the beneficiary schools will add into the available teaching space will be lead to reduced child to classroom ratio and improving quality of learning environment. ***Rehabilitation of and construction of new classrooms will increase the capacity of the schools to absorb host communities' children which ensures a safe learning environment for pupils and teachers in beneficiary schools. Furthermore, it will ensure that young people of school age have optimal access to quality education in a protected environment. Rehabilitation of classrooms will return disused or condemned buildings to safe and habitable state. Additional space will solve the existing congestion issues and thus, likely to increase enrolment numbers in schools. In order to enhance the project benefits, there will be need to carry out regular joint schools' inspection visits to monitor attendance, punctuality, sanitation, and conduct teacher support supervision.***

7.2.4.3 IMPROVED WATER AND SANITATION SITUATION

The basic social services delivery in the host communities is weak and economic opportunities are limited due to the remoteness of the settlements and the poor infrastructure. Due to the shortage of water points, the host communities rely on the few available boreholes distributed within the settlements and host communities. Struggles for water at boreholes are reportedly leading to fights mostly among refugee women and those from the host communities. ***Provision of more water points under the project is likely to reduce such fights. Provision of latrines (separate for boys, girls; male and female teachers) at schools in particular will provide convenience and improve sanitation. This will be so especially if hand wash water is provided at latrines.***

7.2.5 IMPROVED ENVIRONMENTAL AND ECO-SYSTEM SERVICES

Host countries have become more sensitive to the potential economic loss they may suffer, due to environmental damage caused by large concentrations of refugees. Host populations experience deterioration in the quality of their environment; normally available materials and supplies for construction, consumption and fuel are short, and prices for fuel and food in local markets rise. ***The objective of Component 2 is to ensure that environmental and natural resources are carefully and sustainably managed to support current and future needs and livelihoods. Demand side interventions will aim to reduce the unsustainable exploitation of natural resources, including mitigation of risks and other challenges faced by crisis-affected households (host communities affected by large number and influx of refugees in this case).***

7.2.6 TREE PLANTING

Host community concerns of environmental degradation serve as a major source of tension between the refugees and the hosts (Prommier, 2014). Refugees collect firewood and small poles for use in settlements. Since firewood is the most common source of energy for cooking, deforestation has been on the rise in refugee areas. Deforestation gradually forces women and children to walk further for wood, putting women in particular in danger of physical assault. If the rate at which non-gazetted vegetation is being cleared is not checked, then after these are depleted those that are gazetted will follow suit. ***Under the project, planting of trees will help provide a sustainable source of poles for construction of shelter as well as provision of firewood. This will also reduce encroachment on protected forests in search for firewood.***

7.2.7 ADDRESSING VULNERABILITY

The host communities are poor and equally very vulnerable and this project specifically targets such groups of people to improve on their livelihoods. Some of the host areas such as Adjumani are relatively poor districts which are recovering from decades of conflict. Another serious threat to income is the loss of property required to earn a living. Livestock, especially poultry, goats, and cows, are vulnerable to disease, theft, and loss due to poor containment or mismanagement (Norris, 2013). ***This project will address the causes of vulnerability. In order to enhance the benefits, broader and universal social inclusion has to be pursued to ensure that all vulnerable categories.***

7.2.7.1 INCOME TO MATERIAL/EQUIPMENT SUPPLIERS AND CONTRACTORS

Proposed rehabilitation of and small-scale construction/civil works will necessitate procurement of equipment, construction materials and services which will be sources of income to suppliers of such materials.

7.2.8 CREATION OF EMPLOYMENT OPPORTUNITIES

Positive opportunities for communities are expected to be in the form of temporary employment and business opportunities during the construction phase various infrastructure facilities, including revenues from the sale of food and other consumable goods to workers. It is expected that some jobs will be available during construction of the different subprojects for the local population, mainly as casual workers. ***However, these employment opportunities are expected to be temporary and benefit the community in the short term only. There will be a minimal positive impact on employment, since few local people are likely to be employed.***

7.2.9 OTHER POSITIVE IMPACTS OF COMMUNITY ROADS

Other positive environmental and social impacts anticipated from improving community roads will include:

a. It will improve connectivity amongst host communities, refugees' areas and the wider communities thereby enhancing trade, delivery and access to social services;
b. *Income from construction materials*-road construction will require supply of gravel and stone aggregates. Other materials such as lime, bitumen, water and cement will be sources of income to suppliers and owners of land where such materials are sourced; and
c. Improvement of the roads will have positive, significant and long-term local and national socio-economic impacts which include: reduced travel time; safer journeys with reduced accident risks.

7.2.10 IMPROVEMENT IN GIRL CHILD EDUCATION

It is suggested that, the construction of sanitation facilities in the schools be done in a manner that enhances girls' education**.** The girls' toilets should have provisions for changing rooms for use during their menstrual periods which is to create a safer and more secure environment guaranteeing better learning and retention of the girl child at school.

7.2.11 ENHANCEMENT OF WOMEN INVOLVEMENT IN SOCIO-ECONOMIC DEVELOPMENT

One of the focus of DRDIP project is to avail water to host communities which will enhance women participation in household and socio-economic activities through sustainable water supply. This means that, women and girls do not have to spend more time collecting water and in that way, the project will support women's participation in social and economic activities, and girls' time to play as well as go to school will be greatly reduced.

7.2.12 IMPROVED SANITATION AT COMMUNITY AND INSTITUTIONAL LEVELS

DRDIP will lead to improved institutional sanitation which is at the moment at the pupil stance ratio of over 1:200[9] and way below the recommended national average of 1:50. At community levels, the project will ssupport drives to control rampant open defaecation which is common in both the refugee settlements and host communities and recipe for water borne diseases. In addition, establishing pit latrines with long lifespan coupled with appropriate faecal management mechanisms break the contamination pathway of water borne disease and hence reduce their vulnerability to the same.

7.3 NEGATIVE IMPACTS AND MITIGATION MEASURES FOR WATER STORAGE/DAMS FACILITIES

Construction of water storage/dam facilities will have the following negative impacts:

7.3.1 SITES CLEARANCE IMPACTS

Construction of valley dams can potentially disturb the landscape around the dam through site clearance, excavation, establishing areas for storage equipment and construction materials, establishing accommodation facilities and parking, access roads. Such works can have impacts on the integrity of the environmental settings around the area. ***This is to be mitigated through ensuring that, works are kept to the minimum and restricted to the sites designated for the valley dams and their support facilities. In addition, the contractors should stockpile the topsoil excavated for restoration and re-vegetation of***

[9] 1 pit latrine stance to 200 pupils and compared to recommended MoE standard of 1:50

the site after works which will allow for normal re-vegetation and prevent any subsequent erosion and siltation.

7.3.2 RISKS OF DROWNING IN THE DAMS

During their operations, there are potential risks of drowning in the dams by children who are likely to be tempted to go and swim in the dams. This is to be mitigated through fencing off the dams and watering/fetching waters from shallow ends. The community leaders to sensitize the communities on the risks of swimming in the dams.

Figure 16: Water dam fenced with barbed wire to keep off livestock and children (Source: FAO/MAAIF, 2013[10])

7.3.3 CREATION OF BORROW PITS

Dam construction creates borrow pits which degrade the environment through extraction of fill materials for embankments. The borrow pits if poorly restored can be breeding sites for malaria and other water based vectors. ***The contractors should restore borrow areas as part of their contracts and the obligation should be built in the contract and the DEOs should certify to ensure compliance.***

7.3.4 MANAGEMENT OF CUT-TO SPOIL MATERIALS

[10] *MAAIF ESMF for Regional Pastoral Livelihoods Resilience Project-RPLRP, 2013*

The excavation works for valley dams generates volumes of cut to spoil materials which will need to be disposed from the site. In addition, the cut to spoil materials generates loose soils that can silt the water sources. ***It is proposed that; the contractors will lease dumpsites for stock-piling of the cut to spoil materials and should be sited outside water sources. The sites be leased from landlords in the area after negotiated payments for such sites.***

7.3.5 IMPACTS OF EQUIPMENT STORAGE

The construction and rehabilitation work for the dams involves use of plant equipment whose storage and operations can have attendant impacts on environment in terms of noise and compaction of soil thereby affecting soil percolation ability. ***Since DRDIP envisages rehabilitating valley small dams, it means the construction process will involve fairly light equipment which will have minimum impacts on soils. Also, the works will be of short-term nature thus reducing impacts on environment.***

7.3.6 RISKS TO LIVESTOCK

In addition, dam embankments can pose safety risk to both livestock and the communities. If the banks are high, safety of cattle to access water becomes an issue as well for the communities to draw water. In some instances, children can have tempted to swim in the dams and may end up drowning. ***Fencing the dams and reservoir may be required to prevent access to the embankment and its reservoir. This will serve to control access to deep sections. Secondly, sensitizing communities on the risks associated with the dams be done before they are operational. In all, provision be made for safe watering and collection of water by the communities.***

7.3.7 CONSTRUCTION DUST

Construction works for the water storage facilities will generate dust which can cause health associated implications on the workers and neighboring communities. ***This is to be mitigated through provision of Personal Protection Equipment (PPEs) and observing good engineering practices during construction alongside sprinkling water on loose soil surfaces.***

7.3.8 CONFLICTS OVER DAM WATERS

There are likely conflicts over access and usage of waters from the dams arising from the community members and this can arise from arguments on watering turns, watering utensils and petty differences within the community which get carried to the dams culminating into quarrels and sometimes fights.

7.4 POTENTIAL NEGATIVE IMPACTS AND MITIGATIONS FOR HEALTH CENTERS INTERVENTIONS

Potential negative impacts of rehabilitation of health centers will include:

7.4.1.1 DISRUPTION IN THE DELIVERY OF SSERVICES DURING IMPROVEMENTS WORKS

Since health and schools' facilities to be renovated will continue to be functional, this will involve moving some services to some rooms or sealing off some areas from the public which all will likely cause temporary disruption in delivery of health services to patients at the facilities under renovation. This will be a temporary short-term impact through interruption in the delivery of the services.

Impact mitigation

a. Advance relocation information should be shared with both the health centers and workers, and the patients for purposes of preparing them for the relocations;

b. Planning of construction activities to identify suitable rooms/spaces into which, medical services could be relocated with minimal inconvenience, especially to patients; and
c. In addition, 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.

7.4.1.2 FEAR OF ELECTROCUTION

The rehabilitation works inside operational rooms will likely involve cutting off electricity supply an exercise if not well handled could be fatal.

Mitigation

a. It is suggested, the contractor works with UMEME to disconnect power supply to the facilities and after works, securely and safely reconnect supply.

7.4.1.3 INDOOR AIR QUALITY DETERIORATION DUE TO DUST FROM RENOVATION WORKS

Demolition to modify internal built environment inside the health centers will likely lead to slightly moderate levels of indoor dust which can affect construction workers, health workers, members of the public and patients. Dust issues inside health facilities will likely be of effect to asthmatic people, those with respiratory tracts infections, construction workers, and health workers depending on levels of exposure.

Impact mitigation

a. It is suggested, an in charge of or a senior healthcare administrator at such facilities should have authority to inspect works especially where there is non-compliance;
b. Contractors should use dust screens or nets in windows, doorways and ventilators of rooms where demolition or other dusty construction activities are occurring;
c. 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, and if necessary dust be suppressed by water sprinkling; and
d. Patients shall not be allowed to construction areas by cordoning off such areas and ensuring regulated access.

7.4.1.4 RISKS OF IMPROPER MANAGEMENT OF CONSTRUCTION WORKS

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. Improper disposal of construction waste could have environmental and public health impacts especially management of demolition rubble with possible friable construction materials.

Impact mitigation

a. Contractors should undertake waste segregation at source to separate hazardous from non-hazardous waste;
b. Construction waste such as metal scrap or wood waste which does not have any hazardous materials can be salvaged and handed to locals for various uses at household levels;
c. 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;
d. The contractors should seek guidance of local government authorities on availability of acceptable solid waste disposal sites;
e. Supervising engineers and area environment officers should ensure that contractors do not illegally dump waste in non-designated areas. To effectively oversee this requirement, it is

suggested that, area environmental officers (DEOs) should be facilitated to undertake active monitoring of works in the facilities; and

f. Where applicable, ccontractors must provide suitable containment and storage of chemicals and any hydrocarbons to prevent soil contamination and pollution to ground or water where such are likely to occur (surface and ground).

7.4.1.5 HEALTH RISKS FROM IMPROPER WASTE MANAGEMENT

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. From the field visits during this study, there are challenges with effective management of medical waste in that, the contracted (Health Care Waste Management) HCWM service providers in many cases do not routinely collect the medical waste for disposal which creates a challenge to the health facilities with regard to disposal, making them resort to non-conventional modalities such as open burning (Figure 19). Although it is a local cumulative impact, public health due to improper healthcare waste management has *high* impact significance.

Figure 17: Open burning of medical waste in a health facility in Yumbe

Mitigation measures:

A protocol for management of medical waste should be adopted in line with provisions in Table 26.

Table 25: WHO Medical Waste Coding

Type of waste	Waste description	Recommended types of containers
Household refuse	Black	Plastic bag

Type of waste	Waste description	Recommended types of containers
Sharps	Yellow with this sign 	Sharps container
Waste entailing a risk of contamination	Yellow with this sign 	Plastic bag or container
Anatomical waste	Yellow with this sign 	Plastic bag or container
Infectious waste	Yellow with marking "highly infectious and with symbol 	Plastic bag or container that can be autoclaved
Chemical and pharmaceutical waste	Brown, marked with suitable symbol labeling of chemicals 	Plastic bag or container

(*Source: UNEP, 2005*)

One of the interventions by MoH Health towards improved management of medical waste is through contracting it to private hazardous waste handlers. However, the Ministry needs to put in place, robust mechanisms for monitoring the effectiveness of such service providers in line with contract agreements in their delivery of services. For now, based on the consultations and field visits, their effectiveness is very wanting.

7.4.1.6 POTENTIAL RISKS ON INJURY TO PATIENTS OR HEALTHCARE STAFF BY CONSTRUCTION ACTIVITIES

Where renovation will entail modification of internal built environment, it will be necessary 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 the health workers. 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 mitigation

a. Contractors should cordon off areas under construction and regulate access to active sites by non-construction personnel at all times;

b. 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;
c. 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 (Figure 20). 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;
d. The contractor shall 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; and
e. Contractors shall use screens or nets to avoid flying debris, especially while working at heights.

Figure 18: Noise control signage

Apart from noise from equipment and workers, it is important, trucks delivering construction materials to the site need to observe speed limits (Figure 20) inside the health facility to reduce on noise, motor accidents and vibrations impacts.

Figure 19: Speed limit sign inside hospitals during works

7.4.1.7 SAFETY OF THE PUBLIC UTILITY

The health facilities will remain open for use during their rehabilitation works as such, there will be concerns regarding the safety of the public in the facility. It is suggested that, the contractors should screen off the areas through use of warning signs both in ***English and in local languages*** (Figure 21), use of reflective tapes, barriers and guards.

Figure 20: Site warning signs on a construction site

7.4.1.8 OCCUPATIONAL HEALTH SAFETY (OHS) RISKS FOR CONTRACTORS

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

a. Burns from welding (hot works);
b. Falls from working at heights or wet surfaces;
c. Electrocution;
d. Noise and body vibration during demolition;
e. Injury from falling or flying debris when demolishing walls; and
f. Transient pools of water that may become breeding ground for mosquitoes

The 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 health and safety legal instruments require that, workers exposed to health and safety risks are given proper personal protection Equipment appropriate for the type of work they are undertaking.

Impact mitigation

a. Contractors should provide all workers with requisite protective gear (**Error! Reference source not found.**);
b. Project supervising engineers should inspect contractors' compliance with safety precautions during construction;
c. Contractor should provide onsite toilet and washing water for workers; and
d. The water storage tank should be covered and properly managed to minimize mosquitoes breeding.

Table 26: Personal protective equipment according to hazard

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)

7.4.1.9 LOSS OF VEGETATION

Stock piles for construction materials will likely take up space in the health facilities as well routes followed by construction crews and their equipment can cause damage to the greenery in the health facilities.

Mitigation measures

a. The materials stockpile areas have to be fully rehabilitated and restored at the close of the project works;
b. There should be no cutting of any trees inside the health units/facilities and if such happens, the contractor will be asked to undertake compensatory planting in the ratio of 1:5 and under such scenario, he/she will be required to undertake care for the plants throughout the project defects liability period; and
c. The contractors need to instruct their workers to walk along existing pathways inside the health facilities to avoid trampling on the grass.

7.4.1.10 MANAGEMENT OF HUMAN ANATOMICAL WASTE

Sometimes the health centers undertaken some levels of surgical operations requiring removal of human body parts and such wastes cannot be disposed under usual hazardous waste management measures. ***Mitigation measures***

a. From the consultations, medical workers in the health centers, such waste is usually securely wrapped in appropriate polythene bags and taken for incineration and the incineration ash disposed into ash pit.
b. However, in absence of functional incinerators, such human based waste can be buried in an urban cemetery by the public health staff in the town/municipality.
c. In addition, the health facilities need to have functional placenta pits for the management of after birth placentas. Such pits should be of standard specifications to check possible spread of infections arising from their usage.

7.4.1.11 IMPACT OF ESTABLISHING A TEMPORARY EQUIPMENT STORAGE AREA AND OFFICE

For purposes of managing construction logistical needs, the contractor will require a temporary Equipment Storage area (store) inside the health premises to house equipment and Office space for general administration of the project. This can cause public health issues regarding management of human waste amongst others. It can also cause conflict with the patients in terms of water and parking space. This needs to be mitigated as follows:

Mitigation

a. The contractor will put up portable sanitary facilities for his workforce to avoid conflict with the patients;

b. He will make arrangements for his own water supply for his construction needs and put in place, measures for routine clean-up of workers' toilets for the contractor; and

c. No Contractor's workers shall be allowed to sleep onsite, with the exception of security guards, if deployed to watch over construction materials.

7.4.1.12 ISSUES RELATING TO CONSTRUCTION MATERIALS EXTRACTION

The rehabilitation/expansion or improvement works in health centers will require sand, bricks, and stones for masonry works. These materials have to be extracted and transported to the construction sites. The process of extraction of these materials will entail creation of borrow and quarry pits thereby distorting the landscape and aesthetics of the areas. This will likely be a small negative irreversible impact of long term nature.

Mitigation

a. This is to be mitigated through contractors purchasing sand, bricks and stone aggregates from existing suppliers in the areas where the project works are to be implemented; and

b. The Contractors shall undertake due diligence to procure construction materials from sites that do not have encumbrances and/or environmental-community impacts.

7.4.1.13 ISSUES OF CHILD LABOR

In search of employment opportunities, there are likely to be instances of young boys and girls being attracted to come over for employment opportunities in the project. Such moves will contradict and conflict policies of government in place which are meant to empower children of school going age such as Universal Primary Education amongst others.

Mitigation measures:

a. The contractors will be under strict instructions not to employ children of school going age;

b. NUSAF 3 Safeguards Specialist together with the supervising consultants will routinely inspect works sites to ensure no children are employment in the project; and

c. The Districts Community Development Officers (CDOs) and Probation Officers will take responsibility to ensure that sites do not employ children below ages of 18 years.

7.4.1.14 HIV/AIDS CONCERNS

Interactions between the workers and female community members has a potential to trigger risks of communicable diseases transmission such as HIV/AIDS and related STDs. Close interactions between workers and communities may also result in cases where some workers commit sexual abuse or have sexual intercourse with underage community members.

Mitigation measures:

a. Sensitizing workers and the communities on the risks of HIV/AIDS at the start of the project;

b. An arrangement be put in place by the project to bring on board, HIV/AIDS service providers in the project areas to provide/conduct sensitization and awareness campaigns, supply and distribute condoms to both the workers and the communities in the vicinity of the project.

7.4.1.15 IMPACTS ON PCRS

At the moment, it is known that, the health centres are existing and improvement works will be undertaken within such confines. However, it is anticipated that, there will be excavations works that are likely to discover some physical cultural resources (PCRs). Under such circumstances, measures outlined in the Chance Finds Procedures in this ESMF should be operationalized to address such accidental encounters.

7.4.2 NEGATIVE IMPACTS FROM CLASSROOMS WORKS AND THEIR OPERATIONS

Summary of the negative impacts that are likely to arise from classroom works and their operations include:

7.4.2.1 DURING PLANNING PHASE

a. **Land take and livelihood displacement concerns** may arise where classrooms will be constructed in existing schools' compounds or in new sites. Once the projects are identified, land take and livelihood displacements will be assessed to define the impacts. As may be appropriate, OPM and the benefiting districts, will take the necessary actions including acquisition of land as may be appropriate per guidance given in the RPF. Where voluntary land donation by communities is done, guideline have also been given in the RPF. During construction

a. **Setting and operations of temporary workers camp site** can raise public health issues which the contractor will address through routine cleaning of the toilets and later, demolition and fully landscaping such sites;
b. **Vegetation loss implications**, through site clearance and preparation works where class rooms and WASH though the impact is small-scale in nature, delineating areas for such infrastructure prior to clearing sites, define routes for delivery trucks to minimize unwanted trampling on vegetation and full restoration and re-grassing the sites at the end of the project coupled with plating some ornamental trees to enhance greenery in the compounds will reduce the impact;
c. **Potential conflict in water use**: the contractor to put in place, his own water supply preferably, ferry his own trucks of water for project works instead of relying on the school systems where such is available to avoid conflict with the pupils and school operations;
d. **Potential Risks of Violence-SBV**: contractor to have his own public toilets than have his crew use facilities for the schools which can lead to sexual abuse of school girls;
e. **Management of cut to spoil material** which is likely to arise through excavation works and general works to with foundations. Such material can cause erosion, siltation of water ways, be dust nuisance and is sometimes unscrupulously dumped in wetlands;
f. **Erosion control concerns** likely to arise through site clearances and excavations, run-offs from roofs of constructed classrooms, and transport routes for construction traffic. This can be mitigated through site restoration, re-grassing, planting ornamentals and rain-water harvesting. In addition, the project could put in place storm water discharge channels based on the designs of the project;
g. **Noise nuisance** which can arise through transportation of construction materials and from the workers which noise can be a nuisance to the schools' operations and is to be mitigated through briefing the workers and drivers on the need to control noise while in the schools' settings and restricting construction activities to daytime (8:30 am-5:00 pm);
h. **Demolition works impacts** this is likely to arise where works entail demolition of makeshift

classroom shelters to make way for new classroom blocks. The impact will be in terms of construction debris, noise and dust. Such sites will be horded to keep off dust nuisance and intrusion to the site;

i. **Potential disruption of schools' operations** which can be occasioned by demolition of temporary classroom facilities and construction operations though short term, will need to be mitigated by the schools' management committees who should put in place, temporary arrangements to cater for children in the event that makeshift classrooms are to be demolished paving way for construction of permanent classrooms. Also, major civil works should be synchronized to be done during the long end of year holidays (December-February);
j. **Impacts relating to sourcing of construction materials** like stones, sand, etc. will have impact on the environment at their points of extraction which emphasizes the need for the contractors to fully restore such site to the satisfaction of DEO and the Project Engineer;
k. **Occupational health safety (OHS) risks** on both the construction workers and the school community is to be mitigated by providing PPEs to the workers, having modestly stocked First Aid kits on the site and observing speed limits of 20km/hour while on the school compounds. In addition, the contractors should have contacts of nearby ambulance and police fire and rescue services for any emergencies;
l. **Risks to the safety of the school** pupils and the school communities to injuries from construction traffic**;** this is to be mitigated through use of appropriate and standard signage to warn staff and/or visitors that are not involved in construction activities of dangers in the construction sites and by ensuring trucks observe speed limits while on the schools' confines;
m. **Risks of HIV/AIDS, STIs/STDs** or other contagious diseases among local community and pupils alongside child abuse (child labour, child pregnancy, sex work involving children). This is a serious concern to be addressed by Client representatives briefing contractors on the code of conduct while working in schools especially not engaging in sexual relations with pupils, not employing juveniles in the project. Schools Management Committees, parents, the church/mosques, local area councils to sensitize the communities and pupils on the risks of sexual relations with project workers. The contractor to liaise with HIV/AIDS Service providers in the localities who should be co-opted to conduct awareness sensitization, distribute condoms for the workers and conduct Voluntary Counselling and Testing for the workers and those willing within the project settings; and
n. **Management of construction waste,** such as cement bags, brick debris, off-cuts from roofing and timber works, waste paper, plastic bags and heaps of excavated soils will likely be generated. All these have to transported outside the sites by the contractor to agreed disposal sites in consultation with both the DEOs and project engineers.

7.4.2.2 DURING OPERATION

a. ***Rampant vandalism of schools' properties:*** schools in the area are facing increasing vandalism of school property in terms of malicious damage to plastic rainwater harvesting tanks through removal of taps or deliberately cutting the tanks. In some cases, livestock roam schools' premises destroying trees while in some cases, deliquescent youth enter and defecate inside the classrooms plus a host of abuses on school infrastructures. Stakeholders suggest that, possibly underground water tanks could be the options for rainwater harvesting and classrooms be lockable pending future drives of enclosure fencing;
b. ***Fears of collapse of infrastructure*****,** cases of collapsing buildings in the country are common and arise through; poor workmanship, substandard construction materials, inappropriate engineering

designs amongst others. In the project, employing a Project Engineer to oversee the construction processes as well as, certify works on behalf of the Client and securing relevant approvals for the designs from approving entities from the District Engineers will mitigate this risk;

c. ***Fire risks:*** could potentially arise through deliquescent pupils who can lead school strikes thereby torching school infrastructures. This is to be addressed through schools' regulations restricting possession of match boxes while in schools; and
d. ***Risks of lightning strikes****:* recently there are increasing risks of lightning striking school facilities with attendant fatalities on children and teachers. This is to be mitigated by putting in place, lightning conductors/arrestors on buildings and such arresters should be aluminium type which are not so much sought out by thugs compared to copper rods.

7.4.3 NEGATIVE IMPACTS ASSOCIATED WITH CONSTRUCTION OF WELLS

7.4.3.1 DURING PLANNING

a. Land acquisition concerns: the process of sinking production wells, associated drilling works and the water distribution pipelines will likely take-up land though this will be minimal negative impact since the pipelines will be laid 1m deep and the trenches fully restored allowing such areas to be used for cultivation without compromising either party's interests. This will be a limited foot-print impact (take up a small area) and also, land is already availed to OPM and others, offered by the communities, which triggers no compensation; and

b. Anxiety on the part of community in anticipation for water which can trigger un-rest regarding location of the wells with some sections of the community wanting to have the facility on their lands without knowing the process involved in siting of wells.

7.4.3.2 DURING CONSTRUCTION

a. ***Loss of vegetation:*** the drilling site, routing and digging of the water distribution pipelines will lead to loss of vegetation though this impact will likely to be of minimal scale since the area taken by the pipeline will be in the order of 0.5m wide by 1.0m and such sites will be fully restored;

b. ***Dust nuisance during excavation of pipeline:*** The excavation works will likely trigger dust generation whose impact can be of concern while working in the town areas. This will be mitigated by keeping excavation works up to mid-day when winds are low;

c. ***Risks of soil erosion from loose excavated soils:*** the excavation works will generate loose soils along the entire stretch of the water pipeline which can be susceptible to both wind and water erosion in case of storms thereby silting of rivers and streams. This to be mitigated through effectively backfilling the trenches and full restoration of the excavated areas;

d. ***Risks associated with management of drill mud.*** This should be disposed as guided by the engineer overseeing the drilling process;

e. ***Loss of property*** in terms of buildings and roadside kiosks is not envisaged to arise since the water distribution pipelines will run close to the edges of the road. Secondly, the trenches will be restored without any damage to any properties;

f. ***Risks of STD/STI*** this is of concern during the drilling in which, the drill crews can develop relations with women and girls in the community and can result in conflict and spread of HIV/AIDS in instances of unprotected sex relations; and

g. ***Injuries and accidents*** could potentially occur to the workers while digging the trenches as well as to the public walking across such areas. It could also affect livestock in the settlements and is to be mitigated by putting in place, reflective flagging tape barriers around such opened trenches

where water pipes are not laid immediately they are opened alongside a standby First Aid Kit in place for any accidents.

7.4.3.3 DURING OPERATION

a. ***Risks of breeding disease vectors*** which can arise from improper management of accumulated spill waters from standby taps operations which can provide breeding grounds for mosquitoes needs to be addressed by having soak-away pits where such waters could drain to;
   If the sustainable yields of the wells are not well established during planning, there could be risks of over-harvesting underground water resources leading to drying of the aquifer hence, affecting water availability in the vicinity of the communities triggering conflicts;
b. ***Risks of microbiological contamination*** of improved wells can be prevented by aquifer protection measures especially under the catchment protection measures;
c. ***Risks of vandalism and abuse of facilities*** by children and impact of livestock watering will call for protection of well infrastructure through fencing and instituting and equipping working community management framework such as Water Use and WASH Committees, involvement of women in such management arrangements;
d. ***Potential disruption of water supply facilities*** it is established that there are some water supply interventions by some agencies in some of the target beneficiary areas. However, some of the new water supply pipes under the planned project will likely pass through some of those areas and cut such pipes. It is proposed that, where such happens, the affected water lines be rectified quickly to reduce disruption of water supply to such consumers.

7.4.4 CIVIL WORKS (COMMUNITY ROADS IMPROVEMENTS)

Impacts relating to this sub-component works are summarized under the Table 28 below.

Table 27: Summary of community roadworks improvements works and their mitigations measures

Activity	Impact	Mitigation Measures/Benefit Enhancement
Civil Works		
Labor-based road maintenance	a. Creation of employment opportunities b. Increase in household incomes c. Sense of ownership of the road d. Prompt road maintenance e. Reduction in vandalism of road structure f. Development of construction skills	a. Give preference to local communities in awarding road maintenance labor based contracts
Ditch Cleaning	b. Flooding of agricultural lands and homesteads due to modification of points or direction of discourage of ditches	b. Form offshoots to spit flow in the drain. Construct infiltration ditches, soak pits to prevent water being discharged towards agricultural lands and homesteads
Culvert repairs/replacement	a. Disruption of traffic b. Increase in turbidity of water due to excavated materials being washed into the affected	a. Erect road warning signs and advice road users to use alternative roads in case of blocked sections b. Excavated materials should be suitably

Activity	Impact	Mitigation Measures/Benefit Enhancement
	stream	stockpiled and covered so that they will not be washed into water sources
Medium and light grading	c. Disruption of traffic flows d. Increased pressure on water sources used by the community	c. Warn the public about planned and on-going road works and advise an alternative route to avoid delays due to road works d. Water for road maintenance should be obtained from sources which do not affect water supply to communities
Heavy grading, re-gravelling and spot gravelling	h. Reduced land use option on sites where borrow pits will be located. i. Loss of land values on properties on which borrow pits will be located. j. Gulley formation through collapsing offside walls or borrow pits. k. Breeding of disease causing vectors in stagnant water collecting in borrow pits. l. Dust during transportation of field materials. m. Noise due to haulage trucks. n. Delays in traffic due to detours and diversions. o. Objectionable vision intrusion of gravel pits particularly on prominent relief features. p. Disruption of traffic flows. q. Increased pressure on water sources used by the communities.	h. Compensate adequately owners of properties affected i. Rehabilitate borrow pits by backfilling or reducing slopes of side walls j. Backfill borrow pits where necessary possible k. Watering of roads to reduce dust and covering materials to be transported l. Erect transport calming measure near settlements sensitive to noise e.g. schools, hospitals m. Warn road users about road works and suggest alternative road routes to avoid traffic delays. Ensure road maintenance works are completed promptly n. Gravel pits should be located on prominent relief features. If unavoidable, they should be rehabilitated by backfilling and re-vegetating them o. Fence gravel pits and provide only limited access to them by the public p. Reduce slopes of pits. Ideally backfill and re-vegetate pits q. Warn the public about planned and ongoing road works and advise on alternative routes to avoid delays due to the road works r. Water for road maintenance work should be obtained from sources which do not affect the water supply to communities
Health and Safety aspects	b. Accidents and injuries to both workers and the general public;	f. Provide relevant PPE to all workers and ensure their usage at all times; g. Provide medical facilities throughout the construction phase for the use of workers where required; h. Provide suitable and safe accommodation and sanitation facilities, including available

Activity	Impact	Mitigation Measures/Benefit Enhancement
		drinking water and latrines; i. Condone/ screen off construction sites to limit and regulate public/un-authorized access j. Use of appropriate signage and warnings k. Develop a Health and Safety Policy, including personal safety, site conduct, security, site safety and emergency procedures; l. Comply with the Uganda Occupational Safety and Health Act 2007 to ensure the health and safety of workers, organizations and the surrounding; and m. Provision of separate accommodation and sanitation facilities in worker camps in order to satisfy both gender needs.
Social ills of HIV/AIDS, Gender based Violence and Violence Against Children aspects, management of workers/code of conduct	e. Risk of increased incidence of STD and HIV/AIDS; f. Risk of sexual abuse by workers and especially child abuse; g. Marginalization of women during employment process; h. Women being sidetracked from the decision-making processes.	i. Compliance to Employment Act 2006, Section 7 on sexual harassment and violence; j. Favor the employment of local workers to reduce the risk of sexual harassment and violence caused by foreigners; k. Encourage the recruitment of female workers, with equal payment for male and female workers, for equivalent jobs; l. Provide opportunities to women in income generating activities during construction, e.g. provision of catering services, selling local products, etc; m. Prepare and implement an STD and HIV/AIDS prevention program including a strict prohibition of sexual abuse and sexual intercourse with partners younger than 18 years-old (underage sex); n. Immediately report any suspected case of sexual abuse to the nearest police or local authorities; o. Sensitize all contractors, workers and communities on the STD and HIV/AIDS program, including explanations on risks posed by STDs, sanctions, etc. as well as on grievance mechanism in place; and p. Establish a 'grievance mechanism' for workers and local residents.

7.4.5 TREE NURSERIES AND AFFORESTATION

Table 28: Summary of impacts of tree planting interventions under DRDIP

Potential Impact	Recommended Mitigation
Wet season soil disturbance	Schedule activities for the dry season
Potential for debris flows or landslides	Prepare a watershed plan that identifies and address drainage/slope instability
Sensitive downstream ecosystems	Identify and avoid effects of diversion or dams on downstream ecosystems
Removal of native plant/tree species	Protect and encourage regeneration of endemic species
Introduced plant/tree species invasion of native species	Ensure non-native species are compatible with native species
Wildlife habitats or populations disturbed	Identify and avoid effects on habitats and migration routes of key species
Environmentally sensitive areas disturbed	Identify and avoid activity in forest, riparian and wetland habitats with particular biodiversity
Land Acquisition	Avoid occupied land. Prepare procedures to ensure equitable resolution.
Private assets displaced	Avoid occupied land. Prepare procedures to ensure equitable resolution.
Informal land uses displaced or access restricted	Avoid interference with informal land users, and take measures to provide access to alternative lands or resources
Insufficient capacity to manage new plantations/pastures	Establish a local committee, where appropriate, and/or bylaws and provide appropriate controls
Other (specify):	

7.4.6 LATRINES

Potential Impacts	Mitigations
c. Groundwater contamination due to improper siting d. Defecation around and not in latrines or other sanitation facilities, potentially contaminating surface water and/or shallow groundwater sources, adversely affecting both human and ecosystem health	g. Ensure latrines are sited at least 30 meters far away from shallow wells, cisterns, spring sources and boreholes. h. Latrine pits will be dug in the unsaturated zone above the water table, and latrine pits are protected against flooding and overflow due to intense rainfall; i. Check the type of soils at the site –construction on of VIP latrines in sandy soils shall require extra care and expertise; j. Site should NOT have an average slope in excess of 5%; k. Avoid termite infested areas and where there are no alternatives take measures against termites in the designs and during construction; l. Latrine design should prevent in-and-out access for insects or other disease vectors from the pit m. Latrines should be accompanied by hand wash stations n. Establish Community Sanitation Groups or Committees to sensitize the public about proper toilet use including hand washing after use.

7.5 PARTICIPATION OF VULNERABLE GROUPS

7.5.1 IDENTIFICATION OF VULNERABLE GROUPS

A social assessment with focus on potential vulnerability covering all affected groups will be performed to ensure effective consultations and culturally appropriate benefits for each group. As part of this analysis, project preparation will assess the vulnerability of different groups in particular project contexts (in terms of potential exclusion from project benefits, negative project impacts, and the need for specific culturally compatible mechanisms for participation, e.g. for women, the widowed, permanently disabled, elderly etc.), and will incorporate adequate measures to address such vulnerability in project design.

7.5.2 BARRIERS TO PARTICIPATION

Key social challenges that the participating communities might face include: (i) gender disparities in access to livelihood and educational opportunities; (ii) limited access to social services, especially education, health services due to the remote nature of its target communities, and (iii) recurring conflicts over natural resources, particularly related to water management and land tenure arrangements. Each of the vulnerable groups in the project areas confronts a different set of problems that it must overcome in order to fully participant in the project as below:

a. Women in general face the highest risk of exclusion because of cultural biases, attitudes, and social status as they are treated as inferior and socially excluded from decision making and other civic engagements because society accords them little worth.
b. Disabled people confront physical barriers that prevent them from taking advantage of the services that may be available in their community, which, in turn, may make it more difficult for them to participate or benefit from the project. They also tend to be victims of social stigma that further limits their opportunities and isolates them.
c. War-affected populations, whether widows, ex-combatants, returning internally displaced people (IDPs), or families that stayed in their village throughout the conflict, confront a shared reality of a community whose social and economic infrastructure and social fabric has been destroyed by war and must be rebuilt from the bottom-up.

7.5.3 GUIDELINES FOR INCLUSION

Impacted Communities are best placed to identify their priority needs, implement subprojects and manage investments. The local communities hosting refugees are better able to plan for and effectively implement investment sub-projects. However, the process of mobilization and planning process needs to be inclusive and participatory to ensure that all social groups, including women and youth are involved in the process; a sensitive facilitation to ensure that the voice of the disadvantaged groups are expressed and there is no elite capture; planning is led by local governments, involves multi-stakeholders and takes into account other ongoing and/or proposed projects and programs to avoid duplications and ensure synergies; and there is downward accountability to the community. Guidelines for including Vulnerable Groups include:

a. Identify subgroups among the poor, especially those at risk of exclusion;
b. Structure project rules and procedures to promote their participation;
c. Determine participatory techniques that can help facilitate their involvement (where existing systems of social organization are highly inequitable, new groups may need to be created to enable excluded groups to participate);
d. Ensure that intermediaries (NGOs, local government, etc.) working with communities have expertise in working with these groups and using participatory techniques;
e. Investigate how local institutions can be made more responsive and inclusive of these groups;

f. Include specific indicators related to these groups in monitoring and evaluation systems, and involve all stakeholders in monitoring and evaluation.

7.5.4 WORKING WITH STAKEHOLDERS

The degree to which OPM will be able to collaborate, share information, and synthesize efforts will determine, to some extent, the success of project interventions in the proposed project areas. Engaging stakeholders will help OPM to:

a. Identify and prioritize community development needs and opportunities for integration in design of subprojects;
b. Identify potential positive or negative impacts that the project may further leverage or help to mitigate;
c. Encourage community members involvement in project design, implementation, and monitoring;
d. Identify and evaluate potential partners to implement the project; and
e. Monitor project impacts and ensure that the project meets community expectations. Experience of already existing NGOs and other agencies, including MOGLSD and local structures in the project areas will be invaluable to OPM. Therefore, OPM needs to work with these NGOs to implement the project

7.5.5 GENDER CONSIDERATIONS

Emergency interventions and life-saving strategies have a greater impact when there is understanding of different gender impacts, and of men and women's different needs, interests, vulnerabilities, capacities and coping strategies. The equal rights of men and women are explicit in the Humanitarian Charter. Rights and opportunities for both men and women should be enhanced and not compromised by aid interventions. Increased protection from violence, coercion and deprivation in emergency situations, particularly for women and girls, but also for specific risks faced by men and boys, are essential to effective emergency relief.

It is also important to pay attention to the impact of programmes on women's roles and workloads, access to and control of resources, decision making powers, and opportunities for skill development, in order to make sure that interventions support and do not diminish the role of women. Excreta disposal is a sensitive socio-cultural issue and in many societies, there are particular cultural beliefs relating to excreta disposal practices and facilities. In some cases, the sharing of facilities by people of different gender is a taboo, even within family groups. Latrines should be segregated by sex.

7.5.6 DISABILITY CONSIDERATIONS

Disasters and armed conflict are major causes of disability. Millions of children are killed by armed conflict, but three times as many are seriously injured or permanently disabled whether from amputations, head injuries, untreated stress or other trauma. In some emergency situations, up to 20% of the affected population may be disabled. Disasters not only create disability, but destroy the existing infrastructure and services that were meeting their needs.

Access to sanitation for people with physical impairments is often extremely difficult in emergency situations. Most excreta disposal facilities provided in emergencies are inaccessible for physically disabled people, this may force them into unhygienic practices such as open defecation and lack of handwashing and, consequently, their health is often at increased risk. Families struggling for their survival are often too busy to consider the needs and health of disabled members. Consultation with

disabled people and their families is an essential part of the assessment and programme design process. Many features that improve accessibility and usage for disabled people also benefit elderly people, pregnant women, young children and people who are sick, including those living with HIV/AIDS. In general, the following aspects of design and operation should be considered:

a. ensure easy access to latrines by locating them closer to households with disabled people, where possible avoiding steps, steep inclines and slippery surfaces, and providing handrails;
b. provide bigger cubicles for physically disabled people and construct handrails and raised pedestals where necessary;
c. ensure door handles and locks are not situated so high that people with limited reach – and children – cannot use them;
d. provide easily accessible handwashing facilities that are simple to operate and provide support to facilitate handwashing if required;
e. raise awareness among staff and family members to avoid overprotection, pity, teasing or rejection, and to ensure that appropriate support is provided. ESMF IMPLEMENTATION FRAMEWORK

7.6 DETAILED PROJECT INSTITUTIONAL IMPLEMENTATION ARRANGEMENTS

7.6.1 OFFICE OF THE PRIME MINISTER

7.6.1.1 ROLE OF DEPARTMENT FOR REFUGEES

The Office of the Prime Minster (OPM) through its Department for Refugees (DoR) will have overall responsibility for implementing and accounting for project funds and coordinating activities under all project components. The OPM Permanent Secretary will be assisted by a Project Director and Implementation Support Team (PIST). The PIST will be led by the Project Director, and other staff including Project Manager, Project Engineer, Livelihoods Officer, Monitoring and Evaluation (M&E) Officer, and Environmental and Social Safeguards Officers, project Accountant and Procurement Officer. This Team will provide key technical support during implementation, monitoring and evaluation. The PIST will be responsible for managing project funds and will be responsible for: (i) managing the project at the national level, including financial management, procurement in accordance with World Bank guidelines and procedures, and Monitoring and Evaluation; (ii) finalizing the National Project Implementation Manuals by effectiveness; and (iii) producing national progress reports on the project. In addition, District Implementation Support Team and Sub- County Implementation Support Teams will be established at the appropriate levels.

Safeguards Capacity – Strengthening institutional capability to deal with environmental matters in the field is essential. Within OPM, the responsibility for safeguards management will lie with the Safeguards Specialist NUSAF3, Environmental Safeguards Officer and Social Safeguards Officer DRDIP who will have the role **to** monitor compliance with environmental and social safeguards and particularly, within the provisions of this ESMF. The Safeguards Specialist will play a liaison role between the OPM, UNHCR, NEMA and the districts on matters of DRDIP implementation and reporting. OPM will in this project work through the DEOs and CDOs for regular field supervision and monitoring of compliance of implementation of projects safeguards works.

7.6.1.2 NUSAF 3 INVOLVEMENT

NUSAF 3 comes on the scene following influx of refugees into some of the districts which were originally in the focus of DRDIP (i.e. Koboko, Lamwo, Moyo and Yumbe). NUSAF 3 implementation framework has

built on its earlier NUSAF 2 project. In those areas, NUSAF 3 will employ expand its coverage to include those areas neighboring refugee settlements through its Community Driven Development (CDD) approach that will ensure no duplication of efforts between those districts under its operations and those outside under the project. The implementation will continue to be supported by the Technical Support Team headed by a Project Director and staffed by relevant technical experts. In all the two scenarios, the Permanent Secretary, Office of the Prime Minister will have overall responsibility for the coordination, accounting for the project resources and ensuring successful implementation of the Project. Both the NUSAF 3 and proposed project will be implemented by OPM, headed by same Director and will use, as much as possible, the same implementation structures at the central and local government and community levels.

Safeguards Capacity – NUSAF 3 has a qualified Environmental and Social Safeguards Specialist who shall work closely with the DRDIP Environmental and Social Safeguards Officers in OPM.

7.6.2 MINISTRY OF GENDER, LABOR, AND SOCIAL DEVELOPMENT

Responsibility – While the OPM will be responsible for the overall resources management and implementation of the project, the Ministry of Gender, Labor, and Social Development (MoGLSD) mandate as the government agency responsible for Social Protection sector policymaking and overall coordination of SP interventions. As a result, the MoGLSD is leading the preparation of a national framework for public works, to which this Project will contribute. MoGSLD will also lead efforts through the capacity building component of the Project to build the foundation for the direct income support program.

7.7 IMPLEMENTATION OVERVIEW

The implementation of the project will be mainstreamed into existing government structures at national and local government levels. Accordingly, all levels of governments will have roles in providing oversight and implementation supports. Local authorities will be responsible for oversight and coordination of the project implementation at district, sub county and community levels. The community will have a leading role in the identification, prioritization and implementation of their prioritized project activities.

The PIM will set forth the roles and responsibilities of all stakeholders of the project. In addition, the PIM will also include details of all operational and procedural steps regarding reviews and approvals of specific activities, flow of information, detailed description of project management and implementing bodies, procurement and financial management arrangements, reporting requirements, and manual amendment procedures.

7.7.1 MINISTRY OF HEALTH

Mandate and Responsibility - Health governance in Uganda is spearheaded by the MoH and shared with other ministries, health development partners, district leadership, providers (public and private), and representatives of civil society organizations (CSOs). The MoH is tasked with the role and responsibility of delivering on the health goals and objectives of government.

Under decentralization law in Uganda, power, authority and resources are decentralized from the central government directly to the districts. Health services in Uganda are delivered within the framework of decentralization. District Health Officers are responsible for performing the policy, planning, and supervision functions required of monitoring health services and products in the districts.

7.7.2 MINISTRY OF AGRICULTURE, ANIMAL INDUSTRY AND FISHERIES

Mandate and Responsibility – MAAIF is responsible for policy formulation, planning, setting standards on irrigation, aquaculture and water for livestock. OPM will have to closely work with MAAIF to strengthen the afforestation, crop production and veterinary extension services systems to address the beneficiaries' demands of extension services.

7.7.3 MINISTRY OF WATER AND ENVIRONMENT

Mandate – The Ministry of Water and Environment is responsible for policy formulation, setting standards, strategic planning, coordination, quality assurance, provision of technical assistance, and capacity building. The ministry also monitors and evaluates sector development programmes to keep track of their performance, efficiency and effectiveness in service delivery. The ministry has three directorates: Directorate of Water Resources Management (DWRM), Directorate of Water Development (DWD) and the Directorate of Environmental Affairs (DEA). The mandate of the MoWE regarding sanitation and hygiene activities is limited to development of public sanitary facilities and promotion of good hygiene in small towns and rural growth centers. **Safeguards Capacity** – MoWE has an Environmentalist and a Sociologist. However, MoWE has a number of ongoing projects such as the Water Management and Development Project and its safeguards staff may be stretched.

7.7.4 MINISTRY OF WORKS AND TRANSPORT

Mandate and responsibility – The mandate of this Ministry is to promote an adequate, safe and well-maintained transport infrastructure, an efficient and effective communications system, safe housing and buildings, and to contribute to the socio-economic development of the country. With regards to Project, the respective District Engineers will work closely with OPM to implement public works component.

Capacity – The Environment, Gender equality, HIV/AIDS and Occupational Health and Safety issues are part of the standard roads contracts. The Ministry has an Environmental Liaison Unit (ELU) responsible for these areas whose capacity includes the Principal Environment Officer, the Senior Environment Officer and the Senior Environment Officer (Social). In addition, guidance on environmental issues will be provided by the DEOs in line with the decentralized system of government in Uganda.

7.7.5 MINISTRY OF LANDS, HOUSING AND URBAN DEVELOPMENT (MOLHUD)

MoLHUD is responsible for providing policy direction, national standards and coordination of all matters concerning lands, housing and urban development. We are responsible for putting in place policies and initiating laws that ensure sustainable land management promote sustainable housing for all and foster orderly urban development in the country. Through the MoLHUD the government facilities the provision and improvement of urban infrastructure and utilities while ensuring management and maintenance of the provided facilities. With respect to this project, the Ministry is responsible for approval of valuation reports of the RAPs through its Office of the Chief Government Valuer.

Safeguards Capacity – The Ministry has an Environmental Specialist who oversees its project interventions.

7.7.6 NATIONAL FORESTRY AUTHORITY

Mandate and Responsibility – The National Forest Authority is a body of the Ugandan central government that is responsible for managing the country's Central Forest Reserves. It was created as a semi-autonomous corporation through the National Forestry and Tree Planting Act of 2003 to replace the prior Forestry Department.

Capacity – All the project districts for DRDIP have District Forestry Officer to facilitate implementation of Component 2 which includes tree planting.

7.7.7 MINISTRY OF EDUCATION AND SPORTS

Mandate and Responsibility - The mandate of the Ministry of Education and Sports (MoES) is to provide quality Education and sports services in the country, which are constitutional obligations for the Government of Uganda.

7.7.8 THE NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)

Mandate and Responsibility - One of the key institutional mandates of NEMA include among others ensuring the observance of proper safeguards in the planning and execution of all development projects including those already in existence that have or are likely to have significant impact on the environment. The role of NEMA will be to review and approve environmental impact assessments and Project Briefs as well as monitoring project implementation in accordance with the National Environment Act and the respective regulations.

Safeguards Capacity – NEMA has adequate technical capacity to monitor the Project through its Department of Environment Compliance and Monitoring in addition to the District Environment Officers in the respective project areas that will be able to report any cases of noncompliance. NEMA Environmental Inspectors do capture social issues/complaints during their inspections where feasible. However, NEMA is constrained by the small number of staff it has and in most cases, does not monitor projects they deem of low-moderate environmental and social impacts. In addition, they are also resource constrained since they do not have enough funds to take care of projects monitoring and compliance follow up.

7.7.9 LOCAL GOVERNMENT ADMINISTRATION STRUCTURES-DISTRICTS & SUB-COUNTIES

Environment Officers: The districts where the project will be implemented have District Environment Officers (DEO) whose responsibility is to monitor all environmental affairs in the district including compliance of activities within their jurisdiction. It implies under the DRDIP, the DEOs in the project districts will have a role to oversee environmental and social compliance of project activities as in their areas of jurisdiction.

Community Development Officers: In addition, every district has a Community Development Officer who is responsible for mobilizing communities to participate in projects as well as coordinating and reporting on the impact of projects (positive and negative) on the communities. The implementing Partners will liaise with the Community Development Officers in mobilizing and sensitizing target groups on a number of aspects of the DRDIP interventions. Other district staff relevant for the projects include Water and Sanitation Officers, Education Officers, Public Health Officers and District Engineers.

Safeguards Capacity – Every district has a designated District Environment Officer whose responsibility is to monitor all environmental affairs of the district including compliance of activities within their jurisdiction. In addition, every district has a Community Development Officer who is responsible for mobilizing communities to participate in projects as well as coordinating and reporting on the impact of projects (positive and negative) on the communities. However, the districts (specifically the DEOs and CDOs) will require facilitation to monitor project implementation as provided for in the ESMF budget.

7.7.10 HOST COMMUNITIES

Oversight: The project will follow a Community Driven Development (CDD) approach whereby communities will play a key role in identifying, prioritizing and implementing the project activities of their choice. The Community Monitoring Group (CMG) will be elected by the beneficiary community and will be responsible for overseeing the overall implementation of the project at community level. The CMG will be the first recipients of any complaints and appeals about the project and will help to resolve at community levels.

Backstopping: While the CDO is responsible for coordinating project activities at sub-county and community level, much of the facilitation work will be conducted by Parish Chiefs. Where needed, they will be supported by contracted community facilitators.

Implementation Support: At community level all interventions will be initiated and prioritized by members of the community, traditional leaders, parish chairpersons, and NGO/CBOs active in the area. A number of project related institutions will support implementation of the project at community level. These include: (i) the Community Project management Committee (CPMC), made up of community representatives, and are responsible for mobilization and facilitation of the involvement of community members and other stakeholders starting from identification through implementation and M&E of the project; and (ii) the Community Procurement Committee who will undertake all procurement on behalf of the community.

7.7.11 THE ROLE OF THE CONTRACTORS

The Role of the Contractor, which will be as per the contract will be accountable for the overall implementation of the mitigation measures and this will be monitored and supervised by the OPM Environmental Unit. As such, an ESMP will be prepared for each sub-project. In the schedule of works, the Contractor will include all proposed mitigation measures and costs, the Supervising Engineers will also ensure that, the schedules and monitoring plans are complied with. This will lend a sense of ownership to the Contractor. The Contractor on his part will also be responsible for planning, implementing and reporting on mitigation measures during the execution of the project works. The Contractor will also be required to apply standard quality assurance procedures in full compliance with the NEMA's Approvals.

Capacity – The Contractors are unknown at this point. However, the selection criteria (technical evaluation) will include past environmental performance as well as availability of contractor's environmental and social safeguards staff to effectively put mitigations in place.

7.7.12 ROLE OF OFFICE OF CHIEF GOVERNMENT VALUER

Responsibility – The application of the valuation exercise on ground will be done in the presence of at least two local council leaders with the participation of the affected persons. Values assigned to assets must be based on the market rates approved by the respective districts. Where this is not possible, the Chief Government Valuer (CGV) will be engaged to do this. In the event that a Government Valuer handles this process, the depreciation cost will not be imputed and the consent of the affected person on the outcome of the process must be sought in order to arrive at agreements on the total profile of losses and compensation. **Capacity** – The Office of the Chief Government Valuer is understaffed and has been a cause of delays for RAPs for other Bank financed projects.

7.7.13 WORLD BANK

The Bank's safeguard team will consist of social and environmental specialists who will guide the project team in applying the agreed safeguard instruments as well as reviewing compliance during implementation support missions. The World Bank will be responsible for review and clearance of RAPs

as well as independently monitoring the project's environmental and social performance in relation to the respective safeguards through implementation support supervision missions. World Bank will also be responsible for reviewing regular monitoring reports and officially disclosing relevant documents on its website. Technical guidance may also be provided by World Bank to OPM as needed from time to time.

7.8 CAPACITY BUILDING

7.8.1 STRATEGY

Prior to the subproject cycle, mobilization and sensitization of relevant technical teams and communities is important. The PIST will put together a team of experts/consultants/persons that will orient the members of DEC, district and sub county technical planning committees on the ESMF and equip them with skills to analyse potentially adverse environmental and social impacts, prescribe mitigation approaches, integrate environmental standards for planning and implementation into subproject contracts and to prepare and supervise the implementation of the projects. This training will address such matters as community participatory methods; environmental analysis; social analysis, using the ER checklist, reporting; and subproject supervision and monitoring

Furthermore, the PIST, District and Sub County Authorities will undertake sensitization and awareness raising among key stakeholders of the project at national, district, Sub County and community levels. The CDO, together with Sub-County Authorities will mobilize communities and sensitize them on the project objectives and its implementation modalities. Special emphasis will be put on the relevance and significance of environmental and social issues all through the sub project cycle so that they are familiar enough with these issues and can make informed and specific decisions and requests for technical support whenever need arises.

The Environmental and Social Specialist and the Safeguards Officers will work through the CDOs and DEOs and other relevant fora to organize practical training to build the knowledge and awareness of local government officials and local communities, on social and environmental issues related to the proposed Project activities. Training will also seek to build the skills of local people to participate actively in identifying appropriate mitigation measures to avoid or reduce potential negative impacts of project activities. The Capacity building will be required to implement the recommendations outlined in the ESMF.

7.8.2 TRAINING IN SAFEGUARDS IMPLEMENTATION

Training of project staff in planning, programming, supervising and monitoring environment-related activities must complement other activities. A broader training programme for field and headquarters staff would help increase awareness of how environmental concerns could be incorporated into their respective work programmes. The training modules below are proposed to form part of the training program to ensure awareness of how to effectively implement the ESMF:

7.8.2.1 MODULE 1

a. Introduction to Basic concepts on environment and social issues
b. Their relevance and significance in project implementation
c. Overview of environment and social regulations
d. World Bank policies and safeguards

7.8.2.2 MODULE 2

a. Environmental and social considerations in project implementation
b. Environmental and social concerns in typical projects
c. Good environmental and social practices in project implementation

7.8.2.3 MODULE 3

a. Environmental and social assessment processes
b. Screening using the ESSF
c. Writing a project brief
d. EIA process
e. Identification and costing of mitigations
f. Subproject monitoring and reporting
g. Pests and pesticides management
h. Mobilization and consultation of communities
i. Vulnerability issues
j. Management of Physical Cultural Resources
k. Operation and functionality of GRM and GRS

7.9 MONITORING AND EVALUATION

7.9.1 OVERVIEW

The purpose of the environmental and social safeguards monitoring includes:

a. Ensure that proper appraisals on the effects of sub-projects takes place and that proper measures are put in place to mitigate the effects;
b. Set out the basis for compliance and enforcement of terms and conditions for approval;
c. Design compliance strategies;
d. Assess compliance with and management of the environment and social safeguards.
e. Ensure that all stakeholders participate in the sub-project processes

The environmental and social safeguards monitoring will be carried out by the District Environment Officer or any officer delegated to carry out the function. Monitoring of environmental and social safeguards will be carried out during subproject implementation, as well as during subproject operation and maintenance.

Monitoring, evaluation and reporting on environmental and social issues will form part of the overall sub-project implementation processes and LG reporting systems. Communities will keep records of all activities done in their respective communities and submit the same to the local governments for consolidation. The District Environment Officers will work with the communities to capture and report on environment and social issues on a monthly basis. The monitoring reports will then be compiled and sent to OPM Safeguards Specialists for review and who will then prepare a consolidated quarterly monitoring report and share it with the Bank.

7.10 REPORTING

Local authorities are normally required to report annually on their subproject activities during the preceding year. These annual reports should capture the experience with implementation of the ESMF procedures. The purpose of these reports is to provide:

a. an assessment of extent of compliance with ESMF procedures, learn lessons, and improve future ESMF performance;
b. to assess the occurrence of, and potential for, cumulative impacts due to project-funded and other development activities; and
c. A record of progress, experiences, challenges encountered, lessons learnt and emerging issues from year-to-year implementation of ESMF that can be used to improve performance.

The report shall include the following key information:

a. An introduction, Reporting period and monitoring locations
b. Scope of works and status of implementation of activity being reported on
c. ESMF management actions undertaken during the reporting period
d. Progress to date in implementing the ESMF, including key aspects monitored: such as waste management, health and safety practices, procurement/storage/and use of pesticides including their disposal, dust management, water quality, other environmental incidents and accidents, environmental awareness and training undertaken, etc.
e. Key recommended follow up issues, actions, time frame and responsibility center.

7.11 BUDGET AND DISCLOSURE OF ESMF

7.11.1 BUDGET

Most cost of ESMF costs are to be integrated as part of Project budget covering aspects such as facilitation, training, monitoring and reporting among others. However, some of the items the Project costs that relate to ESMF with their costs include:

Nº.	**Item**	**Cost in USD**					**TOTAL**
		Year 1	Year 2	Year 3	Year 4	Year 5	
01.	Training of Line Ministries, Implementing Partners, RWCs, Camp Commandants, DEOs, DFOs and CDOs in safeguards management (environment, social, vulnerability issues, GRM issues, monitoring and reporting etc.)	150,000					150,000
02.	Waste management infrastructures in settlements	50,000	80,000				130,000
03.	Hire of Environmental and Social Safeguards officers (5 years)	60,000	60,000	60,000	60,000	60,000	300,000
04.	Capacity building for community environmental and water use groups	20,000	20,000	20,000	20,000	20,000	100,000
05.	Environmental assessments, auditing and monitoring		50,000		50,000	50,000	150,000
GRAND TOTAL FOR ESMF							**$830,000**

7.11.2 ESMF DISCLOSURE

The Draft ESMF and accompanying RPF documents were discussed with affected communities during preparation; and disclosed by the Environmental Specialist of NUSAF 3/DRDIP in all the 7 new districts from 8th-19th January 2018. During the same period, the disclosure process involved meetings with the

District Planning and Technical Committee members who comprise the District Environment Officers; and the District Community Development Officers (CDOs) who will be key in the implementation and subsequent follow up of the safeguards during project implementation. The process involved presenting key safeguards issues in the ESMF and outlining their involvement and reporting obligations amongst others. It is important to note that, the disclosure being undertaken follows consultations held with various stakeholders during ESMF preparation which constituted availing/disclosing information to the stakeholders on the project. In addition, the ESMF will also be disclosed both in-country in one or two of the local dailies, in OPM's website and at the World Bank's infoshop in compliance with relevant Ugandan regulations and the World Bank Operational Policies. As a guiding procedure, OPM and implementing agencies will provide copies of the respective ESIAs and RAPs to the benefiting Local Governments and communities or/and disclosure at the World Bank *Infoshop* for public access. once such are prepared in project specific sub-projects when such arise.

8 CONCLUSION AND RECOMMENDATIONS

1. As a result of ongoing conflicts and instability in the Great Lakes Region and Somalia, Uganda is currently hosting over 1,300,000 refugees and asylum-seekers mainly in South-West and Mid-West Uganda in the districts of Adjumani, Arua, Isingiro, Hoima, Kamwenge, Kiryandongo, Lamwo, Moyo and Yumbe. As a result, refugee hosting areas are increasingly faced with increased strain in their quest to provide social services not only to the refugees but to the host communities. In particular, there is increasing strain in the provision of education, health, roads, energy supply and WASH based services which is manifest in acute shortage of safe water supply and deteriorating WASH standards at both household and institutional levels. Hence, the timeliness of the proposed interventions under DRDIP;
2. The implementation of the DRDIP will be under the overall coordination by the Department of Refugees in the OPM. However, in areas under NUSAF 3 (i.e. Adjumani, Arua, Koboko, Lamwo and Yumbe), its framework of working with communities will be employed and the Environmental and Social Safeguards Specialist will take a lead on matters of compliance. It is important to note that, as much as possible, the same implementation structures at the community, local and central governments levels will be employed to deliver the outputs of the DRDIP under Community Driven Development (CDD) approach;
3. No doubt, to address the gap in the delivery of social services in the host communities, DRDIP project will put in place a number of infrastructures for education, water supply, investments in sustainable environment management amongst others. However, to ensure sustainability of such interventions, it is important that, institutional capacity component should focus on establishing and building of capacities of Water Use Committees (WUC) in the communities and Environment and Sanitation Clubs in schools. Such institutions should serve to sensitize the communities on the usage and care of the interventions which is expected to instil a sense of ownership and stewardship at both community and institutional levels; and
4. Construction and operations of the proposed infrastructures should, to the extent possible be in accordance with sectoral guidelines for such interventions i.e. classrooms, toilets, roads as well as planting of trees. For instance, MoWE emphasizes the need for all drilling contractors to be licensed and approved by the Ministry and for each production well to be sunk, an abstraction permit is required amongst others.

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9 ANNEXES

9.1 ANNEX 1: ENVIRONMENTAL AND SOCIAL SCREENING DATASHEET FOR DRDIP UGANDA

a. **Geographical Location**: The project will be implemented in refugee hosting districts of North, Mid-West and South West Uganda..
b. **Project Name**: Regional Operation on Development Response to Displacement in the Horn of Africa (P152822-Uganda Project).
c. **Program Location:** Arua, Adjumani, Yumbe, Koboko, Moyo, Lamwo, Hoima, Kamwenge, Isingiro and Kyegegwa.
d. **Environmental Issues:** The project has components that will involve rehabilitation/reconstruction of health centers, schools, water supply, community roads which will trigger small-scale localized and short-term in terms of loss of vegetation, risks of accidents, waste generation and disposal waste management.
e. **Proposed Actions:** by and large, the impacts will be addressed mainly through provision of PPEs, site restoration and instituting appropriate waste management measures in the project operations especially for the health centers.
f. **Justification/Rationale for Environmental Category:** the project impacts are envisaged to be of small-scale, localized and of short-term nature.
g. **Reporting Schedule:** The project reporting will be in line with overall project reporting arrangements.
h. **Remarks:** Preparation of an Environmental and Social Management Framework has been done so as to come up with measures that will be implemented to address anticipated environmental and social impacts in the project. However, once project details are clearer and with subsequent screening, appropriate environmental assessments will be done.

SUBPROJECT DESCRIPTION

Description of the project and its major components:

The project has the following components:

a. **Component 1: Social and Economic Investments:** The component will provide investment funds that together with community contributions both in cash and kind, as feasible; will help expand and improve service delivery, and infrastructure for local development including the construction/expansion of schools, health centers, water supply, and all-weather roads.
b. **Component 2: Sustainable Environmental Management:** In almost all of the hosting areas, the large number of refugees has resulted in environmental degradation and loss of vegetation cover. The unmet energy needs of the displaced and the host communities has resulted in the harvesting of fuel wood and construction wood, denuding the areas which is also a cause of tension between the displaced and host communities.
c. **Component 3: Livelihoods Program:** The component will support the development and expansion of traditional and non-traditional livelihoods of the poor and vulnerable households to build productive assets and incomes.
d. **Component 4: Project Management including Monitoring and Evaluation, and Regional and National Institutional Support.** The project will finance the planning, implementation, and technical oversight of program activities; and effective social and environmental safeguards management, financial management, and procurement.

The salient physical characteristics relevant to safeguard analysis relate to project will entail civil works and/or construction/expansion of schools, health centers, water supply, and all-weather roads

DRDIP ENVIRONMENTAL & SOCIAL SAFEGUARDS SCREENING FORM

(a) Environmental & Social Review (ER) Form

(This form filled with appropriate information is to be attached to each sub-project document)

District: _____ Sub-county: _____ Parish: _____

Sub-project In-charge: _____

Sub-project Name: _____

Sub-project Objectives_____

_____

SPECIFICATION STATUS

1. Will the sub-project encroach onto an important natural habitat Yes [ ] No [ ]

   a. Wetlands Yes [ ] No [ ]
   b. Forests Yes [ ] No [ ]
   c. Land Yes [ ] No [ ]
   d. Water Yes [ ] No [ ]
   e. Rangeland Yes [ ] No [ ]

2. Will the sub-project affect sensitive ecosystems Yes [ ] No [ ]

If yes, describe how it will affect

_____

_____

_____

3. Will vegetation be cleared Yes [ ] No [ ]
   If yes, are there proposed actions to restore cleared areas

_____

_____

4. Use firewood for fuel Yes [ ] No [ ]
5. Use petroleum-based fuel Yes [ ] No [ ]
6. Involves use of pesticides Yes [ ] No [ ]
7. Diversion or use of surface waters Yes [ ] No [ ]
8. New or rebuilt irrigation or drainage systems Yes [ ] No [ ]
9. Require the construction of a seasonal dam Yes [ ] No [ ]

9. Involves latrines, septic or sewage systems Yes [ ] No [ ]
10. Waste generation (e.g. slaughterhouse, medical waste, market etc.) Yes [ ] No [ ]
    a. Description of type of waste generated solid (bulk), solid (particulate), liquid, gaseous, etc

_____

_____

    b. Proposed waste management/disposal methods

_____

_____

_____

11. Residues that may be used as fertilizers: Yes [ ] No [ ] In part [ ]

Describe.

_____

_____

_____

12. Do the sub-project activities

Occur within vicinity of a protected area? Yes [ ] No [ ]

Affect any protected up or downstream? Yes [ ] No [ ]

Affect any ecological corridors for migratory species? Yes [ ] No [ ]

13. Are the sub-project activities likely to introduce new species / varieties into the area?
Yes [ ] No [ ]
What type seeds, invasive species?

_____

14. Will slope or soil stability be affected? Yes [ ] No [ ]
    a. Will local resources such as sand, gravel, bricks, ground water be used? Yes [ ] No [ ]
    b. Will activities cause soil salinity? Yes [ ] No [ ]

Social Screening

15. Will subproject activities affect aesthetics of the landscape? Yes [ ] No [ ]
16. Describe existing land use patterns (community facilities, tourism, agriculture etc)

    (i) Will sub-project activities cause any changes in land use Yes [ ] No [ ]

(ii) Will the subproject activities restrict peoples' access to natural resources Yes [ ] No [ ]
(iii) Are there any cultural/ spiritual sites in the vicinity of the sub project site Yes [ ] No [ ]
(iv) Will the sub-project alter any of these sites Yes [ ] No [ ]
(v) Will the subproject causes losses in livelihood opportunities for households? Yes [ ] No [ ]
(vi) Will the subproject activities affect any resources the people take from the natural environment? Yes [ ] No [ ]
(vii) Will the subproject require any resettlement or compensation of residents including squatters? Yes [ ] No [ ]
(viii) Will there be additional demand to local resources (e.g. water supply, sanitation facilities, health centres, lodging, etc.)? Yes [ ] No [ ]
(ix) Will the sub-project provide safeguard to workers' health and safety? Yes [ ] No [ ]
(x) Measures in place to safeguard human health and safety

(xi) Is the program likely to create local employment opportunities including women and youth? Yes [ ] No [ ]

EVALUATION

1. Produce significant amount of pollutants: Yes [ ] No [ ]
2. Type of pollutants (if yes in 1): Air [ ] Water [ ] Soil [ ]
3. Quantity of pollutants (per month): _____
_____
4. Probable cumulative impacts Yes [ ] No [ ]
5. Means of disposal available: Yes [ ] No [ ] In part [ ]
6. Fate of pollutants: _____
_____
7. Remedial measures and any other issues/comments: _____
_____

Environmental Category[1] C[+] [ ] C [ ] B [ ] A [ ]

Needs Further Evaluation Yes [ ] No [ ]

Needs LEA Yes [ ] No [ ]

Prepared by (Name): _____
SIGNATURE: _____
DESIGNATION: _____
DATE: _____

(b) Typical Sub-Project Environmental Impacts and Their Mitigation

9.2 ANNEX 2: MINUTES OF STAKEHOLDER CONSULTATIONS AND MEETING MINUTES LAMWO

Date of the Meeting	6th December 2017
Meeting Proceedings Recorded by	Gaudesia Apolot
Subject of the Meeting	Meeting with Lamwo technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
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 project brief
2.	**Issues discussed**
	NGOs involved AVSI **SCORE**: Responsible for orphans and vulnerable children through provision of scholastic materials **BRACK**: Belgian based NGO. Identifies children who are orphans and less privileged and pay their feed **WORDET**: Helps the girl child especially the those that drop out of school due to early pregnancies, encourage women to form village saving groups, give out loans and train women on life skills such as bakery, tailoring etc.
	Who is in-charge of managing environmental issues/safeguards? District Environmental officer and other 3 focal persons in the sub counties that is the forest guards
	Who manages social issues/safeguards including grievances? The District Senior Community Development Officer assisted by the sub county community development officers. Each of the sub county in Lamwo district has a community Development Officer
	Major activities carried out in the community Farming and small-scale businesses
	Land tenure (titled land?) and who owns the land? Land is communally owned
	Are there any disputes over ownership of the land? There are no major land disputes
	What is the major land use in the community? Agriculture is the major land use
	How is land accessed in the community? The land is accessed through the Clan chief (Rwotkweri) who allocates the land for use. Every clan has their Rwotkweri
	What are the common types of land tenure in the host community? Communal and Customary tenure
	Average household population of refugees and nationals 12 persons per household
	Tribes of the host community Acholi is the major tribe
	Types and number of water sources in the host community: Boreholes. There are 786 boreholes of which 90 are not functional, 124 are abandoned due to poor water quality, low yield, weak operational and management committees while others were capped due to concentration in one area. The communities usually carry out maintenance works of the boreholes. The pump mechanics and the water user mechanics are trained in carrying out basic repairs and preventive maintenance (greasing the chains) of the boreholes in case they breakdown. Corrective maintenance which is usually requires major repairs is beyond the community and calls for more technical personnel from Kitgum District
	Average quantity of water available per person/day: 10 litres/Person/Day

Date of the Meeting	6th December 2017
Meeting Proceedings Recorded by	Gaudesia Apolot
Subject of the Meeting	Meeting with Lamwo technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
	Communal latrine coverage (host community)
	How is waste/garbage generated within the the host community managed? Open burning of waste
	How is healthcare waste within the health centers managed? Is the waste management infrastructure operational? Its usually incinerated though the incinerators are not in good condition
	Average land owned by host community: 10 acres of land per household
	Livelihood activities for community: Farming, women saving groups, small scale businesses
	Type of business enterprises within the area (e.g. saloons, mobile money, music CDs, etc.): Trading in general merchandise, *boda boda* business, saloons
	Livelihood trainings provided to the host community: The communities are trained in the use of the ox ploughs, grinding mills, village saving groups. They are trained on formation of committees with their constitution on how to share the proceeds of the savings
	What are the common agricultural Practices? The farmers in the community are trained on agricultural agronomy and post-harvest handling to prevent pests and diseases. These practices are bush clearing, early planting.
	Are chemicals for disease and pest control readily available and how are these chemicals managed? They are not readily available due to high prices though very few people can afford them. They are trained regularly on use and handling of chemicals such as pesticides
	Type and status of access roads? Gravel roads in fair condition
	Who maintains the community roads? The community carry out maintenance works. The communities are trained on road maintenance through community mobilization and sensitization. The communities generate the by laws that govern road maintenance by all members. But this is a short-term strategy
	Common modes of transport (*boda boda*, public transport, etc.) The common modes are usually public transport, boda bodas, bicycles, saloon cars, small lorries and fusos
	Types of housing (permanent, semi-permanent or by construction materials): Mostly grass thatched and semi-permanent
	Housing planned or scattered homesteads? Most homesteads are scattered
	Does the host community have electricity? No.
	What are the common energy sources for cooking and lighting in refugee and host areas? The common energy sources are solar energy for lighting, *tadoba* and fuel wood for cooking
	Where is the firewood sourced from? (Gazetted forests or private land?): Firewood is sourced from the forest lands near the communities

Date of the Meeting	6th December 2017
Meeting Proceedings Recorded by	Gaudesia Apolot
Subject of the Meeting	Meeting with Lamwo technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
	Who is in-charge of collecting firewood? The women are in charge collecting firewood
	How far are the firewood sources from the settlement? On average the women have to walk a distance of 2Km to collect firewood
	Are there signs of deforestation associated with firewood? Yes
	Are there any projects on environmental conservation (i.e. tree planting)? Tree planting projects take place in the refugee settlements
	How many schools by type are in the area (primary, secondary, tertiary, vocational)?: In Palabek Ogili Sub County, Apyeta Village, there are 5 primary schools (Apyeta P/S, Padwat P/S, Lugwar P/S, Paracelle P/S and Akanyo P/s). There is only one secondary school constructed UNHCR, Ogili secondary school
	Distance to school: 5Km from home to school
	What is the state of infrastructure at school (toilets, classrooms, etc.)?: The toilets and classrooms are inadequate and in poor conditions. In Akanyo Primary School in Apyeta Village, there are 10 stances for boys and 5 stances for girls of pit latrines. There are only seven classrooms which small in size to accommodate a large of pupils.
	What are the school drop-out rates, literacy levels and reasons? The drop rates are high and the literacy levels very high. The main reasons being, parents attitude towards education rather have them go to school, the parents prefer the children to stay home and help with garden work, teenage pregnancies, early marriages.
	Number and category of health service provision (e.g. HC II, III, IV or RH) In Palabek Ogili Sub County, there are 3 health centre: Palabek Ogili HCIII, Apyeta HC II and Padibe HCIV. Apyeta HC serves three parishes of Lugwar, Padwat and Paracelle.
	Distance to nearest Referral Hospital: Padibe HC IV which is nearest referral centre is 30km away from Apyeta HC II
	Ambulance services? There are no ambulance services within the center
	What are the common diseases among the community? Malaria, Respiratory Tract Infections, diarrhea, STIs such as Gonorrhea, syphilis, HIV/AIDS

Date of the Meeting	6th December 2017
Meeting Proceedings Recorded by	Gaudesia Apolot
Subject of the Meeting	Meeting with Lamwo technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
	Constraints to health service provision • Inadequate staffing at the center. There are many patients compared to the health workers. ➢ Clinical Officer 1 ➢ Nursing officer 1 ➢ Enrolled nurse 1 ➢ Mid wives 2 ➢ Lab Assistant 1 ➢ Health information Assistant 1 ➢ Nursing Assistant 1 • The capacity of the health center is small to accommodate the patients. It can only admit 8 people. • There is high rate of drug stock outs especially ARVs • More infrastructure is needed especially the laboratory, out patients room, consultation room, dispensing room and more wards for children and men instead of one general ward • Stores for the drugs
	HIV/AIDS prevalence rates: Out of 9300 people in Apyeta village, 580 are HIV positive
	HIV/AIDS interventions within the host community a. Integrated outreaches. b. Testing of all household members in case of an HIV positive member in that household c. Sensitization and counselling services
	What social services are provided and by who? Child protection services by the Probation Office and the NGOs in the area
	Who are the vulnerable groups? The elderly, women, people with disability, orphans, child mothers.
	What services are provided to people with special needs? a. The elderly is on Senior Citizen Grant and Social Assistance Grant b. The Youth benefit from Youth Livelihood Programmes c. There is also Uganda Entrepreneurship Programme that benefits 2 groups per sub county
	What are the roles of men and women among the host community? Women carry out household chores, manage the home, sell the produce and fetch water and firewood. While the men protect the home, build houses and farming

Date of the Meeting	6th December 2017
Meeting Proceedings Recorded by	Gaudesia Apolot
Subject of the Meeting	Meeting with Lamwo technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
	Common causes of violence and abuse **1.** Drunkardness 2. Economic problems 3. Drug abuse
	Common modes of GBV 1. Physical (fighting) 2. Psychological torture **3.** Family breakage
	Are there cases of sexual harassment and how are they handled? Yes. They are usually handled by the police in the area.
	Are there cases of child marriages? Yes. Cases of children not going or missing school are reported to the school to help in tracking child marriages.
	What are the common grievances among the host community? Sexual harassment which is common among the youth
	What are the common grievances between refugees and host community? Sharing of resources mainly the water points and firewood collection points
	What are the existing grievance resolution mechanisms and structures? The Local Government Structures for grievance resolution are in place. At the District, there is the District Technical Planning Committee, (consisting of the Chairman and his executives and entire area councilors) sub county level there is the Technical Planning Committee. There are land committees and clan heads and their structures that deal in grievance resolutions in the communities.
	Are they effective? Yes, they are effective
	How are grievances about land ownership handled? These are handled by the Clan heads, sub county chiefs and the sub county Technical Planning Committee. These committees sit on monthly basis to review cases.
	What efforts have been taken to build peace between refugees and the host community? Sensitization on peaceful coexistence and human rights and continuous stakeholder engagement

9.3 ANNEX 3: STAKEHOLDER CONSULTATIONS AND MEETING MINUTES MOYO

Date of the Meeting	6th December 2017
Meeting Proceedings Recorded by	Gaudesia Apolot
Subject of the Meeting	Meeting with Moyo technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
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 ESMF
4.	**Issues discussed**
	NGOs involved IDI, UNHCR, UNICEF, UWEP
	Who is in-charge of managing environmental issues/safeguards? District Environmental officer, Sub county Environment Committee and Sub County Wetland Committee. Trainings on safeguards are conducted hence capacity to manage environmental safeguards is adequate.
	Who manages social issues/safeguards including grievances? The District Senior Community Development Officer assisted by the sub county community development officers. Each of the sub counties in Moyo district has a community Development Officer. These carry out supervision and monitoring of social safeguards. Trainings on safeguards have been conducted and they have full capacity to manage social issues
	Major activities carried out in the community Farming, fishing on the Nile and small-scale businesses
	Land tenure (titled land?) and who owns the land? Land is communally owned
	Are there any disputes over ownership of the land? There are no major land disputes

Date of the Meeting	6th December 2017
Meeting Proceedings Recorded by	Gaudesia Apolot
Subject of the Meeting	Meeting with Moyo technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
	What is the major land use in the community? Agriculture is the major land use
	How is land accessed in the community? The land is accessed through the Clan head who allocates the land for use. Every clan has their leader.
	What are the common types of land tenure in the host community? Communal, Customary tenure and Leasehold
	Average household population of refugees and nationals 5 persons per household for the nationals and 10 persons per household for the refugees
	Tribes of the host community Madi is the major tribe. Others are Reli, Aringa and Kukus
	Types and number of water sources in the host community Boreholes. There are 87 newly drilled boreholes of which 3 are motorized, 30 were rehabilitated. Two high yielding boreholes within the host communities are earmarked for upgrading to motorized in order to cover a wider range and improve on safe water coverage. Currently safe water coverage stands at 40% and the district is targeting to reach 60% coverage
	Average quantity of water available per person/day 15 litres/Person/Day which is the sphere standard against the National Standard of 20 litres/Person/Day.
	Communal latrine coverage (host community) This was at 90% before the influx of refugees
	How is waste/garbage generated within the the host community managed? Garbage boxes are routinely collected from growth centres and burnt. Awareness creation using the sub county environment and wetland committees is carried out to promote good practices in waste management.
	How is healthcare waste within the health centers managed? Is the waste management infrastructure operational? Healthcare waste is managed through incineration at the health centres. The district has few incinerators and hence urge for more in order to manage the waste adequately.
	Average land owned by host community 5 acres of land per household

Date of the Meeting	6th December 2017
Meeting Proceedings Recorded by	Gaudesia Apolot
Subject of the Meeting	Meeting with Moyo technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
	Livelihood activities for community Farming, women saving groups, small scale businesses
	Type of business enterprises within the area (e.g. saloons, mobile money, music CDs, etc.) Trading in general merchandise, *boda boda* business, saloons
	Livelihood trainings provided to the host community The communities are trained in extension services, community development activities, business skills especially in planning and marketing.
	What are the common agricultural Practices? The farmers in the community are trained on agricultural agronomy and post-harvest handling to prevent pests and diseases. These practices are bush clearing, early planting, weeding, soil and water conservation measures
	Are chemicals for disease and pest control readily available and how are these chemicals managed? They are available and handled by registered, certified and trained input dealers. The registration and certification is carried out by UNADA.They are two trained input dealers per sub county. The District Agricultural Officer has the mandate to inspect the use of Agro chemicals. The major crop diseases in Moyo are: fowl army worm(cereals), cassava mosaic, cassava brown strip, fungal and bacterial infection(vegetables), fruit flies. The common livestock diseases include: African Swine Fever, New Castle, rabbies, foot and mouth disease, black quarter.
	Type and status of access roads? There are 4 types namely: feeder roads (226.5 Km), community access roads (over 500 Km), settlement roads and trunk (63 Km) roads. Most of these roads are in fair condition
	Who maintains the community roads? The sub counties carry out maintenance works of community access roads. The trunk roads are maintained by UNRA and settlement roads by UNHCR
	Common modes of transport (*bodaboda*, public transport, etc.) The common modes are usually public transport, boda bodas, bicycles, saloon cars, small lorries and fusos
	Types of housing (permanent, semi-permanent or by construction materials) Mostly grass thatched, brick wall, mud floor and semi-permanent
	Housing planned or scattered homesteads? Most homesteads are scattered. Linear settlements are usually seen along the roads.

Date of the Meeting	6th December 2017
Meeting Proceedings Recorded by	Gaudesia Apolot
Subject of the Meeting	Meeting with Moyo technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
	Does the host community have electricity? No.
	What are the common energy sources for cooking and lighting in refugee and host areas? The common energy sources are solar energy for lighting, *tadooba* and fuel wood for cooking
	Where is the firewood sourced from? (Gazetted forests or private land?) Firewood is sourced from the forest lands near the communities
	Who is in-charge of collecting firewood? The women are in charge collecting firewood
	How far are the firewood sources from the settlement? On average the women have to walk a distance of 4Km to collect firewood
	Are there signs of deforestation associated with firewood? Yes
	Are there any projects on environmental conservation (i.e. tree planting)? • Tree planting projects. Forest officers are on ground to educate the community on tree planting by giving out tree seedlings. • Establishment of woodlots for restoration • Reduction of the number of licences • Demarcation of wetlands and wetland restoration programmes
	How many schools by type are in the area (primary, secondary, tertiary, vocational)? In Itula Sub County, Ukuni Village, there are 9 primary schools. There is only one secondary school secondary school (Itula Secondary School).
	Distance to school 4Km from home to school
	What is the state of infrastructure at school (toilets, classrooms, etc.)? The toilets and classrooms are inadequate and in poor conditions. In Chinyi Primary School in Ukuni Village, there are 10 stances for boys and 10 stances for girls and 2 stances for teachers of pit latrines. There are few classrooms to accommodate a big number of pupils. Some of the pupils' study under trees and under the shift systems (morning and afternoon shifts). There are only 2 staff houses occupied by 9 teachers.

Date of the Meeting	6th December 2017
Meeting Proceedings Recorded by	Gaudesia Apolot
Subject of the Meeting	Meeting with Moyo technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
	What are the school drop-out rates, literacy levels and reasons? The drop rates are high (33%) and the literacy levels very low. The main reasons being, parents attitude towards education rather than have them go to school, the parents prefer the children to stay home and go fishing, teenage pregnancies, early marriages.
	Number and category of health service provision (e.g. HC II, III, IV or RH) There are 11 government aided health centres, 6 are HC II, 1 HC IV in Ubongi , 3 health center III were constructed by UNHCR and Moyo referral hospital
	Distance to nearest Referral Hospital Moyo hospital which is nearest referral center is 37km away from the communities
	Ambulance services? There are ambulance services provided by MTI , MSF and Relief International.
	What are the common diseases among the community? Malaria, Respiratory Tract Infections, pneumonia, diarrhea, STIs such as Gonorrhea, syphilis, HIV/AIDS, multi drug resistant TB
	Constraints to health service provision • Inadequate staffing at the centre. There are many patients compared to the health workers. Besides that, the staff are not motivated and abscond from work while on duty. • Facilitation is inadequate to train and supervise works at the health centres • The capacity of the health center is small to accommodate the patients. There is high rate of drug stock outs especially ARVs • More infrastructure is needed especially the laboratory, out patients room, consultation room, dispensing room and more wards for children and men instead of one general ward • Stores for the drugs • Staff don't have capacity to dispense medicine
	HIV/AIDS prevalence rates: This stands at 15.9%
	HIV/AIDS interventions within the host community a. Integrated outreaches. b. HIV/AIDS testing c. Sensitization and counselling services
	What social services are provided and by who? Child protection services by the Probation Office and the NGOs in the area

Date of the Meeting		6th December 2017
Meeting Proceedings Recorded by		Gaudesia Apolot
Subject of the Meeting		Meeting with Moyo technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)
Item	**Summary of proceedings**	
	Who are the vulnerable groups? The elderly, women, people with disability, orphans, child mothers	
	What services are provided to people with special needs? a. The elderly are on Senior Citizen Grant and Social Assistance Grant b. The Youth benefit from Youth Livelihood Programmes c. There is also Uganda Entrepreneurship Programme that benefits 2 groups per sub county	
	What are the roles of men and women among the host community? Roles are defined by cultural and religious norms. Women carry out household chores, manage the home, sell the produce and fetch water and firewood. While the men protect the home, build houses and farming.	
	Common causes of violence and abuse **a.** Alcohol abuse b. Economic problems (poverty) c. Drug abuse	
	Common modes of GBV 4. Physical (fighting) 5. Psychological torture **6.** Family breakage	
	Are there cases of sexual harassment and how are they handled? Yes. They are usually handled by the police in the area	
	Are there cases of child marriages? Yes. Parents have no commitment to take care of their children	
	What are the common grievances among the host community? • Sexual harassment which is common among the youth • Child neglect • Land grabbing	

Date of the Meeting		6th December 2017
Meeting Proceedings Recorded by		Gaudesia Apolot
Subject of the Meeting		Meeting with Moyo technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)
Item	**Summary of proceedings**	
	What are the common grievances between refugees and host community? • Sharing of resources mainly the water points and firewood collection points • Stray animals • Expectations of the landlords • Employment opportunities	
	What are the existing grievance resolution mechanisms and structures? The Local Government Structures for grievance resolution are in place. At the District, there is the District Technical Planning Committee, (consisting of the Chairman and his executives and entire area councilors) sub county level there is the Technical Planning Committee. There are area land committees clan heads and their structures that deal in grievance resolutions in the communities	
	Are they effective? Yes, they are effective	
	How are grievances about land ownership handled? These are handled by the Clan heads, sub county chiefs and the sub county Technical Planning Committee. These committees sit on monthly basis to review cases	
	What efforts have been taken to build peace between refugees and the host community? sensitization on peaceful coexistence and human rights and continuous stakeholder engagement	

9.4 ANNEX 4: STAKEHOLDER CONSULTATIONS AND MEETING MINUTES YUMBE

Date of the Meeting	7th December 2017
Meeting Proceedings Recorded by	Gaudesia Apolot
Subject of the Meeting	Meeting with Yumbe technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
5.	**Introduction**
	The team leader started explained the proposed project and purpose of the consultation exercise and how findings would be utilised in preparation ESMF
6.	**Issues discussed**
	NGOs involved War Child Canada, IRC, World Vision, Save the Children
	Who is in-charge of managing environmental issues/safeguards? District Environmental officer, Natural Resource Officer, Forest Officer (each sub county has forest guards), Sub county CDOs act as focal persons manage environmental safeguards. Most infrastructure activities mainstream environmental components.
	Who manages social issues/safeguards including grievances? The District Senior Community Development Officer assisted by the sub county community development officers. Each of the sub counties in Yumbe district has a community Development Officer. These carry out supervision and monitoring of social safeguards. Trainings on safeguards have been conducted and they have full capacity to manage social issues
	Major activities carried out in the community Farming, and small-scale businesses
	Land tenure (titled land?) and who owns the land? Land is communally owned
	Are there any disputes over ownership of the land? There are no major land disputes
	What is the major land use in the community? Agriculture is the major land use and major crops grown are cassava, sorghum, sim sim, ground nuts
	How is land accessed in the community? The land is accessed through cultural norms
	What are the common types of land tenure in the host community? Customary land ownership

Date of the Meeting		7th December 2017
Meeting Proceedings Recorded by		Gaudesia Apolot
Subject of the Meeting	Meeting with Yumbe technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)	

Item	Summary of proceedings
	Average household population of refugees and nationals 5 persons per household for the nationals and 10 persons per household for the refugees
	Tribes of the host community Aringa
	Types and number of water sources in the host community Boreholes. There are 95 drilled boreholes. Currently safe water coverage stands at 32%
	Average quantity of water available per person/day 12 litres/Person/Day which is the sphere standard against the National Standard of 20 litres/Person/Day.
	Communal latrine coverage (host community) Stands at 79%
	How is waste/garbage generated within the host community managed? Open burning of waste
	How is healthcare waste within the health centers managed? Is the waste management infrastructure operational? Healthcare waste is managed through incineration at the health centres. The district has few incinerators and hence urge for more in order to manage the waste adequately.
	Average land owned by host community 5 acres of land per household
	Livelihood activities for community Farming, women saving groups, small scale businesses
	Type of business enterprises within the area (e.g. saloons, mobile money, music CDs, etc.) Trading in general merchandise, *boda boda* business, saloons
	Livelihood trainings provided to the host community The communities are trained in extension services, community development activities, business skills especially in planning and marketing.
	What are the common agricultural Practices? The farmers in the community are trained on agricultural agronomy and post harvest handling to prevent pests and diseases. These practices are bush clearing, early planting, weeding, soil and water conservation measures

Date of the Meeting		7th December 2017
Meeting Proceedings Recorded by		Gaudesia Apolot
Subject of the Meeting	Meeting with Yumbe technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)	

Item	Summary of proceedings
	Are chemicals for disease and pest control readily available and how are these chemicals managed? They are available and handled by registered, certified and trained input dealers. The District Agricultural Officer has the mandate to inspect the use of Agro chemicals. The major crop diseases in Yumbe are: cassava mosaic, cassava brown strip, fruit flies. The common livestock diseases include: African Swine Fever, New Castle, rabbies, foot and mouth disease, black quarter.
	Type and status of access roads? There are 4 types namely: feeder roads, community access roads (over 500 Km), settlement roads and trunk roads. Most of these roads are in poor condition
	Who maintains the community roads? The sub counties carry out maintenance works of community access roads though most of these roads lead to the settlements. The feeder roads are maintained by the district and settlement roads by UNHCR.
	Common modes of transport (*bodaboda*, public transport, etc.) The common modes are usually public transport, boda bodas, bicycles, saloon cars, small lorries and fusos
	Types of housing (permanent, semi-permanent or by construction materials) Mostly grass thatched, brick wall, mud floor and semi-permanent
	Housing planned or scattered homesteads? Most homesteads are scattered. Linear settlements are usually seen along the roads.
	Does the host community have electricity? No.
	What are the common energy sources for cooking and lighting in refugee and host areas? The common energy sources are solar energy for lighting, *tadooba* and fuel wood for cooking
	Where is the firewood sourced from? (Gazetted forests or private land?) Firewood is sourced from the forest lands near the communities
	Who is in-charge of collecting firewood? The women are in charge collecting firewood
	How far are the firewood sources from the settlement? On average the women have to walk a distance of 2Km to collect firewood
	Are there signs of deforestation associated with firewood? Yes

Date of the Meeting	7th December 2017
Meeting Proceedings Recorded by	Gaudesia Apolot
Subject of the Meeting	Meeting with Yumbe technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
	Are there any projects on environmental conservation (i.e. tree planting)? • Tree planting projects. Forest officers are on ground to educate the community on tree planting by giving out tree seedlings. • Establishment of woodlots for restoration
	How many schools by type are in the area (primary, secondary, tertiary, vocational)? In Ariwa Sub County Kiranga Village, there are 6 primary schools that are shared with the refugees and one secondary school
	Distance to school 4 - 6Km from home to school
	What is the state of infrastructure at school (toilets, classrooms, etc.)? The toilets and classrooms are inadequate and in poor conditions. In Aringa Primary School in Ramogi Sub County, Swinga Village, there are 5 stances for boys and 5 stances for girls and 2 stances for teachers of pit latrines. There are few classrooms to accommodate a big number of pupils. Hence congestion in the classrooms.
	What are the school drop-out rates, literacy levels and reasons? The drop rates are high and the literacy levels very low. The main reasons being, parents attitude towards education rather than have them go to school, the parents prefer the children to stay home and go to do farming, teenage pregnancies, early marriages.
	Number and category of health service provision (e.g. HC II, III, IV or RH) There are 4 government aided health centres, Yumbe HC IV, Ariwa HCIII, Barakala HC III which is close to the base camp and Pawor HC III
	Distance to nearest Referral Hospital Yumbe hospital which is nearest referral centre is 30 Km away from the communities
	Ambulance services? There are ambulance services provided by partners like IRC.
	What are the common diseases among the community? Malaria, typhoid, Hepatitis B, HIV/AIDS

Date of the Meeting	7th December 2017
Meeting Proceedings Recorded by	Gaudesia Apolot
Subject of the Meeting	Meeting with Yumbe technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
	Constraints to health service provision • Inadequate staffing at the centre. There are many patients compared to the health workers. Besides that, the staff are not motivated and abscond from work while on duty. • Facilitation is inadequate to train and supervise works at the health centres • The capacity of the health center is small to accommodate the patients. There is high rate of drug stock outs especially ARVs • More infrastructure is needed especially the laboratory, out patients room, consultation room, dispensing room and more wards for children and men instead of one general ward • Stores for the drugs • Staff don't have capacity to dispense medicine
	HIV/AIDS prevalence rates: In Yumbe HIV/AIDs prevalence is the lowest
	HIV/AIDS interventions within the host community • Integrated outreaches. • HIV/AIDS testing • Sensitization and counselling services
	What social services are provided and by who? Child protection services by the Probation Office and the NGOs in the area such as Save the Children
	Who are the vulnerable groups? The elderly, women, people with disability, orphans, child mothers
	What services are provided to people with special needs? • The elderly are on Senior Citizen Grant and Social Assistance Grant • The Youth benefit from Youth Livelihood Programmes
	What are the roles of men and women among the host community? Roles are defined by cultural and religious norms. Women carry out household chores, manage the home, sell the produce and fetch water and firewood. While the men protect the home, build houses and farming.
	Common causes of violence and abuse **a.** Alcohol abuse b. Economic problems (poverty) c. Drug abuse

Date of the Meeting		7th December 2017
Meeting Proceedings Recorded by		Gaudesia Apolot
Subject of the Meeting	Meeting with Yumbe technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)	

Item	Summary of proceedings
	Common modes of GBV 7. Physical (fighting) 8. Psychological torture **9.** Family breakage
	Are there cases of sexual harassment and how are they handled? Yes. They are usually handled by the police in the area
	Are there cases of child marriages? Yes. Parents have no commitment to take care of their children
	What are the common grievances among the host community? • Sexual harassment which is common among the youth • Child neglect • Theft
	What are the common grievances between refugees and host community? • Sharing of resources mainly the water points and firewood collection points • Stray animals • Expectations of the landlords • Employment opportunities
	What are the existing grievance resolution mechanisms and structures? The Local Government Structures for grievance resolution are in place. At the District, there is the District Technical Planning Committee, (consisting of the Chairman and his executives and entire area councilors) sub county level there is the Technical Planning Committee. There are area land committees clan heads and their structures that deal in grievance resolutions in the communities
	Are they effective? Yes, they are effective
	How are grievances about land ownership handled? These are handled by the Clan heads, sub county chiefs and the sub county Technical Planning Committee. These committees sit on monthly basis to review cases

Date of the Meeting		7th December 2017
Meeting Proceedings Recorded by		Gaudesia Apolot
Subject of the Meeting		Meeting with Yumbe technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)
Item	**Summary of proceedings**	
	What efforts have been taken to build peace between refugees and the host community? sensitization on peaceful coexistence and human rights and continuous stakeholder engagement	

9.5 ANNEX 5: STAKEHOLDER CONSULTATIONS AND MEETING MINUTES KOBOKO

Date of the Meeting	8th December 2017
Meeting Proceedings Recorded by	Gaudesia Apolot
Subject of the Meeting	Meeting with Koboko technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
7.	**Introduction**
	The team leader started explained the proposed project and purpose of the consultation exercise and how findings would be utilised in preparation ESMF
8.	**Issues discussed**
	NGOs involved War Child Canada, DRC, World Vision, ACAV
	Who is in-charge of managing environmental issues/safeguards? District Environmental officer, Forest Officer (each sub county has forest guards), forest ranger, forest guard act as focal persons manage environmental safeguards. Most infrastructure activities mainstream environmental components.
	Who manages social issues/safeguards including grievances? The District Senior Community Development Officer assisted by the sub county community development officers. Each of the sub counties in Koboko district has a community Development Officer. These carry out supervision and monitoring of social safeguards. Trainings on safeguards have been conducted and they have full capacity to manage social issues.
	Major activities carried out in the community Farming, and small-scale businesses
	Land tenure (titled land?) and who owns the land? Land is communally owned
	Are there any disputes over ownership of the land? There are no major land disputes
	What is the major land use in the community? Agriculture is the major land use and major crops grown are cassava, sorghum, sim sim, groundnuts, finger millet, beans.
	How is land accessed in the community? The land is accessed through cultural norms
	What are the common types of land tenure in the host community? Customary land ownership
	Average household population of refugees and nationals 6 persons per household for the nationals and 10 persons per household for the refugees

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Subject of the Meeting	Meeting with Koboko technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
	Tribes of the host community Kakwa, Lugbara
	Types and number of water sources in the host community Boreholes. Currently safe water coverage stands at 65.4%
	Average quantity of water available per person/day 12 litres/Person/Day which is the sphere standard against the National Standard of 20 litres/Person/Day.
	Communal latrine coverage (host community) Stands at 74.9%
	How is waste/garbage generated within the host community managed? Open burning of waste
	How is healthcare waste within the health centers managed? Is the waste management infrastructure operational? Healthcare waste is managed through incineration at the health centres. The district has few incinerators and hence urge for more in order to manage the waste adequately.
	Average land owned by host community An acre of land per household
	Livelihood activities for community Farming, women saving groups, small scale businesses
	Type of business enterprises within the area (e.g. saloons, mobile money, music CDs, etc.) Trading in general merchandise, boda boda business, saloons
	Livelihood trainings provided to the host community The communities are trained in extension services, community development activities, business skills especially in planning and marketing.
	What are the common agricultural Practices? The farmers in the community are trained on agricultural agronomy and post-harvest handling to prevent pests and diseases. These practices are bush clearing, early planting, weeding, soil and water conservation measures

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Meeting Proceedings Recorded by	Gaudesia Apolot
Subject of the Meeting	Meeting with Koboko technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
	Are chemicals for disease and pest control readily available and how are these chemicals managed? They are available and handled by registered, certified and trained input dealers. The District Agricultural Officer has the mandate to inspect the use of Agro chemicals. The major pesticides include rocket and accaricides. The major crop diseases in Yumbe are: cassava mosaic, cassava brown strip, fruit flies. The common livestock diseases include: Black coat that affects goats, New Castle, rabies, foot and mouth disease, black quarter.
	Type and status of access roads? There are 4 types namely: feeder roads (243.7 Km), community access roads (740.2 Km), settlement roads and trunk roads. Most of these roads are in poor condition
	Who maintains the community roads? The sub counties carry out maintenance works of community access roads though most of these roads lead to the settlements. The feeder roads are maintained by the district and settlement roads by UNHCR.
	Common modes of transport (*bodaboda*, public transport, etc.) The common modes are usually public transport, boda bodas, bicycles, saloon cars, small lorries and fusos
	Types of housing (permanent, semi-permanent or by construction materials) Mostly grass thatched, brick wall, mud floor and semi-permanent
	Housing planned or scattered homesteads? Most homesteads are scattered. Linear settlements are usually seen along the roads.
	Does the host community have electricity? No.
	What are the common energy sources for cooking and lighting in refugee and host areas? The common energy sources are solar energy for lighting, tadoba and fuel wood for cooking
	Where is the firewood sourced from? (Gazetted forests or private land?) Firewood is sourced from the forest lands near the communities.
	Who is in-charge of collecting firewood? The women are in charge collecting firewood
	How far are the firewood sources from the settlement? On average the women have to walk a distance of 1Km to collect firewood

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Subject of the Meeting	Meeting with Koboko technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
	Are there signs of deforestation associated with firewood? Yes
	Are there any projects on environmental conservation (i.e. tree planting)? • Tree planting projects. Forest officers are on ground to educate the community on tree planting by giving out tree seedlings. • Establishment of woodlots for restoration
	How many schools by type are in the area (primary, secondary, tertiary, vocational)? In Lobule Sub County, there are 11 government aided schools and 2 private ones
	Distance to school 2Km from home to school
	What is the state of infrastructure at school (toilets, classrooms, etc.)? The toilets and classrooms are inadequate and in poor conditions. There are few classrooms to accommodate a big number of pupils. Hence congestion in the classrooms.
	What are the school drop-out rates, literacy levels and reasons? The drop rates are high at 6% especially in the higher classes and the literacy levels very low. The main reasons being, parents attitude towards education rather than have them go to school, the parents prefer the children to stay home and go to do farming, teenage pregnancies, early marriages.
	Number and category of health service provision (e.g. HC II, III, IV or RH) There are 4 government aided health centres, Pijoke HC II, Lobule HCIII, Lurujo HC II and Borukolongo HC III
	Distance to nearest Referral Hospital Koboko general hospital which is nearest referral Centre is 15 Km away from the communities
	Ambulance services? There are ambulance services provided by partners.
	What are the common diseases among the community? Malaria, typhoid, Hepatitis B, HIV/AIDs

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Item	Summary of proceedings
	Constraints to health service provision • Inadequate staffing at the centre due to influx of refugees. There are many patients compared to the health workers. Besides that, the staff are not motivated and abscond from work while on duty. • Facilitation is inadequate to train and supervise works at the health centres • The capacity of the health center is small to accommodate the patients. There is high rate of drug stock outs especially ARVs • More infrastructure is needed especially the laboratory, out patients room, consultation room, dispensing room and more wards for children and men instead of one general ward • Stores for the drugs • Staff don't have capacity to dispense medicine
	HIV/AIDS prevalence rates: In Koboko HIV/AIDs prevalence is at 3.6%
	HIV/AIDS interventions within the host community • Integrated outreaches. • HIV/AIDS testing • Sensitization and voluntary counselling services
	What social services are provided and by who? Child protection services by the Probation Office and the NGOs in the area such as Save the Children
	Who are the vulnerable groups? The elderly, women, people with disability, orphans, child mothers
	What services are provided to people with special needs? a. The elderly are on Senior Citizen Grant and Social Assistance Grant b. The Youth benefit from Youth Livelihood Programmes c. Income generating activities d. Entrepreneurship Women groups e. Non – formal skill training to the youth

Date of the Meeting	8th December 2017
Meeting Proceedings Recorded by	Gaudesia Apolot
Subject of the Meeting	Meeting with Koboko technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
	What are the roles of men and women among the host community? Roles are defined by cultural and religious norms. Women carry out household chores, manage the home, sell the produce and fetch water and firewood. While the men protect the home, build houses and farming.
	Common causes of violence and abuse **a.** Alcohol abuse b. Economic problems (poverty) c. Drug abuse d. Promiscuity
	Common modes of GBV a. Physical (fighting) b. Psychological torture **c.** Family breakage
	Are there cases of sexual harassment and how are they handled? Yes. They are usually handled by the police in the area
	Are there cases of child marriages? Yes. Parents have no commitment to take care of their children and have surrendered their responsibility in bringing up a girl child
	What are the common grievances among the host community? **a.** Sexual harassment which is common among the youth **b.** Child neglect **c.** Theft
	What are the common grievances between refugees and host community? **a.** Sharing of resources mainly the water points and firewood collection points **b.** Stray animals **c.** Expectations of the landlords **d.** Employment opportunities

Date of the Meeting	8th December 2017
Meeting Proceedings Recorded by	Gaudesia Apolot
Subject of the Meeting	Meeting with Koboko technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)

Item	Summary of proceedings
	What are the existing grievance resolution mechanisms and structures? The Local Government Structures for grievance resolution are in place. At the District, there is the District Technical Planning Committee, (consisting of the Chairman and his executives and entire area councilors) sub county level there is the Technical Planning Committee. There are area land committees clan heads and their structures that deal in grievance resolutions in the communities
	Are they effective? Yes, they are effective
	How are grievances about land ownership handled? These are handled by the Clan heads, sub county chiefs and the sub county Technical Planning Committee. These committees sit on monthly basis to review cases
	What efforts have been taken to build peace between refugees and the host community? Sensitization on peaceful coexistence and human rights and continuous stakeholder engagement

9.6 ANNEX 6: SOME OF THE KEY STAKEHOLDER COMMUNITY CONCERNS AND VIEWS IN THE ADDITIONAL DISTRICTS

Stakeholders	**Issues Raised**
Lamwo technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)	a. Communication of the project should be done clearly and early enough before project implementation so as to manage the expectations of the community members. b. Continuous sensitization on peaceful co-existence and human rights for harmonious living between the host communities and the refugees. c. Water in Lamwo tends to be acidic and corrodes the metals used for obtaining water from the boreholes. The stainless-steel metal that is recommended is 5 times expensive and the community cannot afford.
Host Community members Lamwo District	a. Security in the host community is not adequate especially for the women and the girls. The women are in danger especially at night and early morning hours. b. The rate of STIs have increased with the influx of refugees
Moyo technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)	a. Most of livestock infections are managed through vaccination but the district does not have adequate vaccines to contain the infections. With the influx of the refugees, the situation was aggravated. b. Required infrastructure such as remand homes are not in place so most times such cases have to be taken to Arua. c. Environmental Protection Committees should integrate both the host community and the refugees and the same applies to the Parents Teachers Association under the livelihood programmes d. The settlements should also put in place administrative structures to help in resolving conflicts between the refugees and the host communities. They should also implement the Village Health Team system that will assist in disseminating information on healthy living.
Host Community Members Itula Sub-county Moyo District	a. They are experiencing shortage of land due to the influx of refugees and firewood has become expensive since the refugees also collect firewood from the same points. b. Parents attitude towards education is very poor,

	they prefer boys to go fishing along the Nile.
Yumbe technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)	a. Most of the roads are in a poor condition due a lot of traffic exerted on the roads which was not planned for. b. Due to prolonged drought, foo production was affected hence, this brought about food insecurity. c. Most of the sub-counties that do not host refugees do not benefit from this kind of projects and yet they are entry points. For example, Midigo Sub-county does not host refugees but water tracked from Midigo to the settlements. Therefore, should be a spillover of resources to such sub counties. d. Maintenance of the roads is quite challenging due inadequate funds and also delayed release of the funds. e. Most of the health centers should be upgraded to manage the health situation on ground.
Koboko technical team (NUSAF Desk Officer District Engineer, District, Community Development Officer and District Natural Resources Officer, District Environment Officer)	a. Parents have surrendered their responsibility in bringing up a girl child thus increasing on the rate of child marriages. b. Defilement cases are not usually reported which makes it hard to ascertain the situation on ground. c. Most of the health centers are overwhelmed with the influx of the refugees hence, increases stock outs of the drugs and poor health care.
Host Community in Lobule Sub County Koboko District	a. There of issues of shortage of land especially farm land which the host community attribute to sharing it with the refugees which leads to low production and eventually to hunger strikes in the area. e. Grass for roofing their houses is getting scarce because where they used to get grass from has become farm land and yet they cannot afford iron sheets. f. Most of the boreholes have broken down and they have no money to contribute towards repair of the boreholes. g. They is poor latrine coverage since most of the areas have high water table hence, the latrines sink and collapse. Therefore, they share with the neighbors.

9.7 ANNEX 7: SUMMARY OF STAKEHOLDER ISSUES OF 2016 CONSULTATIONS

Name and Position of person consulted	Organization/Agency	Issues raised during the consultations	Remarks
a. Wadri Sam Nyaka - LCV Chairperson b. Mr. Peter S -RDC c. Tiko Beatrice - District Health Inspector d. Titre A Robert - Programmes Coordinator e. Obia Richard - District Community Development Officer f. Obitre Stephen - District Water Officer	Arua District Local Government	a. Refugee impact is so huge. It covers various aspects of life. Impacts on the environment is so adverse and commitment of UNHCR is inadequate. Due to limited wood for construction and fuel, the refugees resorted to cutting down trees especially in Ocea Sub County and yet they have a negative mindset towards tree growing. b. Local land agreements with the local leaders of the communities and land owners should be secured and ensure no disputes are incurred in areas where the project is going to be implemented; c. Depletion of underground water sources due to drilling of so many boreholes. Water tracking is good during emergency situations but in the long run, it becomes very expensive and should cover host communities because some of them face acute water shortages. d. Rampant open defecation due to inadequate sanitation facilities and cultural norms is common in both refugees and host communities which breeds diseases. e. Collapsing Latrines due to sandy soils and also the rocky surfaces in the settlement areas make it hard to excavate the pits.	a. Other interventions such as abstraction of surface water and drilling of motorized boreholes should be looked into as a way of solving water related issues. b. Sensitization of the community on general and personal hygiene and proper usage and maintenance of communal facilities. c. Design of the drainable pit latrines should take into consideration the loose soils and rocky surfaces. d. Conflict resolution mechanism in this ESMF should be operationalized to handle conflict issues at project levels.
a. Jena Toma – Deputy Refugee Desk Officer b. Armitage Basikania– Settlement Commander Rhino Camp	Office of the Prime Minister-Arua	a. OPM clarified that the land occupied by refugee is from the communities through an MoU with the land owners and will revert to them once refugees; b. When infrastructure is to be set up, the Districts needs to formalize land question with the landlords in collaboration with OPM; c. The refugees and host communities have a cute water shortage which is affecting levels of	a. Though there are local agreements for refugees to stay in some of the camps, government should formally acquire such lands as it guarantees lives of refugees. b. There should be agreement where the lagoon is to be located.

Name and Position of person consulted	Organization/Agency	Issues raised during the consultations	Remarks
		sanitation and hygiene both in the settlements and in the host communities. d. There are cases of sexual and gender based violence amongst the refugees as well as early marriages especially for the girl child in the host communities and settlements. e. There are Refugee Welfare Council (RWC) that handle issues at all levels in the camps and such will held address conflicts inside the settlemnts while those outside in the host communities will be handled through existing local council/village systems.	
a. Aniku Saidi – LCV Vice b. Ojock K – For CAO c. Ayimawi Bernard – District Environment Officer d. Robert Baryamwesiga – Settlement Commander Bidi e. Andama k. Abdu – District Water officer	Yumbe District Local Government	a. The settlement is located on communal land which was acquired through an agreement by way of Memorandum of Understanding with OPM. However, in the future, the Government should own land permanently and such discussions need to be started b. Most of the areas of the refugees' settlements and host communities have rocky and sandy soils making sinking and maintenance of pit latrines a problem. c. The district has limited clean water sources so the project needs to focus on alternate sources of water covering host communities as well. d. Designs for WASH and classrooms needs to be consistent with applicable standards and approved by the District Engineers as provided in the Public Health Act; e. Moving forward from emergency to development is the focus of Government and schools should be built close to the communities so that, in the event of refugees returning to their countries the infrastructure should not be left in the bushes as did happen sometimes back.	a. The government needs to formalize and own the settlement land. This will resolve all land issues and provide a good environment for development of the disputed part of the settlement. b. Most of the refugees do livelihood activities similar to those of the host community and can therefore be organized and trained to develop their income base. c. There also need to strategically build infrastructure in areas where the services can be easily accessed by both refugees and host communities. This would ensure that the infrastructure remains in use even when the refugees retrun. d. The refugee and host communities programs should be implemented in collaboration with district line departments as well as the sub-

Name and Position of person consulted	Organization/Agency	Issues raised during the consultations	Remarks
			county levels for purposes of ensuring ownership and building synergies.
• Host and refugee communities	Bibi bidi Settlements	a. There are five early childhood centers, six primary schools serving both the host communities and the refugees and one secondary school; b. Water resources are quite a distance from the schools which affects both refugees and host communities alike; c. The ratio of the teachers to the pupils is overwhelming which affects learning; d. Encourage both the host communities and the refugees to do farming instead of depending on relief from humanitarian agenices; and e. Alcoholism and HIV/AIDS is on the rise in the settlements and host communities.	a. More water supply in the areas to improve on sanitation and hygiene in general. b. Carry out massive sensitization on the dangers of HIV/AIDS and alcoholism to both refugees and host communities. c. Tree planting programme should be implemented in order to conserve the environment and should focus on both the refugees and host communities
a. Onduaru Emilly b. Francisco Juma c. Dricile Augustine d. Omdoru Jane e. Lowuro Moses f. Ajua Charles g. Ewaru Doreen h. Econi Annet i. Akuma Jamadi j. Samuel M.	School Management Committee Yumbe	a. There are so many children in the schools (some schools have more than 2,000 pupils) and yet there are few teachers especially female teachers. b. Most schools don't have enough classrooms to accommodate the large number of pupils coming from both the refugees and host communities leading to congestion. More so with the temporary structures which are affected by bad weather. c. Teachers have to move a long distance to come to school as they are no staff quarters nearby. d. There is a challenge of language barrier as the refugees speak Arabic which affects education of both refugees and host communities. e. Poor feeding is another challenge in the schools.	Teacher accommodation facilities should be constructed near the schools to avoid coming to school late and to motivate the teachers to carry on their duties diligently.
a. Dr. Callist Tindimugaya – Commisioner, Water	Ministry of Water and Environment	a. Government is keen to guide the processes of settlements of the refugees with water and such	a. Adopt a holistic approach towards management of refugee

Name and Position of person consulted	Organization/Agency	Issues raised during the consultations	Remarks
Resources Planning and Regulations b. Eng. Joseph Oriono Eyatu – Commisioner Rural Water Supply and Sanitation		a process should be for the wider areas not, point based i.e. water should serve communities and neighborhoods too. b. Any Contractor contracted to drill boreholes should have a drilling permit and must obtain water abstraction Permit. c. Water source protection and Water catchment area management should be taken into consideration to avoid contamination of the water points.	settlements and host community water issues.
Name and Position of person consulted	Organization/Agency	Issues raised during the consultations	Remarks
• Mr. Edema Richard – Assistant CAO • Mr. Giyaya Charles – Natural Resources Officer & • Mr. Eberu James, District Environment Officer • Mr. Ojja Francis, District Forestry Officer	Adjumani District Local Government	a. The emergency phase or the resettling of refugees is a critical moment and has lots of short and long term negative environmental impacts with wider coverage. b. Some of the lands where refugee settlements have been established were offered by the communities freely without any MoUs with the landowners, is it possible to give the host communities some benefits in return? c. The District has very little involvement on refugee programs yet some of the refugee settlements have environmental challenges. d. There are issues of wetland degradation near refugee settlements as they try to increase land acreages for crop farming; e. There has been massive vegetation clearance by both the host communities and the refugees' yet very low rate of tree planting is being undertaken; and f. Some incidences of conflicts over resource use and access have also been recorded especially over water points and grazing land.	a. After refugees have been resettled, there is need for an environmental audit to establish impacts and what measures need to be instituted to restore the environment. b. The Project objective of Sub-component 2(c): Alternative Energy Sources is to improve host communities' access to alternative energy sources. The sub-component will support interventions that address energy requirements of host communities related to domestic needs for cooking and lighting, social services such as schools and health services, and productive activities including lighting for small shops/businesses and small manufacturing or processing. c. Conflict resolution mechanism in this ESMF should be operationalized to handle conflict

Name and Position of person consulted	Organization/Agency	Issues raised during the consultations	Remarks
			issues at project levels.
• Mr. Eswilu Donath-CAO • Nkuba Godfrey-Inspector of Schools • Mukalazi Dickson-Physical Planner • Muganira Edward- DCDO	Isingiro District Local Government	a. The settlement is located on Government land. However, there are a number of nationals who live on it and many use it for grazing. Important to note is that there are many refugees living outside the gazetted settlement areaThe district does not have a budget for the refugees, yet they share the available resources with the host community. This strain the already overwhelmed social services in the district. b. The district has limited clean water access and thus the project needs to focus on safe water provisioning projects. c. There are conflicts within the refugees and also with host community- social issues like animals of the host community entering the gardens of the refugees d. Project should be diversified to benefit the majority in that those who are not good at agriculture can be trained and given start up kits. e. There is need mainly to sensitize the communities both the refugees and communities about human rights, living in peace and utilizing the resources available. Promote dialogue meetings for peace building. f. There is need for a secondary school for instance in Rushasha there is no secondary school, so students have to move longer distances to attain education, which sometimes leading to school drop for those who can't pay fees in private schools. There is an issue of unqualified staff and lack of learning structures and also the language barrier, hinders the performance of learners. School infrastructure is in bad conditions and for private schools is worse. Therefore, government	a. The government needs to formalize and own the settlement land. This will resolve all land issues and provide a good environment for development of the disputed part of the settlement. b. There is a need to involve the district leadership in Programs targeting the refugees. c. Most of the refugees do livelihood activities similar to those of the host community and can therefore be organized and trained to develop their income base. d. There also need to strategically build infrastructure in areas where the services can be easily accessed by both refugees and host communities. This would ensure that the infrastructure remains in use when the refugees repatriate. e. The refugee and host communities' programs should be implemented in collaboration with district line departments as well as the sub-county levels for purposes of ensuring ownership and building synergies.

Name and Position of person consulted	Organization/Agency	Issues raised during the consultations	Remarks
		needs to rehabilitate the structures for instance there 189 government primary and 14 secondary schools.	
Nabirye Frida Chief Adminstrative Oficer, CAO	Kiryandongo District Local Government	a. Most social services facilities are strained due to the influx of refugees especially education, health centers and water sources. b. Refugees and host communities both engage in charcoal burning which has led to vegetation degradation. c. Refugees also tend to undermine local people claiming that they are "UNHCR protected" making it difficult to deal with them on many fronts.	a. The management of the camp and settlements should institute bye-laws to protect environment especially tree cutting. In Kiryandongo camps, all trees in the camps and settlements are numbered and can only be cut upon issuance of clearance by the camp Commandant. b. Tree planting component in the project be operationalized to address issues of environmental degradation.
Arnold Waiswa-Ayazika; Director, Environmental Monitoring and Compliance	National Environment Management Agency-NEMA	a. Normally emergency camps and settlement are set up in an emergency situation so, no EIA is being done before the camps are set, and therefore no annual environment compliance audits are done. Mitigation measures such as tree plantation, improved sanitation and water supply, encouraging use of energy saving stoves etc. so that to prevent or reduce environment degradation, b. Monitoring of camps and settlements can be done once or twice a year by District Environmental Officer. Monitoring frequency will depend on sensitivity of the location of that particular facility. Financial assistance will be required but technically NEMA presented by district officials can do the assignment.	a. OPM should plan to launch environmental audits for the camps after every 24 months after their establishment. b. The DEOs are well placed to conduct regular inspections of refugee camp sites.
Charlie Yaxley, Associate External Relations Officer	UNHCR	a. Land access and use issues are main sources of challenge in camps and are manifested in terms	a. Issues of land are to be sorted by OPM and they need to be

Name and Position of person consulted	Organization/Agency	Issues raised during the consultations	Remarks
		of encroachment and direct conflict. Refugees and host communities have tended to encroach on CFRs for woodfuel. b. One of the feasible livelihood avenues is for refugees to cultivate their own food but land availability is a challenge. c. Issues of environmental degradation are rife in both amongst refugee settlements and host communities and cannot be apportioned only to refugees.	formalized to reduce conflict; and b. The Agency has dedicated programmes to address environment and a host of other cross-cutting issues.
Andrew Malaba, Field Operation Manager	Lutheran World Federation, (LWF)	d. The refugees and the host communities both have vulnerable groups in terms of women, youth and the elderly. These groups face challenges regarding access and control over resources; e. Waste management in camps and settlements is poor. f. The 30% fund for the host community from refugee's projects fund, is earmarked for some category of interventions such as WASH, livelihood programs, food security, environment protection i.e. tree planting, solar technology, energy saving stones, etc. but not for roads construction. g. There are cultural large differences between refugees and host communities which triggers some conflicts. h. There is concern that, agencies tend to procure good and services as well as recruit employees from outside refugee hosting areas.	There should be deliberate target to support vulnerable groups such as women, youth and the elderly due to their unique socio-economic challenges. The government should allocate funds for community development to the districts hosting refugees since such areas are prone to a number of social and environmental shocks. The planned project component on livelihoods and environmental management should put in place measures for addressing amongst others, waste management. Procurements of goods and services should be done within the region hosting communities in order to support the areas.

Name and Position of person consulted	Organization/Agency	Issues raised during the consultations	Remarks
Mwodi Martin Kegere, Range Manager	National Forest Authority (NFA)	a. During emergency resettlement of refugees, some settlements are sometimes established within Central Forest Reserves (CFRs) though they are eventually relocated outside the CFRs. b. Host communities sometimes hire out parts of the CFRs land to refugees for cultivation and this brings tension between Government (NFA), refugees and the host communities.	OPM together with organizations resettling refugees should consult NFA or agencies responsible for protected areas to ensure refugees camps are not setup inside CFRs; Once resettled, refugees and host communities be sensitized on laws governing access to forests.
Akello Hawet, Principal Literacy Officer	Ministry of Gender, Labour and Social Development (MoGLSD)	The budget from the Ministry for community development considers only host communities. When having refugees the pressure is built on limited resources to accommodate both host communities and refugees.	a. The interventions focusing on refugees and host communities should pay attention to vulnerable groups especially women, youth and the elderly both in and outside the camps. b. The delivery of refugee related interventions with reference to use of 30% for the host communities should be done in consultations with MoGLSD to ensure it compliments government interventions.
Adiribo Edison Gestive, District Forestry Officer	Arua District Local Government	Soil and water conservation is one of the challenges in the camps and surrounding communities because of the fragile nature of the soils in the district at large; Latrine coverage is higher in the settlement camps than in the host communities.	Environmental sustainability is to be inbuilt in the project interventions in order to protect the environment and support the people's livelihoods both in the camp and in the host communities.
Andua Martin Drani	Assistant Chief Administrative Officer	The concept of host communities is complex in that, even those from far off areas endeavor to access social services meant for those near refugee hosting areas. Some of the interventions should be geared towards	The modality of delivering interventions to the host communities should be planned with the local governments who if resources allow, can make a contribution so that the intervention

Name and Position of person consulted	Organization/Agency	Issues raised during the consultations	Remarks
		addressing technologies for food security and improved productivity.	should meet needs of wider population who equally need such services. Livelihood interventions both for the refugees and host communities should amongst others, focus on introducing sustainable agriculture technologies such as irrigation and draught resistant crop varieties in order to address food security and sustainable livelihoods.
Abiribage Alex	Ag. Sub-county Chief	There are many youths both inside and outside the refugee camps that are jobless and idle. Some of the main needs outside the camps include: broken down boreholes; ill equipped and poorly staffed health centers; energy issues for cooking and lighting; poor communication between implementing partners and local government officials.	Need for skills center to be set up to help youth learn and develop skills for their empowerment. In addition, there should be participatory planning in the planning and delivery of social interventions in the host communities.

9.8 ANNEX 8: ATTENDANCE LIST FOR MEETINGS

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P.O. Box 28434, Kampala, Uganda

ATTENDANCE LIST

Project: DEVELOPMENT RESPONSE DISPLACEMENT IMPACT PROJECT.

Location: MOYO DISTRICT OFFICIALS Date: 6-12-17

Sr no.	Name	Designation	Contact	Signature
1.	Chelimo Alex	CAO	0772587855	
2.	LUGA DAVID	F.O	0782538179	
3	Vuemi Geoffrey	NDO / Ag. Dero	0774928909	
4	Dr. Drateka Christopher	Production Offic	0772540034	
5	Dr. Akule Richard	DVO/SAO	0782782379	
6	Zamulago Jonathan	Planner	0753826894	
7	Rukani Samson A	Eng. Assistant	0773791888	
8	Dr. Idi Franklin Amula	DHO	0772832822	
9	Idanga Dominic	Eng. Assistant-Water	0777706414	
10	Obuni Severino	Head Teacher	0774401515	

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ATTENDANCE LIST

Project: UPDATING ESMF & RPF FOR DRDIP NUSAF-3

Location: MOYO - ITULA SUB-COUNTY Date: 6-12-2017

Sr no.	Name	Designation	Contact	Signature
1.	ECAKIRA MARTINE	Vice Chairperson	0778942062	
2.	BAKO AMINA	Community member	-	
3	PEACE KALISUM	"	0770513622	
4	LOKUA Lily	"	0785526505	
5	BAATIO SCOVIA	member	-	
6	MAMAWI GODFREY	"	-	
7	ONZIMA LEONARD	"	0781704674	
8	OLEBA SIMON	"		
9	MAYSUKU ATBAKAR	"	0781535748	
10	ABAIY ELLY	"	-	

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ATTENDANCE LIST

Project: UPDATING ESMF & RPF DRDIP NUSAF-3

Location: MOYO Date: 6-12-2017

Sr no.	Name	Designation	Contact	Signature
1.	AYRMAN SAM SWADIK	MEMBER	0785909116	
2.	CIRIGA AMIN	11	—	
3	Lema Rashid	member	0783647368	
4	MIGA RASHID	11	0789129170	
5	BRAGULE SKIAN		0778629076	
6				
7				
8				
9				
10				

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ATTENDANCE LIST

Project: UPDATING ESMF & RPF DRDIP NUSAF-3

Location: LOBULE KOBOKO Date: 8-12-2017

Sr no.	Name	Designation	Contact	Signature
1.	GIFT SAFARI	COMMUNITY MEMBER	—	
2.	AMAMA MUTAMIL	11	—	
3	ANIFA	11		
4	Mageri bilana	11	—	
5	MARIMONA GBORA	11	—	
6	CANDIGA ALEX	COMMUNITY FACILITATOR NUSAF 3 PROSECT	0771277294	
7				
8				
9				
10				

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ATTENDANCE LIST

Project: UPDATING ESMF & RPF DRDIP NUSAF-3

Location: LOBULE KOBOKO Date: 8-12-2017

Sr no.	Name	Designation	Contact	Signature
1.				
2.	mawomba wahid	"	—	
3	Ahumedi Demaya	"	—	
4	mukiz IDRI	"	-	
5	AKIKe Akisi	"	-	
6	KEMERUGA SWABU	"	-	
7	Rahuman Kamali	"	-	
8	[illegible] KHALID	"	-	
9	ARAFAT S	"	-	
10	AMIKE MANZU	"	-	
	ARUBE ADAM	"	-	

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ATTENDANCE LIST

Project: UPDATING ESMF & RPF DRDIP NUSAF-3

Location: LOBULE KOBOKO Date: 8-12-2017

Sr no.	Name	Designation	Contact	Signature
1.	YUMAGA ANWAR	Community Member	—	
2.	NIGO MUKUTARI	"	—	
3	WAILOJO SWAIL	"	—	
4	ZUBERI ACIOW	"	—	
5	Imuran Senga	"	—	
6	AIAKI HAKIM	"	—	
7	YOSA MUOPSIBI	"		
8	ALUMA ASUMAN	"		
9	ALEMA TUAHA	"	—	
10	ALI [illegible]UKA	"	—	
11	AKUBI SAFIA	"	—	

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ATTENDANCE LIST

Project: UPDATING ESMF & RPF DRDIP NUSAF-3

Location: KOBORO - DISTRICT Date: 8-12-2017

Sr no.	Name	Designation	Contact	Signature
1.	ALONGA SIMON LOYUMA	AG OCAO	0779819570	
2.	ZULAIKA Amman	Fisheries officer	0776-548047	
3	Engabua Simon	SCDO	0775545732	
4	[illegible]	DEO	0782906566	
5				
6				
7				
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9				
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ATTENDANCE LIST

Project: DEVELOPMENT RESPONSE DISPLACEMENT IMPACT PROJECT

Location: YUMBE DISTRICT Date: 7/12/17

Sr no.	Name	Designation	Contact	Signature
1.	ANIKU SAIDI	LCV VICE	0772892927	
2.	OJOOK K. BRAN.	PAS/NDO	0772-541867	
3	AIGA JAMAL	Assist. Eng. officer	0772254433	
4	KIIRA JAMAL	SCDO	0775307458	
5	Amin M.G. Clay	CT.O	0772-322993	
6				
7				
8				
9				
10				

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ATTENDANCE LIST

Project: Development Response e Displacement Impact Project.

Location: LAMWO DISTRICT OFFICIALS Date: 4/12/17

Sr no.	Name	Designation	Contact	Signature
1.	ALUKU ANTHONY JOLI	NDO	0781558059	
2.	Kinyera George Bongoman	ACAO	0779937330	
3	O. Augustine Okwera	SEA	0782159714	
4	Komakech Robert Okwedo	DWO	0772841405	
5	Ocan Jalico	DCDO	0772358879	
6	Ohwam Jim	MCI	0772358927	
7	OLING JACOB	HSR, AKANYO P/S	0773435119	
8	OTTO FRANCIS	C/person LC1	0783937606 Akyella Central	
9				
10				

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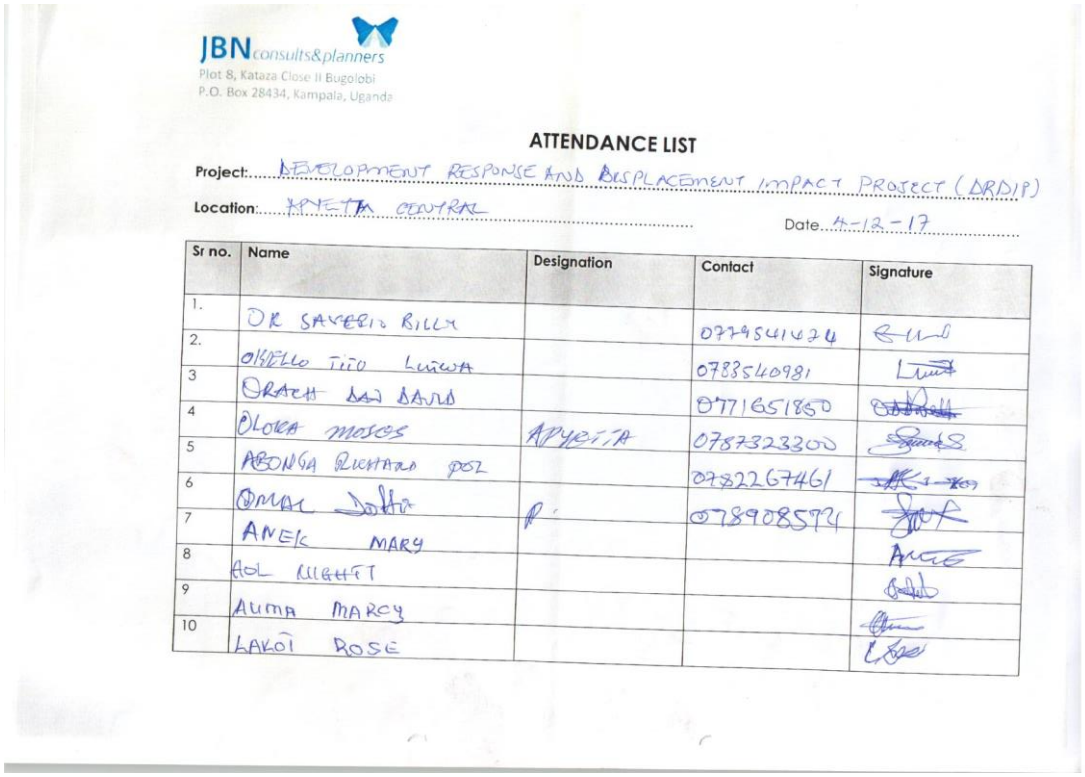
ATTENDANCE LIST

Project: DEVELOPMENT RESPONSE AND DISPLACEMENT IMPACT PROJECT (DRDIP)

Location: PALABEK-OGILI Date: 4-12-17

Sr no.	Name	Designation	Contact	Signature
1.	ARACH JULIETH Sunday			
2.	ALOYO JENETH			
3	ACIRO GRACE			
4	[illegible] SISILIYA			
5	AUMA			
6	Atim SARAH		0778886821	
7	ALIMO CAN JETINEPER		0774953211	
8				
9				
10				



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ATTENDANCE LIST

Project: DEVELOPMENT RESPONSE AND DISPLACEMENT IMPACT PROJECT (DRDIP)

Location: APETTA CENTRAL

Date. 4-12-17

Sr no.	Name	Designation	Contact	Signature
1.	DR SAVERIO BILLY		0774541674	
2.	OKELLO TITO LUWA		0783540981	
3	ORACH DAVID DAVID		0771651850	
4	OLOKA MOSES	APYETA	0787323300	
5	ABONGA RICHARD POZ		0782267461	
6	OMAL John	P.	0789085974	
7	ANEK MARY			
8	ADL NIGHET			
9	ALIMA MARCY			
10	LAKOI ROSE			

9.9 ANNEX 9: SUMMARY OF PEST MANAGEMENT PLAN

Potential Impacts and Risks	Mitigation Measures	Implementation tool	Expected result	Monitoring indicators	Responsibility
Improper use of pesticides by farmers and extension staff	Educate farmers and extension staff on proper use of pesticides and pesticide use hazards including use of PPE.	Pesticide hazards and use guide manual or leaflet for the project (include simple pictorial presentations)	Proper use of pesticides by farmers and farm assistants	Number of cases of pesticide poisoning occurring under the project	DAO, DEO
	Control and supervise pesticide use on farms	Adoption of IPM approaches/ techniques	Farmers trained in IPM techniques	Number of farmers trained, Training records	DAO, DEO
	Monitor pesticide residue in crops	Random sampling procedure for crops and storage products	Pesticide residue in crops within acceptable limit/MRL	1. Levels and trend of pesticide residue in sampled crops 2. Number of times exported crops are rejected due to pesticide residues	DAO, DEO
Pollution of water resources and aquatic life	Control and supervise pesticide use by farmers	Adoption of IPM approaches/ techniques	Farmers trained in IPM techniques	Number of farmers trained, Training records	DAO, DEO
	Proper disposal of pesticide containers by resellers/farmers	Pesticide container collection and disposal plan	Pesticide container disposal plan developed and implemented	1. Number of farmers/ resellers aware of pesticide container disposal plan 2. Number of containers collected	DAO, DEO
	Monitor pesticides in water resources	Environmental quality monitoring plan (linkage with Project ESMP)	Pesticide concentration in water resources (boreholes, streams etc.)	Levels of pesticides in water resources	DAO, DEO

Potential Impacts and Risks	Mitigation Measures	Implementation tool	Expected result	Monitoring indicators	Responsibility
Abuses in pesticide supply and sales	Identify all pesticide distributors and resellers interested in providing services and products to farmers under the Project	Registration policy for all interested distributors and resellers under project	Only approved and licensed dealers and resellers supply pesticides under project	a) Company registration documents b) Evidence of license/permit to operate in pesticides c) Evidence of location and contacts of suppliers/resellers	DAO
	Confirm status and integrity of pesticides supplied under project Ban big pesticide containers to minimize decanting cases	a.) All pesticides are to be in the original well labeled pesticide containers prior to use b.) No decanting of pesticides under this project c) Inspection of pesticides at farm gate prior to use Decanting policy (No decanting of pesticides under project)	a) Only approved and registered pesticides used under project b) Banned pesticides avoided c) Fake and expired pesticides avoided d) Integrity of pesticide guaranteed at farm gate level All pesticides delivered for use are in the original containers	a) List of pesticides supplied and used in line with Agricultural Chemicals Board b) Cases of pesticides found in non-original containers c) Inspection records for pesticides at farm gate prior to use Cases of pesticides found in non-original containers	DAO
Poisoning from improper disposal of pesticide containers	1. Educate farmers, extension staff and local communities on health hazards associated with use of pesticide containers	1. Pesticide hazards and use guide manual or leaflet for the project	Farmers, extension staff, local communities educated on pesticide health hazards	Number of cases of pesticide poisoning through use of pesticide containers; Number of farmers returning empty pesticide containers at collection points; Number of farmers, extension staff, and resellers trained in proper cleaning of pesticide containers	DAO, DEO
	2. Properly dispose pesticide containers	2. Pesticide container cleaning and disposal plan	Pesticide container cleaning and disposal		

Potential Impacts and Risks	Mitigation Measures	Implementation tool	Expected result	Monitoring indicators	Responsibility
Provide emergency response to pesticide accidents and poisoning	Emergency response plan	Pesticide accidents and emergencies managed under the project	Number of pesticide accidents and emergencies	DAO, DEO	DAO
	Provide PPEs to farmers/extension staff for pesticide use in the fields	Health and safety policy for farm work	Farmers and accompanying dependants (children) protected against pesticide exposure in the fields	Quantities and types of PPEs supplied or made available under the project	DAO
	Educate farmers/ farm assistants in the proper use of pesticides	Pesticide hazards and use guide manual or leaflet for the project (include simple pictorial presentations)	Farmers know and use pesticides properly; pesticide hazards and use guide leaflet or flyers produced.	Number of farmers trained in pesticide use; Number of farmers having copies of the pesticide hazard and use guide flyers;	DAO, DEO
	Properly dispose obsolete and unused pesticides	Obsolete and unused pesticide disposal plan	obsolete and unused pesticide disposal plan prepared and implemented	Relationship between pesticide supply and usage	DAO, DEO
	Educate farmers to obtain or purchase quantities of pesticides required at a given time and to avoid long term storage of pesticides	Pesticide use policy/plan	Only pesticides needed are purchased; long term storage of pesticides by farmers avoided	Relationship between pesticide supply and usage	DAO

Potential Impacts and Risks	Mitigation Measures	Implementation tool	Expected result	Monitoring indicators	Responsibility
	Provide emergency response to pesticide accidents and poisoning	Emergency response plan	Pesticide accidents and emergencies managed under the project	Number of pesticide accidents and emergencies	DAO, DEO
Threat from other crop pests and diseases	Educate and train farmers to adopt good agricultural practices (GAP)	Adoption of IPM techniques/ approaches	Farmers trained in IPM techniques and GAP	1. Number of farmers trained, Training records 2. Incidence of crop pests 3. Production losses from crop pests	DAO
	Apply ACB approved or recommended pesticide if necessary	Inspection of pesticides at farm/storage gate prior to use (Project Policy)	Applied pesticides registered and approved by key stakeholders and in conformity with IPM principles	Records of pesticides applied at each farm	DAO
Impact on post-harvest losses due to pests	1. Provide adequate and proper storage facilities	Post-harvest loss reduction plan based on IPM techniques in place	a.) Post harvest losses avoided or minimized b) Applied pesticides registered and approved by key stakeholders and in conformity with IPM principles	Number of farmers trained in IPM techniques for post-harvest storage; Number and condition of storage facilities in use	DAO
	2. Monitor incidence of post-harvest pests			Number of cases of post-harvest pests	DAO
	3. Confirm status and integrity of pesticides at storage gate prior to use	Inspection of pesticides at farm/storage gate prior to use (Project Policy)		Records of pesticides applied at storage sites/ rooms	DAO

9.10 ANNEX 10: WASTE MANAGEMENT PLAN

Introduction

This Waste Management Plan (WMP) has been prepared to address waste management issues associated with the Project in line with legal and regulatory requirements. All stakeholders in the project shall have to adhere to this Plan. The NUSAF Environment Specialist together with the DEOs are responsible for ensuring that waste is managed in accordance with this Plan by providing the necessary resources and by issuing instructions and guidance during the course of project.

Definition of Waste

The National Environment (Waste Management) Regulations 1999 state that "waste" includes any matter prescribed to be waste, and any radioactive matter, whether liquid, solid, gaseous or radioactive which is discharged, emitted or deposited into the environment in such volume, composition or manner as to cause an alteration of the environment.

Key Laws and Regulations

Reference will be made to the provisions in the following legal framework:

a. Constitution of the Republic of Uganda, 1995
b. The National Environment Act (Cap 153)
c. Water Act Cap 152
d. National Environment (Waste Management) Regulations, 1999
e. The National Environment (Standards for Discharge of Effluent into Water or on Land) Regulations, 1999
f. The National Environment (Audit) Regulations, 2006
g. The National Environment Management Policy, 1994
h. General Specifications for Roads and Bridge Works 2005

Waste Management Principles

Waste will be managed in line with the hierarchy of waste management options ordered by preference as follows:

Waste Prevention – It is the responsibility of all project stakeholders to limit the amount of waste produced, insofar as is reasonably and economically practicable. This is to be achieved by careful consideration of the disposal implications of all developments and purchases.

Reuse – It is the responsibility of all stakeholders in so far as is reasonably and economically practicable to reuse articles that have not yet reached the end of life.

Recycling – Where opportunities exist and where regulations apply, waste recycling shall be encouraged and implemented to minimize the amounts of waste destined for landfill.

Transport – Waste will be collected from site waste hold/storage areas at regular intervals to authorized transfer, treatment or disposal sites only. Transportation of waste shall be done by NEMA Licensed Waste Transporters. Any vehicle used for the transportation of waste must be fit for purpose.

Treatment - Where wastes are sent for treatment to render safe or reduce hazardous properties of waste prior to recycling or disposal, it must be ensured that the segregation, storage, handling, transport and treatment processes comply with legislation.

Disposal – Where the production of waste is unavoidable, it shall be ensured that the segregation, storage, handling, transport and disposal processes comply with legislation and contract requirements. Hazardous wastes where possible shall be treated using appropriate technologies to remove or minimize the hazardous properties prior to disposal. All treatment/sorting facilities shall be licensed by NEMA such that they are permitted to accept, transfer and treat wastes accordingly.

Waste Management Hierarchy

In deciding on the best method for managing any waste, there is a hierarchy for decision making which addresses issues such as sustainability, cleaner production, health, safety, and environmental protection. The same hierarchy will be applied to the Project project at each level, starting at the top of the hierarchy. The hierarchy will be as follows:

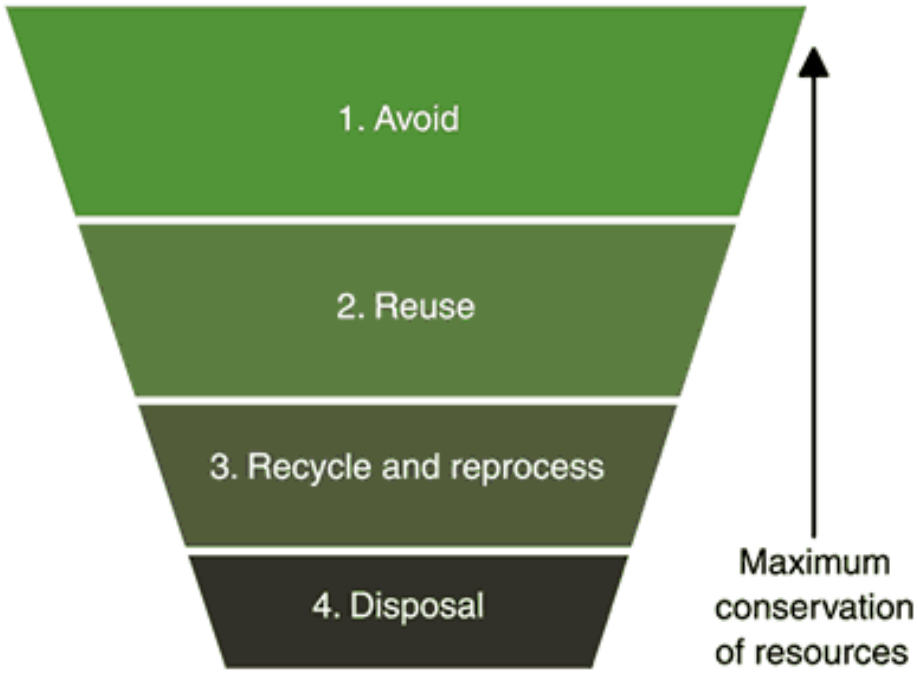


Figure: Waste Minimization Hierarchy

Avoid/Prevent: Waste avoidance by reducing the quantity of waste being generated. This is the simplest and most cost-effective way to minimize waste. It is the most preferred option in the Waste Management Hierarchy and is therefore ranked first. All waste generators shall endeavor to prevent waste by tight estimating to ensure that large surpluses of construction materials are not delivered to site; supplier co-ordination (requiring the supplier to take back/buy back surplus and sub-standard/rejected materials); operate a "just in time" delivery system (coordinating material delivery with its use).

Reuse: Reuse occurs when a product is used again for the same or similar use with no reprocessing. Reusing a product more than once in its original form reduces the waste generated and the energy consumed, which would have been required to recycle.

Recycle and Reprocess: Recycling involves the processing waste into a similar non-waste product consuming less energy than production from raw materials. Recycling spares the environment from further degradation, saves landfill space and saves resources.

Dispose: Removing waste from worksites, compounds and offices and dumping in a licensed landfill site, or other appropriately licensed facility.

General Storage, Collection and Transport of Waste

The following measures to minimize adverse impacts will be instigated:

a. Handle and store waste in a manner which ensures that it is held securely without loss or leakage, thereby minimizing the potential for pollution;
b. Use waste hauliers authorized or licensed to collect specific categories of waste;
c. Remove waste in a timely manner;
d. Maintain and clean waste storage areas regularly;
e. Minimize windblown litter during transportation by either covering trucks or transporting waste in enclosed containers;
f. Obtain the necessary waste disposal permits from NEMA, if they are required, in accordance with the National Environment (Waste) Management Regulations 1999;
g. Dispose of waste at licensed waste disposal facilities;
h. Develop procedures such as a ticketing system to facilitate tracking of loads, particularly for chemical waste, and to ensure that illegal disposal of waste does not occur; and
i. Maintain records of the quantities of waste generated, recycled and disposed where feasible.

Temporary Waste Storage and Segregation
Waste storage facilities will be provided as a secure, short term store for all waste streams generated on site prior to them being collected by relevant waste carriers for final disposal. Wastes must be classified and segregated in accordance with the National Environment (Waste) Management Regulations 1999 to ensure that each category of waste transported by or on behalf of the project meets the waste acceptance criteria of the authorised waste receiving site/process. All Contractors' staff has a responsibility to ensure that the waste generated by their activities are segregated and identified as follows:

Waste Electrical and Electronic Equipment
Waste Electrical and Electronic Equipment (WEEE) is any item that that is powered by mains or battery electricity. WEEE must be segregated from other waste.

Waste Batteries – There are certain battery types that are classified as Hazardous Waste and so must be segregated, stored and transported for recycling separately from non-hazardous batteries and or other waste.

Waste Destined for Recycling – Contractors will as opportunities arise implement waste recycling schemes to minimise the amount of biodegradable waste that goes to landfill and to reduce the impact to the environment from the final disposal of other wastes. Plastic bottles, glass, aluminium cans, and metals will be stored onsite and then given away for recycling.

Domestic Waste – Domestic Waste is the non-infectious and non-hazardous waste found in any household or office. It shall be segregated according to the labels.

Food (Catering) Wastes
a. Catering waste is divided into food waste and non-food waste.
b. Catering waste shall be collected and separated by personnel in the catering team and then transported by the waste collector.
c. Food waste shall be removed daily from the kitchen.
d. Food waste shall always be contained in plastic bags for disposal to prevent pest like flies and rats e.g. from breeding.
e. Non-food waste (beverage cans, packing materials, etc.) shall be collected in separate containers

Medical Waste
The key to minimization and effective management of health-care waste is segregation (separation) and identification of the waste. The most appropriate way of identifying the categories of medical care waste is

by sorting the waste into color-coded plastic bags or containers (WHO, 1995). In addition to the color coding of waste containers, the following practices are recommended (WHO, 1995).

a. Bags and containers for infectious waste will be marked with the international infectious substance symbol;
b. All sharps will be collected together, regardless of whether or not they are contaminated. Containers should be puncture-proof (usually made of metal or high-density plastic) and fitted with covers. They should be rigid and impermeable so that they safely retain not only the sharps but also any residual liquids from syringes. To discourage abuse, containers should be tamper-proof (difficult to open or break) and needles and syringes should be rendered unusable. Where plastic or metal containers are unavailable or too costly, containers made of dense cardboard are recommended (WHO, 1997); these fold for ease of transport and may be supplied with a plastic lining.

Figure 21: Illustration of the coding system recommended by World Health Organization

Chemical Waste

Chemical waste that is produced should be handled in accordance with the National Environment (Waste) Management Regulations, 1999. Containers used for the storage of chemical waste should:

a. Be suitable for the substance they are holding, resistant to corrosion, maintained in good condition, and securely closed;
b. Display a label in English
c. Containers used for the storage of chemical wastes shall be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed Display a label. Proper labelling is essential.
d. The storage area for chemical waste shall:
   - ❖ Be clearly labelled and used solely for the storage of chemical waste;
   - ❖ Have an impermeable floor and bundling, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest;
   - ❖ Have adequate ventilation;
   - ❖ Be covered to prevent rainfall entering (water collected within the bound must be tested and disposed as chemical waste if necessary);
   - ❖ Be arranged such as to separate incompatible materials.

Excavated Materials

a. Excavated materials are not considered likely to cause adverse impacts, since they may be possible to be used as reclamation fill, which is considered a useful reuse of the material. Any uncontaminated inert material may be delivered to public fill site.
b. Surplus excavated material, quarry overburden, rock rejected for aggregate, aggregate surplus to the requirements and the like shall not be discarded indiscriminately.
c. Different types of surplus excavated materials shall be deposited separately in the spoil dumps or quarries requiring restoration.

Construction and Demolition Waste

a. Careful planning and good site management can minimize over ordering and waste of materials such as concrete, mortars and cement groups;
b. If feasible, the noise enclosure shall be designed so that the materials are reusable after it has been dismantled and removed;
c. The design of formwork could maximize the use of standard wooden panels so that high reuse levels can be achieved;
d. Alternatives such as steel formwork or plastic facing could be considered to increase the potential for reuse;
e. Disposal of construction waste can either be at a specified landfill, or a private landfill to be acquired by the Contractor.

Medical Waste

Description – Medical care based wastes including used and/or contaminated sharps will be generated at health care centers. This particular waste is hazardous by its nature and is basically classified in infectious and non-infectious wastes.

Disposal Options

In the project, medical waste will be handled as follows:

a. General medical care based wastes (packaging e.g. boxes etc.) will be disposed just like for domestic refuse;
b. Highly infectious waste shall, whenever possible, be sterilized immediately by autoclaving. It therefore needs to be packaged in bags that are compatible with the proposed treatment process: red bags, suitable for autoclaving, are recommended.
c. Small amounts of chemical or pharmaceutical waste may be collected together with infectious waste;
d. Disposal by incinerating aims at complete combustion of medical waste is to totally burn it up to complete sterile ashes.

There are incinerators locally fabricated in Uganda. A good example is the MAK IV incinerator that has been specially invented for the burning of medical waste such as used cotton, syringes and safety boxes. The stainless-steel machine uses waste paper as fuel and burns at up to about 1200 degrees Celsius. The top of the incinerator is covered with sand, to stop air leakage but also work as refractory powder, to prevent heat loss. It can burn 5 kilos of waste in about 25 minutes.

Hazardous (Chemical) Waste

- For the process which generates chemical waste, it may be possible to fine alternatives which generate reduced quantities or even no chemical waste, or less dangerous types of chemical waste.
- The wide range of materials and chemicals involved such as oil, lubricants, cutting oils, sludge, paints etc. Hazardous waste shall be identified, classified, handled and disposed of safely.

- The machinery used during construction will require maintenance that will include change of engine oil, hydraulic oil and coolants.
- The maintenance schedule varies from machine category and the type of fluid changed. Typically, maintenance is determined by the number of hours of operation of a machine as shown below for bulldozers:
    - ✓ Every 250 hours or monthly - Engine oil & filters plus transmission filters.
    - ✓ Every 500 hours or 3 months - Fuel filters and hydraulic system filters.
    - ✓ Every 1000 hours or 6 months - Transmission oil and final drive oil.
    - ✓ Every 2000 hours or one year - Hydraulic system oil and Coolant
    - ✓ For small vehicles, maintenance is typically carried out after accumulation of 2500 miles usually after 3 months i.e. 4 oil changes per year. The number of machines and the frequency of service are related to construction activity.

A NEMA-Licensed Contractor will be engaged to transport and dispose of chemical waste. Advice should be sought from the DEO or NUSAF Environment Specialist about safe handling, storage, transport, treatment and disposal for any other waste substance or material that is not covered in this WMP.

Table 29:**Detailed Hazardous Waste Inventory and Management Plan**

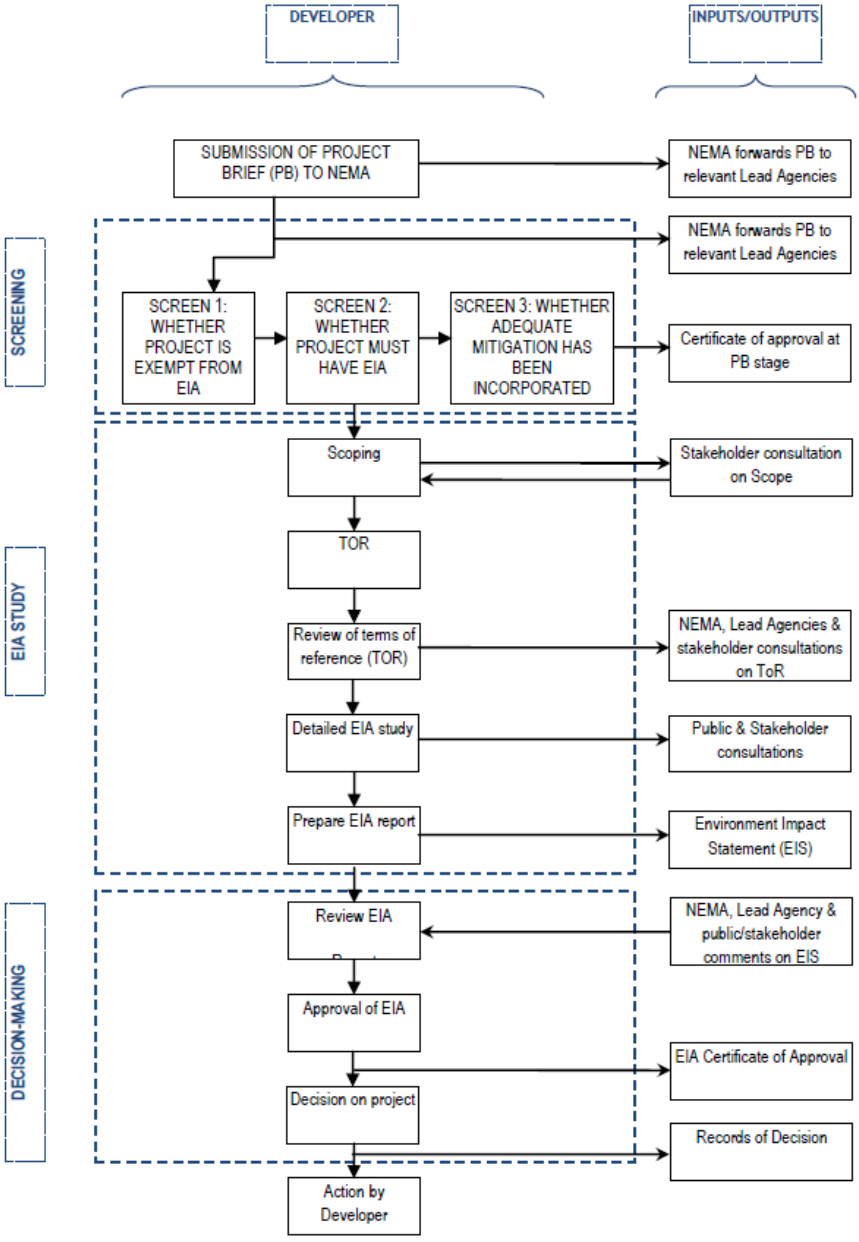
Waste Type	Description	Source	Hazardous Characteristics	Management Or Treatment Option
• Acidic Wastes	• Spent pickling and cleaning acids	• During construction and maintenance of equipment/machinery.	• Corrosive (sulphuric acid, hydrochloric acid), will contain heavy metals.	Neutralize with lime and dispose residues to landfill
• E-Waste	• VDU's Computer • Waste Cell Phones • Printer Cartridges	• Various	• Heavy metals including Cadmium, Nickel and Lithium from batteries	• Recycle or treat, contain and dispose to Landfill
• Oily (Hydrocarbon)Waste	• Oily water	• Oily Water Drains from vehicle maintenance areas	• Petroleum Hydrocarbons, PAHs	Oil separators for recovery of oil and send offsite for incineration
	• Lubricating Oil	• Mechanical Workshops	Petroleum hydrocarbons, heavy metal compounds present as additives, e.g. Zn, Mo, etc.	• Incineration
	• Grease	• Mechanical Workshops	Can contain Heavy Metals and Antimony as additives	• Incineration
	• Contaminated Rags	• Mechanical Workshops	• Petroleum hydrocarbons, • degreasers	• Incinerate
	• Oil Contaminated • Soil / Adsorbents	• Mechanical Workshops	• Petroleum hydrocarbons, • degreasers	• Incinerate
	• Oil Filters	• Mechanical Workshops	• Petroleum, hydrocarbons, • degreasers	Recover oil and send for recycling of metal components.
• Clinical waste	• Sharps	• Health Centres	• Infectious – needle stick, injuries, etc.	Incineration at in high temperature incinerator
	• General Infectious Waste	• Health Centres	• Infectious	Incineration at in high temperature incinerator
	• Pharmaceutical / Chemical Waste	• Health Centres	• Toxic; can include solvents	• Incineration at in high temperature incinerator
• Waste Chemicals	• Detergents and Cleaning Chemicals	• Offices	• May be corrosive and can contain chlorine chemicals. • Are toxic to aquatic organisms.	• Treat, contain and dispose as hazardous waste.

Table 30: **Detailed Non-hazardous Waste Inventory and Management Plan**

Waste Type	Description	Source	Management Or Treatment Option
Scrap Metal	Various	During construction especially from fabrication works	• Waste metals can be sold as scrap for recycling
Domestic (General) Waste including wood waste, office waste, and Canteen waste	Packaging, paper, Food	Administration office block, kitchen, etc.	• To be stored onsite to be collected by NEMA licensed Waste Collector to nearest Municipal Composting Site; • Further sorting and recovery of material to be conducted by the facility staff at nearest Composting Site; • Composting
Sand/Soil/Overburden /Rubble from construction	Mainly during road construction	Various	• Utilize as fill material for stone quarries and borrow pits and take excess material to landfill.
"Clean" Run-off Water		"Clean" areas of site including Batching Plant	• Discharge to drainage system; • Collect and utilize as water for dust suppression (sprinkling) if acceptable contamination levels.

9.11 ANNEX 11: DETAILED ESIA PROCESS IN UGANDA

The ESIA guidelines (NEMA 1997) and the ESIA regulations (NEMA 1998) recognize the following stages in an ESIA process: Project Brief formulation; Screening; Environmental impacts study; and Decision making. In addition, public consultation is required throughout the ESIA process.



(Source: ESMF MoES, 2013)

The EIA process in Uganda as described is initiated by the submission of a project brief – a document that contains the same sorts of information that are in the ESSF and a format for which is contained in the EIA guidelines. Once the information is judged to be complete, NEMA requests comments from the lead agency and then screens the

project. The Executive Director has three options: (a) approve the proposed project, if the EIA is not mandatory and the project brief includes adequate mitigation measures, or (b) request the developer to prepare an Environmental and Social Impact Study (ESIS) if a decision cannot be made on the basis of the project brief. If OPM's Environmental Specialist has ascertained that the project is on the mandatory ESIA list, NEMA state that the project brief stage is normally omitted, moving straight into the ESIA process. If the decision is for an ESIS, the proponent obtains NEMA approval of the proposed ESIA consultant, conducts a scoping exercise, and agrees with NEMA on the study terms of reference. The study is conducted, and culminates in submission of an Environmental Impact Statement (ESIS) to NEMA for review and decision. Stakeholder consultation is mandatory at scoping, Terms of Reference preparation, during the environmental study, and preparation of the draft Environmental and Social Impact Statement (ESIS). The content of an ESIS, as specified in the EIA regulations, covers the recognized elements of environmental and social assessment good practice, including consideration of technical and site alternatives and induced and cumulative impacts.

The EIA Regulations (First Schedule) list the issues to be considered in an EIA, including:

a. Biodiversity
b. Ecosystem maintenance
c. Fragile ecosystems
d. Social considerations including employment generation, social cohesion or disruption, immigration or emigration, local economy
e. Effects on culture and objects of cultural value
f. Visual impacts

Preparation of Project Brief

According to the National Environment Act, "project brief" means a summary statement of the likely environmental effects of a proposed development referred to in section 19 of the Act. Unlike the ESIA, a project brief does not require a scoping report and neither submission of terms of reference for approval by NEMA.

According to Regulation 5 of the ESIA Regulations, 2006, a Project Brief is supposed to contain the following:

a. the nature of the project in accordance with the categories identified in the Third Schedule of the Act;
b. the projected area of land, air and water that may be affected;
c. the activities that shall be undertaken during and after the development of the project;
d. the design of the project;
e. the materials that the project shall use, including both construction materials and inputs;
f. the possible products and by-products, including waste generation of the project;
g. the number of people that the project will employ and the economic and social benefits to the local community and the nation in general;
h. the environmental effects of the materials, methods, products and by-products of the project, and how they will be eliminated or mitigated;
i. Any other matter which may be required by the Authority.

If the Executive Director is satisfied that the project will have no significant impact on the environment, or that the Project Brief discloses sufficient mitigation measures to cope with the anticipated impacts he may approve project. The Executive Director of NEMA or his delegated official shall then issue a Certificate of Approval for the project. However, if the Executive Director finds that the project will have significant impacts on the environment and that, the Project Brief does not disclose sufficient mitigation measures to cope with the anticipated negative impacts, he shall require that, the developer undertakes an ESIA for the planned project.

Environmental Screening

The purpose of screening is to assist categorize the type of ESIA required for the project i.e. does it require a full ESIA, a Project Brief or no ESIA at all is required. This is important to enable the application of the appropriate ESIA level based on the project's anticipated levels of significant impacts as elaborated in the National Environment (EIA) Guidelines 1997.

Scoping and Preparation of ToRs

Scoping is the initial step in the ESIA process. Its purpose is to determine the scope of work to be undertaken in assessing the environmental impacts of the proposed project. It identifies the critical environmental impacts of the project for which in-depth studies are required, and elimination of the insignificant ones. The scoping exercise should involve all the project stakeholders so that consensus is reached on what to include or exclude from the scope of work. It is also at this stage that project alternatives are identified and taken into consideration. The contents of the scoping report are the same as the project brief; however, more detail is likely to be needed. This may involve some preliminary data collection and fieldwork. The Developer takes the responsibility for scoping and prepares the scoping report after consultation with NEMA, Lead Agencies and other stakeholders. The developer with assistance from technical consultants will draw up the ToRs for the ESIS and submit a copy to NEMA that shall in turn be forwarded to Lead Agencies for comments, in this case including the District Environment Officer.

Preparation of the ESIS

In preparing an ESIS, relevant information is collected on issues of real significance and sensitivity. These are then analyzed, mitigation measures developed for the adverse impacts and compensatory measures recommended for unmitigated environmental impacts. Measures aimed at enhancing beneficial or positive impacts are also given. An ESIS documents the findings and is submitted to NEMA by the developer.

Review of ESIS and Decision on Project

The Developer is required to submit ten (10) copies of the ESIS to NEMA for review and approval. NEMA then forwards a copy to the Lead Agencies for comments. NEMA in consultation with the Lead Agencies shall review the contents of the ESIS, paying particular attention to the identified environmental impacts and their mitigation measures, as well as the level of consultation and involvement of the affected stakeholders in the ESIS process. In this review, the level to which the ToRs set out for the study is addressed shall be considered. In making a decision about the adequacy of the ESIS, NEMA shall take into account the comments and observations made by the Lead Agencies, other stakeholders and the general public. NEMA may grant permission for the project with or without conditions, or refuse permission. If the project is approved, the Developer will be issued a Certificate of Approval.

Environmental and Social Management Plan

The Environmental and Social Management Plan (ESMP) is intended to ensure efficient management of environmental and social issues in subprojects. The ESMP consists of:

a. The relevant project activities,
b. The potential negative environmental and social impacts,
c. The proposed mitigating measures,
d. The institutions responsible for implementing the mitigation measures,
e. The institutions responsible for monitoring the implementation of the mitigation measures and the frequency of the afore-mentioned measures;
f. Capacity building needs and
g. The cost estimates for these activities.

In many cases, Project will likely have sub-projects, most of which are small in nature without significant environmental impacts. This calls for ESMP specific actions to mitigate these impacts and conforming to the obligations stipulated in the screening exercises, the environmental checklists and all legal instruments in force. At

the time of the implementation of the sub-projects, the potential environmental and social impacts must be clearly identified and a management plan formulated, implemented and the plan's performance monitored during and after execution of sub-project activities. The impacts must be avoided or neutralized where possible or mitigated in conformity with Uganda's and the World Bank's prescriptions for sound environmental management.

Environmental Management and Monitoring Plan

Monitoring is the continuous and systematic collection of data in order to assess whether the environmental objectives of the project have been achieved. Good practice demands that procedures for monitoring the environmental performance of proposed projects are incorporated in the ESIS. Monitoring provides information on the occurrence of impacts. It helps identify how well mitigation measures are working, and where better mitigation may be needed. The monitoring program should identify what information will be collected, how, where and how often. It should also indicate at what level of effect there will be a need for further mitigation. How environmental impacts are monitored is discussed below.

a. Responsibilities in terms of the people, groups, or organizations that will carry out the monitoring activities be defined, as well as to whom they report amongst others. In some instances, there may be a need to train people to carry out these responsibilities, and to provide them with equipment and supplies;
b. Implementation Schedule, covers the timing, frequency and duration of monitoring are specified in an implementation schedule, and linked to the overall sub project schedule;
c. Cost Estimates and Source of resources for monitoring need to be specified in the monitoring plan;
d. Monitoring methods need to be as simple as possible, consistent with collecting useful information, so that the sub project implementer can apply them.
e. The data collected during monitoring is analyzed with the aim of:
    - ❖ Assessing any changes in baseline conditions;
    - ❖ Assessing whether recommended mitigation measures have been successfully implemented;
    - ❖ Determining reasons for unsuccessful mitigation;
    - ❖ Developing and recommending alternative mitigation measures or plans to replace unsatisfactory ones; and
    - ❖ Identifying and explaining trends in environment improvement or degradation.

Public Consultation

The environmental impacts or effects of a project will often differ depending on the area in which it is located. Such impacts may directly or indirectly affect different categories of social groups, agencies, communities and individuals. These are collectively referred to as project stakeholders or the public. It is crucial that during the ESIA process, appropriate mechanisms for ensuring the fullest participation and involvement of the public are taken by the developer in order to minimize social and environmental impacts and enhance stakeholder acceptance. An effective consultation process should generally ensure that:

- The public has a clear understanding of the proposed project; and
- Feedback mechanisms are clearly laid out and known by parties involved.

Different stages of the ESIA process require different levels of public consultation and involvement. The key stages are:

- Public consultation before the commissioning of the ESIS;
- Public consultation during the ESIS; and
- Public consultation during ESIS review.

Consultation can be before, during the ESIA study or during its review as outlined below:

Consultation before the ESIA

On submission of the project brief to NEMA, it might be decided that views of the public on the project are sought. NEMA is obliged to publish the developer's notification and other relevant documents in a public notice within 4

weeks from the date of submission of the project brief and/or notice of intent to develop. It is important therefore, that a plan for stakeholder involvement is prepared before the ESIS begins. Such a plan should consider:

- The stakeholders to be involved;
- Matching of stakeholders with approaches and techniques of involvement;
- Traditional authority structures and political decision-making processes;
- Approaches and techniques for stakeholder involvement;
- Mechanisms to collect, synthesize, analyze and, most importantly, present the results;
- The ESIS team and key decision-makers;
- Measures to ensure timely and adequate feedback to the stakeholders;
- Budgetary/time opportunities and constraints

Pubic consultation during the ESIS

During the ESIS, the study team should endeavor to consult the public on environmental concerns and any other issues pertaining to the project. Though consultations are very critical at the scoping stage, ideally, it should be an on-going activity throughout the study. During the ESIS review, the public is given additional opportunity for ensuring that their views and concerns have been adequately addressed in the ESIS. Any earlier omissions or oversight about the project effects can be raised at this stage. To achieve this objective, the ESIS and related documents become public after submission to NEMA. An official review appointment will be announced, where the reviewing authority has to answer questions and remarks from the public. These questions have to be handed in writing prior to the meeting.

9.12 ANNEX 12: GENERIC TORS FOR ESIA FOR PROJECT PROJECTS

Background

The Introduction indicates the purpose of the ESIA, presents an overview of the proposed project to be assessed, as well as the project's purpose and needs. It shall also briefly give the background information on the subproject as well as the need for the ESIA in line with national environmental policies and legislations.

Objectives of ESIA study

The main objective of the ESIA should be stated. The environmental and social impacts study should take into consideration all environmental and social impacts of the proposed subproject activities and identify the main environmental and social aspects that are likely to be raised by key stakeholders in order to optimize the project from the environmental and social point of view, by avoiding, minimizing, reducing or off-setting negative and enhancing positive impacts.

ESIA Study Methodology

1. Desk Research and Literature Review

The consultant shall perform a comprehensive literature review of key documents related to environmental, security, occupational health and safety legislation, policies, guidelines, manuals, procedures, practices, international best practices related to the project. The appropriate Field tools including questionnaires, data collection forms etc. shall then be developed.

2. Site Investigation

The consultant shall visit the project area with the aim of identifying the following:

a. Physical-cultural and historical sites
b. Noise sensitive areas
c. Wildlife habitats, feeding, and crossing areas
d. Proximity to residential places, road network, recreational activities etc.
e. Hydrological setting

3. Public and Institutional Consultations

The consultant shall carry out extensive consultations with all key stakeholders including but not limited to the following:

a. NEMA
b. MoES
c. MoH
d. OPM
e. District Local Government Officials

4. Analysis of Project Alternatives

The Consultant shall identify and systematically, undertake comparison of the potential Project Alternatives taking into account environmental and social factors such as:

a. Sites – Assess suitability of the site and potential alternative sites;
b. No-Project Scenario: This will include the alternative of not having the project to demonstrate environmental, social, and economic conditions without it.

5. Impact Analysis

The consultant shall evaluate potential project impacts considering planning, construction, and operation stages which shall cover social, ecological, and environmental issues. Identification of impacts shall include positive and negative impacts, direct and indirect impacts, and immediate and long-term impacts, unavoidable or irreversible impacts. The assessment of the potential impacts will also include; landscape impacts of excavations and

construction, loss of nature features habitats and species by construction and operation, soil contamination impacts, noise pollution, soil waste, and socio-economic and cultural impacts.
Due to the recent increase in renewable energy developments in Uganda, it is important to follow a precautionary approach to ensure that the potential for cumulative impacts are considered and avoided where possible. Cumulative impacts shall be assessed by combining the potential environmental and social impacts of the proposed Project with the impacts of substantial projects that have occurred in the past, are currently occurring, or are proposed or planned in the future within the proposed Project cumulative impact corridor.

For the case of hydropower projects, the Consultant shall assess both the effects on the baseline situation and the cumulative effects on a set of pre-identified Values Environmental Components (VECs) of the project in combination with other feasible foreseen future hydropower developments (i.e. Cascading dams in the same watershed), as well as other development activities (including non-hydropower) either currently underway or planned in the watershed which may have impacts that reasonably could interact with project-related impacts to generate a cumulative effect. These assessments will be based upon a compilation of information from existing hydrological and power generation studies as well as regional development plans. The selection of the VECs to be the focus of the analysis should take into account stakeholder inputs.

6. Preparation of the ESMP

Depending on the relevance of each impact identified, specific corrective measures have to be identified in order to mitigate the potential negative impacts and eventually to strengthen the positive ones. Mitigation measures could consist of the integration of proposed actions into the designs of the respective components. Besides, appropriate measures can be taken to compensate negative impacts that can occur and cannot be avoided, design appropriate measures to reduce/eliminate the negative identified impacts, to tackle needs and problems pointed out by consultation with stakeholders, to improve local living conditions and to promote local development. The Consultant will identify the appropriate measures that can be taken to maximize and/or enhance the positive impacts and avoid, reduce or minimize the negative impacts. He shall prescribe and present detailed tangible, practical relevant management/mitigation measures bearing in mind capacity restraints for those who have to implement and monitor their implementation, also bearing in mind the need to first avoid these impacts altogether, or to reverse them and then when these are not possible to manage them in an sustainable way. The ESMP will include measures to avoid, prevent, reduce, mitigate, remedy or compensate any adverse effects on the environment and social in relation to the respective construction and operation activities.

7. Capacity and Training Needs

The Consultant shall identify the institutional needs to implement the environmental and social assessment recommendations by reviewing the institutional mandates and capability of implementing institutions at local/district and national levels and recommend steps to strengthen or expand them so that the management and monitoring plans in the ESIA can be effectively implemented. The recommendations may extend to management procedures and training, staffing, and financial support.

8. Preparation of Environmental and Social Monitoring Plan

The Consultant will prepare a specific description, and details, of monitoring measures for the Environmental and Social Monitoring Plan including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, and definition of thresholds that will signal the need for corrective actions as well as deliver a monitoring and reporting procedure. The monitoring program would enable verification of the adequacy of the management plans and other mitigation measures identified in the ESMP, and would provide a basis for determination of any remedial measures or adjustments to management aspects if required. The Consultant should provide a time frame and implementation mechanism, staffing requirements, training and cost outlays.

Team Composition

The ESIA Experts for Project Subprojects shall comprise of experts proposed herewith. It is important that, the ESIA teams are constituted taking into account the prevailing conditions on the proposed subproject sites.

1. Environmental Management Specialist (Team Leader)

Key Qualifications:

He/she should possess the following qualifications:

a. At least an MSc. Environmental Management, Natural Resource Management or Environmental Engineering and four years of experience or a good BSc degree with experience of at least 6 years in conducting EIAs for infrastructure projects
b. Should be registered with NEMA as an Environmental Practitioner and also certified as a Team Leader.

Tasks:

He/she will perform the following roles:

a. Provide overall coordination and leadership to an ESIA team;
b. Take a leadership role in steering stakeholder consultations during ESIA for slaughterhouse projects;
c. Play an inter-phase role between client, NEMA and other stakeholders during EIA process;
d. Conduct site visits of planned subprojects;
e. Identify impacts of the project activities on the social and associated environment items;
f. Participate in the elaboration of technical, legal and regulatory norms to comply with environmental requirements in all the chain of project activities;
g. Identify, assess and propose environmental mitigation measures for the Project subproject under study; and
h. Prepare an ESMP for the project.

2. Occupational Health and Safety Specialist

Key qualifications:

a. In addition to relevant formal training, should have undertaken training in OHS;
b. Should have undertaken trainings in ESIA and or Environmental Audits;

Tasks:

a. Participate in stakeholder consultations to discuss energy issues and safety aspects;
b. provide OSH input throughout the assignment;
c. provide public health aspects in the assignment;
d. Participate in development ESIA for projects and participate in stakeholders' workshop.

3. Ecologist

Key qualifications:

a. Must have a postgraduate training in natural sciences (forestry, botany or zoology);
b. Must have undertaken an ESIA training;
c. Conducted at least 5 ESIAs studies in development projects.

Tasks:

a. Take a lead in the ecological investigations of the project;
b. Consult with stakeholder institutions on ecological aspects of the project;
c. Review various literature sources on ecological matters of the projects; and
d. Participate in write up of Environmental Impact Report.

4. Socio-economist

Key qualifications:

a. He/she should have undertaken postgraduate training in the fields of sociology, anthropology or social work or related social sciences;
b. He/she should have conducted ESIAs with experience of at least 5 years; and

c. Must be registered with NEMA.

Tasks:

a. Take a lead in stakeholder consultations especially with the key stakeholders, local residents etc.;
b. Provide socio-economic input/expertise throughout the assignment;
c. Lead in the formulation of social survey instruments;
d. Prepare reports relating to RAP and compensations; and
e. Provide social input in the Environmental Impact Report.

5. Aquatic Ecologist

Key qualifications:

a. Must have a postgraduate degree or training in natural sciences (fisheries, aquatic ecology or zoology);
b. Must have undertaken an ESIA training;
c. Conducted at least 5 ESIA studies in water resources development projects.

Tasks:

a. Take a lead in all aquatic ecological assessments of the project;
b. Assess impacts on aquatic ecology including fish;
c. Consult with stakeholder institutions on ecological aspects of the project;
d. Participate in write up of Environmental and Social Impact Report.

6. Hydrologist

Key qualifications:

The Hydrologist shall possess proven experience in river management in developing countries. He/she shall have a minimum of BSc Degree qualification in a relevant field as well as post graduate qualifications in river management with a minimum of fifteen (15) years overall experience. Knowledge of sediment transport modeling in rivers will be an advantage.

Tasks:

a. Review the hydropower designs and their potential impact on the river's hydrology;
b. Assess the potential impacts of any river diversions or other activities;
c. Overall evaluate the different dam safety designs

Expected Deliverables

The Consultant shall produce an ESIA report acceptable to OPM, NEMA and the funding institution and the report shall include the following as per the requirements of Regulation 14 of the National (Environmental Impact Assessment) Regulations of Uganda:

a. the project description and the activities it is likely to generate;
b. the proposed site and reasons for rejecting alternative sites;
c. a description of the potentially affected environment including specific information necessary for identifying and assessing the environmental effects of the project;
d. the material in-puts into the project and their potential environmental effects;
e. an economic analysis of the project;
f. the technology and processes that shall be used, and a description of alternative technologies and processes, and the reasons for not selecting them;
g. the products and by-products of the project;
h. the environmental effects of the project including the direct, indirect, cumulative, short-term and long-term effects and possible alternatives;
i. the measures proposed for eliminating, minimizing, or mitigating adverse impacts;
j. an identification of gaps in knowledge and uncertainties which were encountered in compiling the required information;

k. an indication of whether the environment of any other State is likely to be affected and the available alternatives and mitigating measures;
l. such other matters as the Executive Director may consider necessary.

9.13 ANNEX 13: 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, and 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.

4. Besides the regular inspection of the 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.
5.

10 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.

11 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:
    a. HSE management actions/measures taken, including approvals sought from local or national authorities;
    b. Problems encountered in relation to HSE aspects (incidents, including delays, cost consequences, etc. as a result thereof);
    c. Lack of compliance with contract requirements on the part of the Contractor;
    d. Changes of assumptions, conditions, measures, designs and actual works in relation to HSE aspects; and
    e. 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 fulfil 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).

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