THE REPUBLIC OF UGANDA

PROJECT BRIEF FOR NEW OFFICE HOUSING AND STAFF HOUSING FOR Mt. KEI FOREST SECTOR IN KOBOKO DISTRICT

Developer:

NFA
NATIONAL FORESTRY AUTHORITY

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September 2024

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LIST OF ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
AQG	Air Quality Guideline
AQI	Air Quality Index
ARVs	Anti-Retroviral Drugs
Cap	Caption
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CO	Carbon Dioxide
NOx	Nitrogen Oxides
SO_2	Sulphur Dioxide
CSC	Construction Supervision Consultant
dB	Decibels
DIZ	Direct Impact Zone
DWRM	Directorate of Water Resources Management
E & S	Environment and Safety
EA	Environmental Assessment
EHS	Environmental, Health and Safety
EHS	Environment Health and Safety
EHSG	Environment Health and Social Safe Guards
EIA	Environmental Impact Assessment
EMP	Environment Management Plan
EMT	Environment Management Team
NFA	National Forestry Authority
ES	Environmental Staff
ESF	Environmental and Social Framework
ESHS	Environmental, Social, Health and Safety
ESIA	Environmental Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standards
FGDs	Focus Group Discussions
FESMMR	Final Environmental Management Monitoring Report

GBV	Gender Based Violence
GBV	Gender-Based Violence
GHG	Green House Gas
GMC	Grievance Management Committee
GMM	Grievance Management Mechanism
GPS	Global Positioning System
GRC	Grievance Redress Committee
H & S	Health and Safety
HC	Health Center
HIV	Human Immuno-Deficiency Virus
Hrs	Hours
HSE	Health Safety and Environment
IIZ	Indirect Impact Zone
IPF	Investment Project Financing
IUCN	International Union for Conservation of Nature
KII	Key Informant Interviews
LC	Local Council
LTD	Limited
MGLSD	Ministry of Gender Labour and Social Development
mi	Mile
mm	Millimeter
MoWE	Ministry of Water and Environment
NDP	National Development Plan
NEA	National Environment Act
NEMA	National Environment Management Authority
NFA	National Forestry Authority
NGO	Non-Government Organization
NGP	National Gender Policy
NIP	National Implementation Plan
No.	Number
OSH	Occupational Health and Safety
PC	Project Contractor
PM	Project Manager

Pm	Past Midnight
POPs	Persistent Organic Pollutants
PPEs	Personal Protective Equipment
SEO	Social and Environmental Officer
SGBV	Sexual and Gender-Based Violence
SMP	Social Management Plan
SP	Safeguard Policies
SRH	sexual and Reproductive Health
STDs	Sexually-Transmitted Diseases
ToR	Terms of Reference
UGP	Uganda Gender Policy
VAC	Violence Against Children
VAWG	Violence Against Women and Girls
VES	Visual Encounter Surveys
VOL	Volume
VAC	Violence Against Children
WB	World Bank
WCS	World Conservation Status
ZOI	Zone of Influence

EXECUTIVE SUMMARY

With support from the World Bank, the National Forestry Authority (NFA) contracted Infrastructure Development and Management Limited (IDML) to undertake preparation of a project brief for office building and staff house for Mt. Kei Forest Sector, comprising locations in Mt Kei CFR and Ozubu CFR.

The project activities shall involve the development of one new office housing at Ozubu CFR, two (2) staff housing each at Ozubu and Lima and two (2) security/patrol housing each at Lima and Ozubu The proposed office building will have a meeting room, reception, store, 2 offices, porches two toilet (1 for males and one for females), kitchen facility, rainwater harvesting facility and solar system.

The proposed staff building will have Lounge – Dining, Front Porch, Mini Kitchen (With service porch, laundry and pantry), Store, 2 bedrooms, Toilet-bathroom spaces, rainwater harvest facility, and solar system. The Security/Patrol Housing will have a front porch, four bedrooms, common toilet-bathroom space, and common kitchen

To undertake the assessment, different approaches were used that included site reconnaissance, onsite assessment, literature review, review of the legal and regulatory framework relevant to the project, professional judgement, observations.as described in Chapter 4. These were used in acquisition of secondary baseline data, primary data and map development to ensure a comprehensive report is prepared.

A detailed assessment of the baseline social and environmental data was done to understand the existing parameters in the physical, biological and socio-economic environment within the project site. The assessment covered several key aspects, including climate data, geological data, soil conditions, hydrology, and air and noise quality, among others, as detailed in Section 3 of the report. Additionally, social data was collected, capturing demographic trends, community health, land use, and local livelihoods, which were essential in evaluating the project's potential impacts on the social environment.

Comprehensive stakeholder engagement was carried out, and views of key stakeholders such as Patrol teams and the local leaders at different levels and district officials, community members, UWA, NFA head office, Ministry of Tourism Wildlife and Antiquities, Ministry of Gender, Labour and Social Development, Uganda Tourism Board were obtained. A summary of key issues raised by stakeholders is shown in section 6.3.2 and the minutes of these engagements are

shown in appendix 3. From the engagements, stakeholders were positive about the project especially the NFA staff at the reserve and local leaders. The engagements emphasized sustainable construction, waste and pollution management, worker safety and training, biodiversity compensation, HIV/AIDS awareness, community sensitization, strict worker discipline, local employment opportunities, and environmental monitoring.

Considerations of alternatives were carried out and the Proposed Project Alternative was selected as the optimal option due to its ability to deliver significant environmental, social, and economic benefits while minimizing negative impacts. The NFA identified the project sites through a thorough evaluation, prioritizing areas with minimal environmental disturbance and limited clearance of indigenous vegetation.

Impact identification and analysis was carried out and both positive and negative risks and impacts were identified in relation to the proposed project. Most of the negative impacts are anticipated in the construction phase, while few in the operational phase of the project. These negative impacts are expected to be highly localized, temporary, and minimal in scope. A summary of the identified potential project impacts is outlined below:

Positive Impacts	**Negative Impacts**
Construction phase • Employment opportunities • Market for Construction material Operation phase • Enhanced forest Protection • Improved Emergency Response • Sustainable Infrastructure and Operations	Construction phase 1. Noise and Vibrations 2. Air and Dust Emissions 3. Erosion effects 4. Destruction of the floral characteristics 5. Occupational Health and Safety Hazards 6. HIV/AIDS spread 7. Poor waste management 8. Gender and sexual exploitation and abuse Impacts such as sexual harassment and abuse, discrimination and gender-based Violence Operational Phase 1. Risks of fire out breaks 2. Poor waste management

For the positive impacts, enhancement measures have been proposed, while adequate mitigation measures have been provided for the negative impacts as described in section 8 of this project brief.

To ensure effective implementation of the mitigation measures, an environmental and social management and monitoring plan has been prepared to guide the implementation of the project in an environmentally and socially sound manner.

For the proposed project to be implemented in Mt. Kei CFR adequate measures should be taken to manage any potential negative environmental and social impacts including impacts on occupational and public health and safety.

1 INTRODUCTION

1.1 PROJECT BACKGROUND

The National Forestry Authority is an implementing arm under the Investing in Forests and Protected Areas for Climate-Smart Development Project (IFPA-CD Project), supported by financing from the World Bank. The primary goal of this initiative is to bolster forest and wildlife preservation for the betterment of local communities and the national economy. With the project's support, the NFA is spearheading various infrastructure endeavors across 13 specified protected regions. Mt Kei Forest Sector, comprising Mount Kei CFR and Ozubu CFR, has been selected as one of the recipients of the IFPA-CD project. To enhance infrastructure within the reserve, the NFA has contracted Infrastructure Development and Management Limited (IDML) to plan the construction of a new office and staff house for Mount Kei CFR and Ozubu CFR.

The main aim of the project is to build an office and staff facility (including associated facilities) for the sector supervisor, ensuring efficient Reserve management and visitor contentment.

The specific project objectives include:

- Providing on-site accommodation for Patrol teams, so it provides decent housing for NFA staff and ensures a continuous staff presence within the reserve. This presence helps deter illegal activities such as poaching, thereby enhancing the security of the reserve and its resources.
- The comfort of the NFA Staff with their families at their workplaces, with inclusion of such features as, for example, water born toilets, rainwater harvesting systems will be installed under this project.
- Safety and Compliance to ensuring that the renovated or newly constructed structure complies with building codes, safety regulations, and industry standards. This involves addressing any structural deficiencies,

1.2 Purpose of the Project Brief

The project brief is prepared to identify the potential environmental and social risks, impacts, and liabilities linked to the project, and to propose mitigation measures to ensure the project's execution aligns with environmental and social standards.

1.3 Specific objectives of this Project Brief

- Assessing the baseline environmental and socio-economic conditions of both the project area and its surroundings and evaluating how these conditions will be influenced by the proposed development.
- Identifying pertinent legislation and policy frameworks that must be adhered to due to the proposed project activities and presenting recommendations on how to address them within the project scope.
- Identifying and evaluating the potential positive and negative environmental and social impacts of the proposed project and recommending practical measures to amplify positive impacts and alleviate negative ones.
- Developing an Environmental and Social Management Plan (ESMP) to direct the implementation and monitoring of mitigation measures for anticipated project risks.
- Engaging in consultations with relevant stakeholders to gather their perspectives and suggestions regarding the environmental and social impacts.

1.4 Need for the Project brief

To comply with the legal requirement under *National Environment Act (NEA) of 2019, the National Environment (Environmental and Social Assessment) Regulations of 2020, and the Guidelines for Environmental Impact Assessment in Uganda of 1997*, a screening process was conducted to determine the appropriate level of environmental assessment for this project. The NEA of 2019 specifies projects that necessitate either Environmental and Social Impact Assessment (ESIA) or Project Briefs.

The proposed project falls within Schedule 4 (a) of the NEA, 2019 under Construction of planned settlements or housing estates covering at least 2.5 acres but not more than 5 acres, and Section 8(f) Support facilities to (a) to (e).

In Addition, the **Project Brief** will be undertaken in accordance with national regulations, World Bank Environmental and Social Standards, and international best practices. After assessment, this project is categorized as a moderate risk project, according to the World Bank risk classification. This is because some of the project activities pose significant environmental and social impacts and risks.-

1.5 Details of the Project Developer

Full Details of proponent	**National Forestry Authority**
Contact person	**Stuart Maniraguha**
Position	Ag. Executive Director
Address	National Forestry Authority (NFA) Headquarters
Telephone	+256 782786048
Estimated Project Cost	**783,994,600 EXCL VAT**

1.6 Structure of this Project Brief

The structure of this project brief has the following chapters arranged as shown in the table below:

Table 1: Structure of the Project Brief

Chapter 1	Introduction to the project background, stating purpose and objectives, project brief requirements, background of the proponent, justification, scope, cost etc.
Chapter 2	A review of policies, laws, regulations and standards in relation to the development of the Office building
Chapter 3	Description of the proposed project location, components, preparation, construction and operations phase activities.
Chapter 4	Methodology of the Assessment
Chapter 5	Site baseline conditions including the bio-physical and socio -economic information, surrounding area, infrastructure and activities in the project site neighbourhood likely to be affected.
Chapter 6	Public consultations and disclosure, mentioning stakeholder concerns, responses provided to concerns raised and developing measures to address them.
Chapter 7	An analysis of alternatives, including a comparison of feasible alternatives to the proposed project site, their suitability under local conditions
Chapter 8:	Evaluation of the identified Environmental and social impacts and recommendation of appropriate mitigation measures for all significant negative impacts predicted and enhancement of positive impacts.
Chapter 9	Environmental Social Management and Monitoring plan
Chapter 10	Recommendations and conclusions arising out of the study

2 POLICY, LEGAL, REGULATORY AND INSTITUTIONAL FRAMEWORK

2.1 Introduction

This chapter discusses policy, legal, and institutional framework pertinent to the project. Auxiliary facilities associated with the project, such as borrow pits and equipment yards, may impact the environment in two ways: firstly, through the construction process itself and the resulting disruption of ecological and social systems; and secondly, post-construction, the economic activities stemming from the office housing may yield both positive and negative environmental effects. These environmental and social impacts necessitate management within a legal framework. Uganda has a range of laws, policies, and institutional structures governing the management of its natural environment, as outlined below. Consequently, this assessment has prompted consideration of a series of pertinent and applicable regulations and policies. Specifically, the following regulations and policies were considered relevant for this assessment.

2.2 Policy Framework

2.2.1 The National Environment Management Policy, 1994

This policy strives to foster intergenerational equity by advocating for sustainable development practices that preserve and enrich environmental quality for both current and future generations. It emphasizes aspects such as health and safety, restoration programs, and the optimal utilization of natural resources like land and water resources.

Therefore, undertaking this study ensures that the project poses no or minimal impacts on the environment for sustainable development.

2.2.2 The Uganda National Land Policy, 2013

The overall goal of the Uganda National Land Policy is: "*To ensure an efficient, equitable and optimal utilization and management of Uganda's land resources for poverty reduction, wealth creation and overall socio-economic development."*

Construction of office housing considers the objectives of this Policy including among others;

- *To ensure sustainable utilization, protection and management of environmental, natural and cultural resources on land for national socio-economic development;*

Sustainable, equitable and integrated utilization of natural resources, like the land on which the staff quarters and their respective support facilities are to be constructed, are essential for natural social and economic development.

- *The Policy emphasizes, among others, environmentally friendly practices during the establishment office building and staff accommodation*

2.2.3 The Uganda Gender Policy, 2007

The overall goal of this policy is "*to achieve gender equality and women's empowerment as an integral part of Uganda's socio-economic development"* and its main purpose is "*to establish a clear framework for identification, implementation and coordination of interventions designed to achieve gender equality and women's empowerment in Uganda"*. The policy is a guide to all stakeholders in planning, resource allocation, implementation, monitoring and evaluation of programs with a gender perspective.

The policy requires that, for adequate implementation of gender aspects, there is need for the contractor to emphasize gender equality through gender sensitization and awareness as well as, construction of gender sensitive sanitary facilities, and enhance equal employment opportunities to both men and women.

2.2.4 National Occupational Health and Safety Policy (1995)

This policy seeks to:

- *Provide and maintain a healthy working environment;*
- *Institutionalize Occupational Health and Safety (OHS) in the policies, programs and plans; and*
- *Contribute towards safeguarding the physical environment.*

The OHS Policy Statement is guided by the Constitution of the Republic of Uganda and other global, national and sector regulations and policies.

The OHS Policy also takes into consideration the Health Sector Strategic Plan, all of which aim to improve the quality of life for all Ugandans in their living and working environment

The policy will be relevant in provision of mitigation measures that will protect the workers from health and safety impacts associated with the activities at the construction sites, for example provision of adequate full personal protection equipment (PPE) to all workers by the contractor.

2.2.5 National Policy on HIV/AIDS and the World of Work, 2007

The main goal of the National Policy on HIV/AIDS and the World of Work is "*to provide a framework for prevention of further spread of HIV and mitigation of the socio-economic impact of HIV/AIDS within the world of work in Uganda"* with some of the policy objectives including:

- To provide guidelines for employers, workers and the Government on prevention, management as well as mitigation of the impact of HIV/AIDS within the world of work;
- To provide guidelines for employers, workers and the Government to eliminate stigma and discrimination based on perceived or real HIV status within the world of work;
- To provide a framework for monitoring and evaluating the effectiveness of measures taken to combat HIV/AIDS within the world of work;
- To provide a framework for monitoring and evaluating the impact of HIV/AIDS within the world of work.; and
- To promote care, treatment and support for people living with HIV/AIDS within the world of work.

About 136 workers will be expected to be employed at the two construction sites (59% will be skilled workers and 41% unskilled and the latter will be obtained from the nearby communities), and they are likely to be exposed to an environment that encourages the spread of HIV/AIDS and other sexually transmitted diseases (STD). Strategies to fulfill this policy's objectives must be incorporated throughout the project's life.

The contractor shall avail and display information regarding HIV/AIDs prevention on noticeboards around the site as well carry out sensitization and awareness campaigns against the spread of HIV/AIDs amongst his employees and the adjacent communities.

2.2.6 Uganda Forestry Policy, 2001

The goal of this policy is to have an integrated forest sector that achieves sustainable increases in the economic, social and environmental benefits from forests and trees by all the people of Uganda, especially the poor and vulnerable.

The establishment of the project shall ensure improvement in management of the CFR in line with the requirements of this policy.

2.2.7 Uganda Wildlife Policy, 2014

The vision of this policy for the wildlife sector is "sustainably managed and developed wildlife resources and healthy ecosystems in a developed Uganda". The main goal of this policy is to conserve the wildlife resources of Uganda in a manner that contributes to the sustainable development of the nation and the well-being of its people.

The establishment of the proposed project shall ensure improved management of the wildlife species within the CFR. This is in line with the requirements of this policy.

2.2.8 National Water Policy, 1995

The overall objective of the National Water Policy is *"to manage and develop the water resources of Uganda.in an integrated and sustainable manner, so as to secure and provide water of adequate quantity and quality for all social and economic needs of the present and future generations with the full participation of all stakeholders".* This Policy aims to ensure:

- Integrated and sustainable, development and management and use of the national water resources with the full participation of all stakeholders; and;
- Regulated use of all water, whether public, private or groundwater, other than for domestic use.

This policy is relevant where project development could impact the quantity and quality of water resources within the project area.

2.2.9 National Employment Policy, 2011

This policy provides a framework to promote productive and decent employment and enterprise development, compliance with labour standards by employers, investors and workers, social protection and social dialogue. Social dialogue, affirmative action, promotion of gender equality for all in employment, addressing HIV/AIDS in the workplace, and community participation are crucial guiding principles of the Employment Policy.

*The policy is relevant since employment opportunities (*59% will be skilled workers and 41% unskilled*) will be created by the contractor who will establish the sites and hence compliance with this policy is important. All the unskilled workers willl be sourced from the communities.*

2.2.10 National Child Labour Policy (2006)

This Policy provides a framework for addressing child labour and actions that need to be taken to deal with child labour. The policy guides and promotes sustainable action aimed at the progressive elimination of child labour, starting with the worst forms.

The policy is relevant since it is the basis on which child labour will be avoided on the project construction sites.

2.2.11 National Child Policy, 2020

The National Child Policy seeks to provide a framework for addressing issues related to children's rights and well-being in a holistic and coordinated manner. The policy's mission is to promote the realization of all children's rights to survival, education and development, protection and participation through a coordinated, comprehensive interdisciplinary and multi-sectoral approach.

The policy is relevant, and, in its compliance, the contractor will not employ any children, be it from the host community or from other communities.

2.2.12 The National Equal Opportunities Policy, 2006

The National Equal Opportunities Policy guides the establishment and promotion of a just, free and fair society, where all citizens participate in and benefit from the development process. It promotes the fulfilment of the fundamental rights of all Ugandans to social justice and economic development.

The contractor shall provide equal opportunities to all Ugandans who would want to be part of the project in line with the requirements of this policy.

2.2.13 National Climate Change Policy, 2015

The goal of the policy is to ensure a harmonized and coordinated approach towards a climate-resilient and low-carbon development path for sustainable development in Uganda. The overarching objective of the policy is to ensure that all stakeholders address climate change impacts and their causes through appropriate measures while promoting sustainable development and a green economy. This national policy emphasizes climate change adaptation as the first priority for Uganda, while mitigation efforts are embraced by the policy as secondary.

Ensuring sustainable management of forestry resources is part of the adaptation policy priorities and therefore this project shall support effective management of these resources by providing appropriate facilities for staff. Hence, all activities in this project implementation are in line with this policy requirements.

2.3 Legal Framework

2.3.1 The Constitution of the Republic of Uganda, 1995

The following National Objectives of the Constitution pertain:

Objective XIII: Protection of Natural Resources." The State shall protect important natural resources, including land, water, wetlands, minerals, oil, fauna and flora on behalf of the people of Uganda." In this case this proposed project intends to use land, which is a significant natural resource for the country, hence, the need to protect this resource through preparation of this project brief.

Objective XXVII: (i) The State shall promote sustainable development and public awareness of the need to manage land, air, water resources in a balanced and sustainable manner for the present and future generations. This objective necessitates public awareness about the project scope, activities, potential impacts, health and safety precautionary measures, hence a need for consultation through public meetings as a step for sustainable development.

(ii) The utilization of the natural resources of Uganda, *the State shall take all possible measures to prevent or minimize damage and destruction to land, air and water resources resulting from pollution or other causes.*

Activities, such as site clearing and excavations during the construction of the office building will lead to the destruction of vegetation, change of land use, hence, the need for this project brief as a measure to provide adequate mitigation measures to minimize these impacts.

Article 39 preserves the right of every Ugandan to a clean and healthy environment.

This project brief has been prepared in accordance with the requirements of the Constitution.

2.3.2 The National Environment Act, No.5 of 2019

According to the National Environment Act, No.5 of 2019, this proposed project is listed within Schedule 4: Part 1 under Section 9 (f) ***Construction of administration, educational and research***

infrastructure in protected areas of a capacity of less than 50 persons. Therefore, the developer of this proposed project with such scale of activities is required to prepare a project brief with required information on the project activities and adequate mitigation measures to the identified impacts to ensure sustainable utilization and management of environmental, natural and cultural resources for national and socio-economic development.

This legal provision requires that an assessment is undertaken. A project brief has been prepared and submitted to the lead Agency, to review and recommend an action to be taken in accordance with this law.

2.3.3 The National Forestry and Tree Planting Act, 2003

This Act makes provision for the conservation, management and development of forest resources in Uganda and establishes the National Forestry Authority and a fund for tree planting. The purposes of the Act include the creation of an integrated forest sector, conservation of biological diversity, the devolution of functions and powers in the forest sector and the sustainable development of that sector.

The establishment of the project will support the increase in protection of forest reserves against human activities in line with the objectives of this Act.

2.3.4 The Uganda Wildlife Act, 2019

The Uganda Wildlife Act provides for the conservation and sustainable management of wildlife. It aims to strengthen wildlife conservation and management; to continue the existence of the National Forestry Authority; to streamline the roles and responsibilities of institutions involved in wildlife conservation and management; to continue the existence of the Wildlife Fund; to repeal the Uganda Wildlife Act, Cap. 200 and for related matters.

This project brief serves to meet the requirements of this Act to ensure that developments in conservation areas are designed in a way to prevent loss of wildlife in the reserve.

2.3.5 The Water Act Cap 152

One of the objectives of this Act is "*to control pollution and to promote safe storage, treatment, discharge and disposal of waste which may pollute water or otherwise harm the environment and human health"*.

Section 6 (c) implies that *it is prohibited to cause or allow any waste to come into contact, whether directly or indirectly, with any water, other than under the provisions of the Water Act.*

The Act in section 28 (2) requires anyone responsible for the production, storage, discharge or deposit of waste not to permit or cause any waste to be discharged directly or indirectly into any water except in accordance with a waste discharge permit. Subsection 3 reiterates that it is an offence to contravene this directive. Procedures for making applications for waste discharge permits and conditions of approval are outlined in section 29 of this Act.

During the construction phase water will be needed, for instance, during the equipment cleaning, for drinking and sanitary purposes and for sprinkling of water to minimize dust. With such water demand more effluent discharges are expected; hence, the need of monitoring the quality and quantity of discharge, treatment and disposal methods as to prevent or control both ground water and surface water pollution. Relevant approvals from relevant authorities for water abstraction shall be required before any abstraction is done by the contractor; however, water abstraction permit will not be needed in this project, because water will be purchased by the contractor.

2.3.6 The Occupational Safety and Health Act, 2006

Part III of this Act *outlines duties, obligations and responsibilities of employers to the working environment of their workers,* and since construction of the office building will employ various categories of workers such as safety officers, engineers, casual laborers, operators, drivers, security guards, etc., this law is vital. These duties include but are not limited to employers providing personal protective clothing where a worker is to be exposed to pollutants or chemicals that could be hazardous to their health.

Section 13 states that it is *the responsibility of an employer to take as far as is reasonably practicable, all measures for the protection of his or her workers and the general public from the dangerous aspects of the employer's undertaking at his or her own cost. Employers are also held responsible to ensure that the working environment is kept free from any hazard due to pollution by employing technical measures, applied to new plant or processes in design or installation or added to existing plant or processes; or employing supplementary organizational measures* which can all be developed in the management and monitoring section of this project brief.

Construction of the office housing is associated with the use of heavy machinery, dust generation which all compounded together, require that provision of safety gear, training and other considerations as per the Act are compiled to.

2.3.7 Employment Act, 2006

The Employment Act is the governing legal statutory instrument for the recruitment, contracting, deployment, remuneration, management and compensation of workers. The Act is based on the provisions of Article 40 of The Constitution of Uganda. The Act mandates Labour Officers to regularly inspect the working conditions of workers to ascertain those rights of workers and basic provisions are provided and workers' welfare attended to.

The Act also provides for the freedom of association of workers permitting workers to join labour organizations.

Section 32 addresses the issue of child labour and states that children under the age of twelve years shall not be employed in any business, undertaking or workplace (32(1)). Subsection 32(2) provides restrictions under which a child under the age of fourteen (14) years may be employed; including for light work under the supervision of an adult aged over eighteen (18) years and the work shall not interfere with the child's education.

The contractor will ensure that he abides by the requirements of this law and prohibit child labor on the site. The working conditions and workers' welfare, including child labour, will be governed by the provisions of this Act and by Labour Management Procedures prepared for the IFPA-CD Project which prohibit use of child labour (workers under the age of 18) for the project activities. Additionally, workers must be provided with a mechanism to raise their concerns effectively.

2.3.8 The Workers' Compensation Act 2000, Cap. 225

The Workers' Compensation Act outlines responsibilities and obligations for both parties (employer and employee) in guaranteeing the safety and health of the workers. The Act outlines matter of compensation for injuries and accidents as well as the responsibility of employees to take care of their health and safety while on the project.

Labour shall be employed; it shall be mandatory for the contractor to have in place a workers' compensation insurance policy in case of accidents while at work in line with this Act.

2.3.9 The Local Government Act, 1997

This Act allocates responsibility for service delivery to the Local Government (LG); the local government has both legislative and executive powers, rendering it the highest political authority in the district. Concerning natural resource management, LG is responsible for land surveying, land administration, physical planning and environmental services that are not the responsibility of the central government.

Under this Act, local authorities shall be continually doing site inspections throughout the construction period and will also have a representative to be in charge of overseeing the construction site activities.

2.3.10 The Labour Disputes (Arbitration and Settlement Act) (2006)

This Act provides for arbitration in labor related grievances and is emphasized during project planning and implementation. The Act seeks to promote social dialogue, facilitate collective bargaining, and modernize procedures to address unresolved or mismanaged labour disputes that may have adverse effects.

The contractor will comply with all Labour policies that specifically address Gender and Vulnerability including the Employment (of Children) Regulations 2012, Employment (Sexual Harassment) Regulations 2012, and the National Action Plan on Elimination of the Worst Forms of Child Labor in Uganda (2012/13-2016/17).

2.4 Regulations

2.4.1 National Environment (Waste Management) Regulations No.49. of 2020

These regulations apply to all types of waste (non-hazardous and hazardous) and its storage and eventual disposal. Regulation 12 prohibits the disposal of waste into the environment without adequate treatment at a treatment facility approved by the Lead agency. Regulation 5 emphasizes waste minimization measures by making Cleaner Production a requirement for owners or operators of facilities that generate waste. Production process improvement; product cycle monitoring; and incorporation of environmental concerns in the product lifecycle, are some of the requirements.

Some volumes of waste are anticipated to be generated during construction and operation of the office housing. Therefore, NFA will ensure that the waste management measures to be developed

must be in line with the requirements of this regulation, for example, reusing and recycling waste material should be considered before disposal.

2.4.2 National Environment (Environmental and Social Assessment Regulations), 2020

These regulations hold for all projects/activities listed under the fourth and fifth schedule of the National Environment Act, 2019. The regulations state in part III section 10 that, environmental impact studies shall be conducted in accordance with terms of reference developed by the developer in consultation with the Authority and the lead agency and that, the study shall be conducted in accordance with the guidelines adopted by the Authority in consultation with the lead agency under subsection (8) of section 19 of the National Environment Act. Regulation 16 of these regulations also requires that stakeholder consultations should be carried out while undertaking the Environmental Impact Assessment study.

Therefore, the assessment for the proposed project was conducted in line with the requirements of these Regulations.

2.4.3 National Environment (Noise and Vibrations Standards and Control) Regulations, 2013

All noise emitting sources at the project sites must conform to the National Environment (Noise and Vibrations Standards and Control) Regulations, 2013. The Regulations are aimed at ensuring maintenance of a healthy environment for all people in Uganda, the tranquility of their surroundings and their psychological well-being. Part IV, Section 19(1) of the Regulations states that *"the owner of machinery or the owner or occupier of a facility or premises or person responsible for any activity shall use the best practicable means to ensure that the emission of noise and vibration from that machinery, facility, premises or activity does not exceed the permissible noise levels*".

The activities at the sites under construction will emit noise; hence, the contractor will put in place measures that will minimize noise emissions and keep them below *the national standards. The contractor shall take caution on all equipment and noise generating* sources, especially *during the construction phase*

Maximum Permissible Noise Levels are shown in table 2 below.

Table 2: Maximum Permissible Noise Levels for Construction Site

Facility	**Noise limit dB(A) (Leq) Day**	**Noise limit dB(A) (Leq) Night**
1. Any building used as a hospital, convalescence home, home for the elderly, sanatorium and institute of higher learning, conference rooms, public library, environmental or recreational sites	45	35
2. Residential buildings	50	35

Source: The National Environment (Noise and Vibrations Standards and Control) Regulations, 2013. (Schedule 1)

Time Frame: Use duration

Day- 6.00 a.m. -10.00 p.m.

Night- 10.00 p.m. - 6.00 a.m.

The Time frame takes into consideration human activity

2.4.4 National Environment (Air Quality Standards) Regulations, 2024

The construction activities will cause air emissions which will need to be minimised. The draft National Air Quality Standards provide the following regulatory limits.

Table 3: Regulatory Air Quality Standards for selected Pollutants

Pollutant	**Averaging time for ambient air**	**Standard for ambient air**
Saw dust	24 hr	1 $mgNm^{-3}$
Carbon dioxide (CO_2)	8 hr	9.0 ppm
Carbon monoxide (CO)	8 hr	9.0 ppm
Hydrocarbons	24 hr	5 mg/m^3
Nitrogen oxides (NO_x)	24 hr1 year arithmetic mean	0.10 ppm

Soot	24 hr	500 µg/Nm^3
Sulphur dioxide (SO_2)	24 hr	0.15 ppm
Sulphur trioxide (SO_3)	24 hr	200 µg/Nm^3

Note: ppm = parts per million; "N" in µg/Nm^{-3} connotes normal atmospheric conditions of pressure and temperature (25^oC and 1 atmosphere).

Baseline air quality conditions for this site were undertaken and are elaborated in chapter three of this report; they shall form a benchmark for the air quality levels during construction.

2.4.5 The National Environment (Audit) Regulations, S.I. No. 47 of 2020

These Regulations apply to the undertaking of Environmental Audits and the establishment of Environmental Management Systems by developers. Regulation 12 (1) of the Regulations states that "The developer of a project or activity listed in Schedule 3 to these Regulations shall carry out an environmental compliance audit." Section 11 (1) notes that The Authority shall notify the developer of the findings of the environmental enforcement audit and require the developer to take specific corrective measures within a specified period.

This Project brief recognizes the requirement of this regulation and recommends Environmental Audits for all support facilities especially those with NEMA approvals, such as the camp establishments.

2.4.6 The Labor Disputes (Arbitration and Settlement Act) (2006)

This Act provides for arbitration in labor related grievances and is emphasized during project planning and implementation. The Act seeks to promote social dialogue, facilitate collective bargaining, and modernize procedures to address unresolved or mismanaged labor disputes that may have adverse effects.

The contractor will comply with all Labour policies that specifically address Gender and Vulnerability including the Employment (of Children) Regulations 2012, Employment (Sexual Harassment) Regulations 2012, and the National Action Plan on Elimination of the Worst Forms of Child Labor in Uganda (2012/13-2016/17).

The 2011 Employment Regulations deter employers from the casualization of labor by granting contractual/permanent rights to any worker exceeding four (4) months of service.

2.5 International Treaties

Uganda is party to several global and regional environment and conventions and agreements as described below:

2.5.1 The Convention on Biological Diversity (CBD)

The objectives of this Convention to be pursued in accordance with its relevant provisions are: to conserve biological diversity, to implement the sustainable use of biodiversity components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, by appropriate access to genetic resources and by appropriate transfer of relevant technologies, to consider all rights over those resources and to technologies, and by appropriate funding.

Parties to this convention are required to develop national plans and programs for the conservation and sustainable use of biodiversity.

The project activities will be carried out in a sensitive biodiversity ecosystem and, therefore, measures to ensure minimal impacts to this ecosystem should be put in place by the contractor and the supervising consultant. Hence, the CBD is relevant to the project.

2.5.2 Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat, 1971

The Ramsar Convention on Wetlands provides the framework for the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world. Uganda is a signatory to this convention and, therefore, abides by the requirements of the convention on the protection of all wetlands of international importance

2.6 Institutional Framework

2.6.1 National Environment Management Authority (NEMA)

The National Environmental Act provides for the establishment of NEMA as the principal agency responsible for coordination, monitoring and supervision of environmental conservation activities. NEMA is under the Ministry of Water and Environment (MoWE) but has a cross-sectoral mandate to oversee the conduct of ESIAs through issuance of ESIA guidelines, regulations and registration of practitioners. It reviews and approves environmental impact statements (EIS) and project briefs like for such a project in consultation with any relevant lead agencies. NEMA works with District Environment Officers and local environment committees at local government levels who also

undertake inspection, monitoring and enforce compliance on its behalf.

It is for this reason that the project brief is being submitted to the lead Agency for approval and this is a recommendation outlined in schedule 4 of the National Environment Act, no.5 of 2019.

2.6.2 National Forestry Authority (NFA)

The mandate of NFA is to conserve, economically develop and sustainably manage the wildlife and protected areas of Uganda in partnership with neighbouring communities and other stakeholders for the benefit of the people of Uganda and the global community.

NFA is a project proponent. NFA Patrol teams will be working directly with the contractors to provide security against possible wildlife attacks and ensuring compliance to mitigation measures by the contractor.

2.6.3 Ministry of Tourism, Wildlife and Antiquities

The mandate of this institution is to formulate and implement policies, strategies, plans and programs that promote tourism, wildlife and cultural heritage conservation for socio-economic development and transformation of the country.

The ministry has a responsibility to ensure conservation areas are protected from degradation, so that the country's tourism sector continues to flourish.

The establishment of the project ensures that the staff carrying out conservation activities in Mt. Kei CFR are well facilitated with good housing conditions.

2.6.4 Ministry of Water and Environment

The Mandate of the Ministry includes initiating legislation, policy formulation, setting standards, inspections, monitoring, and coordination and back up technical support in relation to water and environment sub sectors.

The mission of the ministry is to promote and ensure the rational and sustainable utilization, development and effective management of water and environment resources for socio-economic development of the country.

The establishment of the project activities will require use of water resources and therefore the ministry shall have the obligation to monitor any water abstractions if necessary.

2.6.5 Uganda Wildlife Authority

The mandate of UWA is to conserve, economically develop and sustainably manage the wildlife and protected areas of Uganda in partnership with neighboring communities and other stakeholders for the benefit of the people of Uganda and the global community.

Since the CFR has wildlife, UWA will be a key stakeholder in ensuring that the establishment of the project does not cause harm to the wild animals or disrupt their wildlife activities within the forest reserves.

2.6.6 District Local Government

The Reserve is within the jurisdiction of Koboko and Yumbe Districts headed by a Local Council V (LC V) Chairman and Chief Administration Officer (CAO) who is a political and technical head respectively. Various district offices with relevant functions include offices of Natural Resources/Environment, District Health Inspector, District Planner, Community Development Officer and District Labour Officer.

These shall carry out monitoring of the activities to ensure compliance with the relevant permits and certifications that shall be issued to the project implementers in both the construction and operational phases.

Table 4: *Location of the proposed sites*

No	***Facility***	***District***	***Subcounty***
1	Ozubu	*Koboko*	*Ludara*
2	Lima	*Koboko*	*Lima*

2.7 Relevant Permits

A list of permits and licenses necessary for execution of the project are indicated in Table 4 below.

Table 5: Required permits

TYPE OF PERMIT/APPROVAL	SUPPORTING LEGISLATION	REQUIREMENT	APPLIES TO	APPROVING AUTHORITY	TYPE OF APPLICATION SUBMITTED	STAGE AT WHICH APPROVAL IS REQUIRED
ESIA approval certificate**.**	The Environmental Impact Assessment Regulation2020	The office building fall under **schedule 4**, *Part 1; Section 9 (f) Construction of administration, educational and research infrastructure in protected areas of a capacity of less than 50 persons.*	Any project with likely significant impacts to the Environment	NEMA	Project Brief	Prior to commencement of the project
Certificate of Registration of a Workplace	The Occupational Safety and Health Act, 2006	Section 40, Subsection (2): a person shall not less than one month before he or she begins to occupy any premises as a workplace, serve on the Commissioner, a notice with the particulars prescribed in Schedule 3.	Any project requiring the establishment of a workplace (e.g., camp site).	Department of Occupational Safety and Health MGLSD	Particulars to be Submitted When Applying for the Registration of a Workplace or a Change in the Registered Occupier	Immediately upon (not later than one month) prior to undertaking any site work (construction, operation, preconstruction surveys).
Building plan approvals	Building Control Act 2013	Section 34 prohibits any person from carrying out a building operation unless he/she has a valid building permit issued by the District Building Committee	Applies to all commercial and residential buildings	District Local Government	Building plans	Prior to commencement of construction

2.8 World Bank Environmental and Social Framework (ESF), 2018

As this is a World Bank financed project, provisions of the ESF apply to the proposed development, as follows:

Table 6: ***World Bank ESF Standards Applicable to the Project***

ESS1: Assessment and Management of Environmental and Social Risks and Impact	ESS1 provides for carrying out an environmental and social assessment of the project to assess the environmental and social risks and impacts of the project throughout the project life cycle. *The ESF requires to carry out an appropriate environmental and social assessment depending on the risk level of the project. This project has been ranked as moderate risk, and, hence, a Project Brief has been prepared in line with the National Environment Act, 2019.*
ESS2: Labor and Working Conditions	Recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. Borrowers can promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions. *Both skilled (80 workers) and unskilled (56) labour force will be required on the project; and, therefore, requirements of this standard to ensure appropriate working conditions shall have to be complied with. In particular, compliance must be ensured with the project specific Labour Management Procedures.*
ESS3: Resource Efficiency and Pollution Prevention and Management	ESS3 applies to the project due to the nature of the proposed activities. It recognizes that economic activities often cause pollution of air, water, and land, and consumes finite resources that may threaten people, ecosystem services and the environment at the local, regional, and global levels. This ESS3 sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life cycle. The project will require the use of power and water resources during both construction and operational phases. *Given the scarcity of these resources in the project sites, available resources will be used in the most efficient way to minimize wastage. In addition, measures to minimize pollution have been detailed in Section 8 of this Project Brief.*
ESS4: Community Health and Safety	ESS4 recognizes that project activities, project equipment and infrastructure increase the exposure of project stakeholder communities to various health, safety and security risks and impacts and thus recommends that projects implement measures that avoid or limit the occurrence of such risks. It

	provides further requirements or guidelines on managing safety, including the need for projects to undertake safety assessments for each phase of the project, monitor incidents and accidents and prepare regular reports on such monitoring. ESS4 also guides emergency preparedness and response. *The project may pose limited health and safety risks to the workers employed from the reserve adjacent communities. Therefore, provisions of ESS4 shall be complied with through implementing mitigation measures that minimize these potential risks.*
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	ESS6 recognizes that protecting and conserving biodiversity and sustainably managing living natural resources are fundamental to sustainable development; and it recognizes the importance of maintaining core ecological functions of habitats, including forests, and the biodiversity they support. Some of the mitigation measures mentioned in the ESMP of this Project Brief are aimed at addressing issues under ESS6. *The project is to be established in a sensitive ecosystem, Mt. Kei CFR, and, therefore, there is a need to comply with the provisions of this standard*.
ESS8: Cultural Heritage	This standard sets out general provisions on cultural heritage preservation and recommends protecting cultural heritage from the adverse impacts of project activities. The project sites' locations shall not impact any known cultural resources based on the assessment. However, in case there is / are chance finds during the execution of the project, any chance finds will follow the chance finds protocol included in this Project Brief.
ESS10: Stakeholder Engagement and Information Disclosure	ESS10. The standard establishes a systematic approach to stakeholder engagement and helps to identify stakeholders and build and maintain a constructive relationship with them, as well as disclose information on the environmental and social risks and impacts to stakeholders in a timely, understandable, accessible and appropriate manner and format. It recommends that stakeholder engagements be commenced as early as possible in the project development process and continued throughout the lifecycle of the Project. This allows for stakeholders' views to be considered in the project design and environmental and social performance. For this project, relevant stakeholders were and will still be engaged in line with the provisions of this standard and other requirements of this standard will be complied with. ESS10 also provides for the establishment and implementation of a grievance mechanism to receive and facilitate resolution of concerns and grievances. The IFPA-CD project has established a

	Grievance Redress Mechanism (GRM). GRC's will be established to support the resolution of the registered grievances.

2.9 Project Documents

During the conceptualization of the project, there are different documents that were prepared, and these shall be relevant during the project's implementation. These are described in the table below;

Table 7: Project Documents during Project Conceptualization

Project Document	**Key Aspects**
Environmental and Social Commitment Plan (ESCP)	The ESCP describes a summary of the project's material measures and actions to Mitigate the project's potential environmental and social risks and impacts. This will be helpful to NFA especially during monitoring of the project's implementation.
Environmental and Social Management Framework (ESMF)	The ESMF highlights socio-economic, legal, policy and institutional contexts of the project and sets a framework for NFA's roles and responsibilities in addressing the assessed social and environmental risks and impacts.
Labour Management Plan (LMP)	The LMP describes how the labour force on the project will be handled to ensure compliance with the requirements of ESS2. NFA shall carefully ensure all these aspects are fully catered for during the implementation of the project.
Stakeholder Engagement Framework (SEF)	The SEF describes the process for consultations with Stakeholders during the project formulation. It also shows the identified stakeholders which NFA shall have to engage during implementation of the sub-project activities.
General EHS Guidelines	These are technical reference documents with general and industry-specific examples of Good International Industry Practice. These guidelines contain the performance levels and measures that are generally considered to be achievable for new projects by existing technology at reasonable costs.

3 DESCRIPTION OF THE PROPOSED PROJECT COMPONENTS

3.1 Geographical location of Mt. Kei and Ozubu CFR

Mount Kei CFR (formerly Mount Kei Rhino Sanctuary) is in the extreme north-west of Uganda in Koboko District The northern boundaries are the Kaya River and the international border with Sudan; the Kechi River is to the east. The reserve can broadly be classified into dry Combretum-Terminalia savanna and Butyrospermum savanna woodland. It has a total area of 38,400 ha. The centroid geographical coordinates of the reserve are latitude and longitude N 03.59134 and E 31.09947, respectively.

The Ozubu Central Forest Reserve is located in Northwest Uganda in Koboko District, with centroid coordinates of 2.627° N latitude and 31.113° E longitude. The reserve is situated at altitudes ranging from 1,000 to 1,500 meters above sea level and is part of the Country's rich tropical and semi-deciduous forest zones.

The Mt. Kei CFR site is located in Lima Sub County and the one at Ozubu is located in Ludara Sub County.

Table 8: Coordinates for the Selected Site

S/n	Proposed site	Centroid GPS Location WGS 84 (UTM 36N)	Elevation (m)	Area (m^2)
1	Ozubu	383289 m N 277355m E	1159	207
2	Lima	395371m N, 288290m E	1174	207

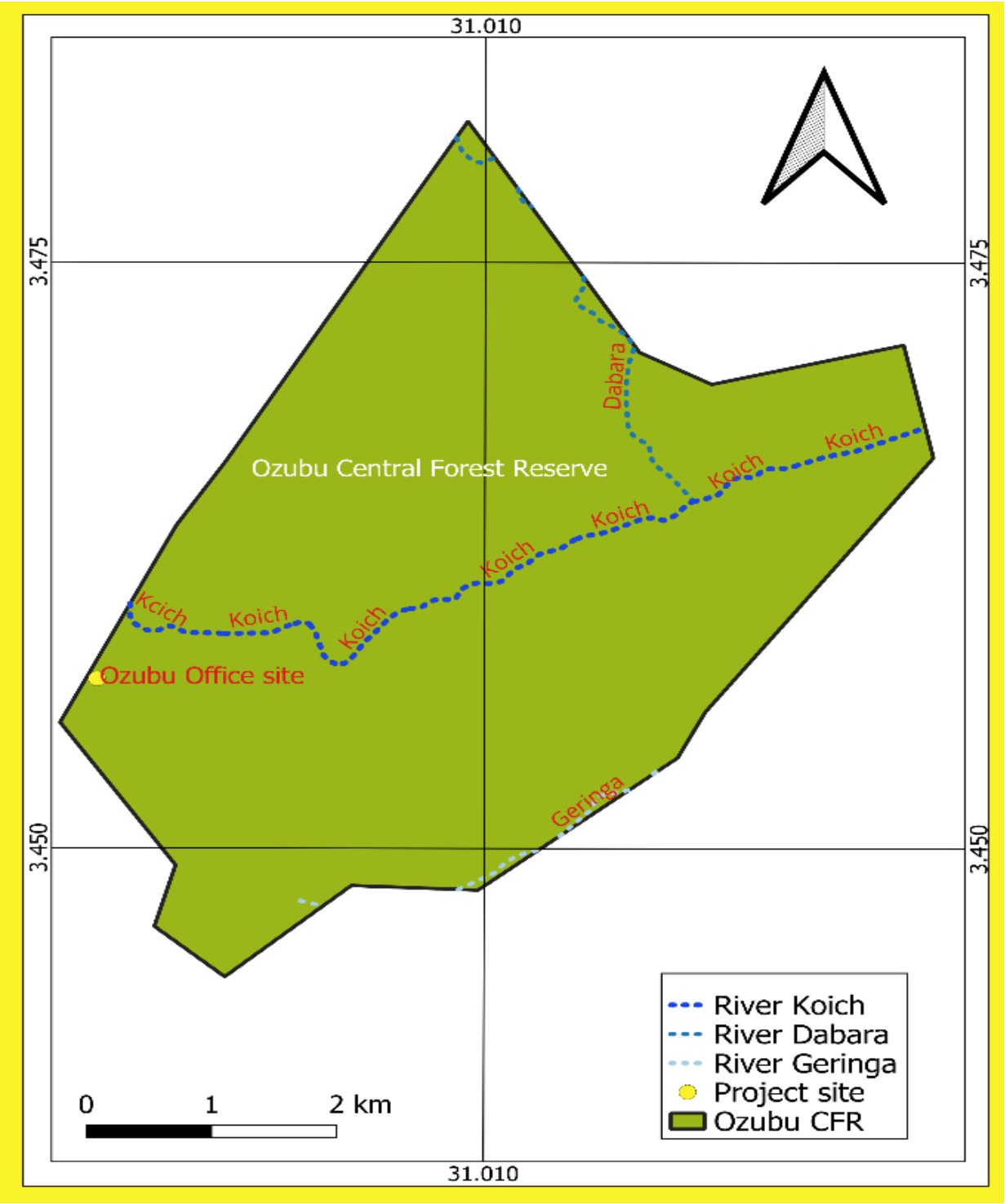

Figure 1: Geographical location of Ozubu CFR and proposed development location

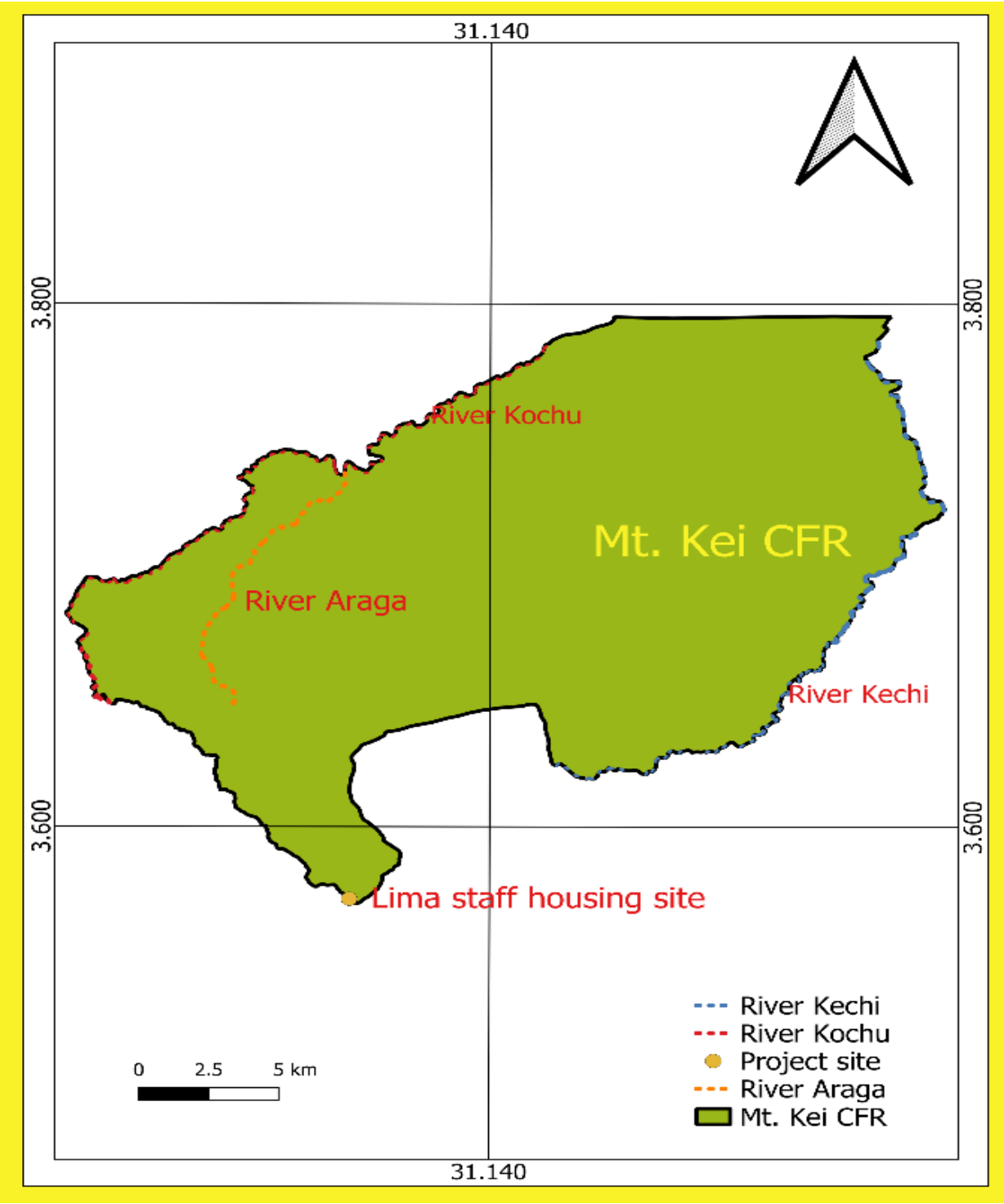

Figure 2: Google Map of Mt.Kei CFR showing the proposed site

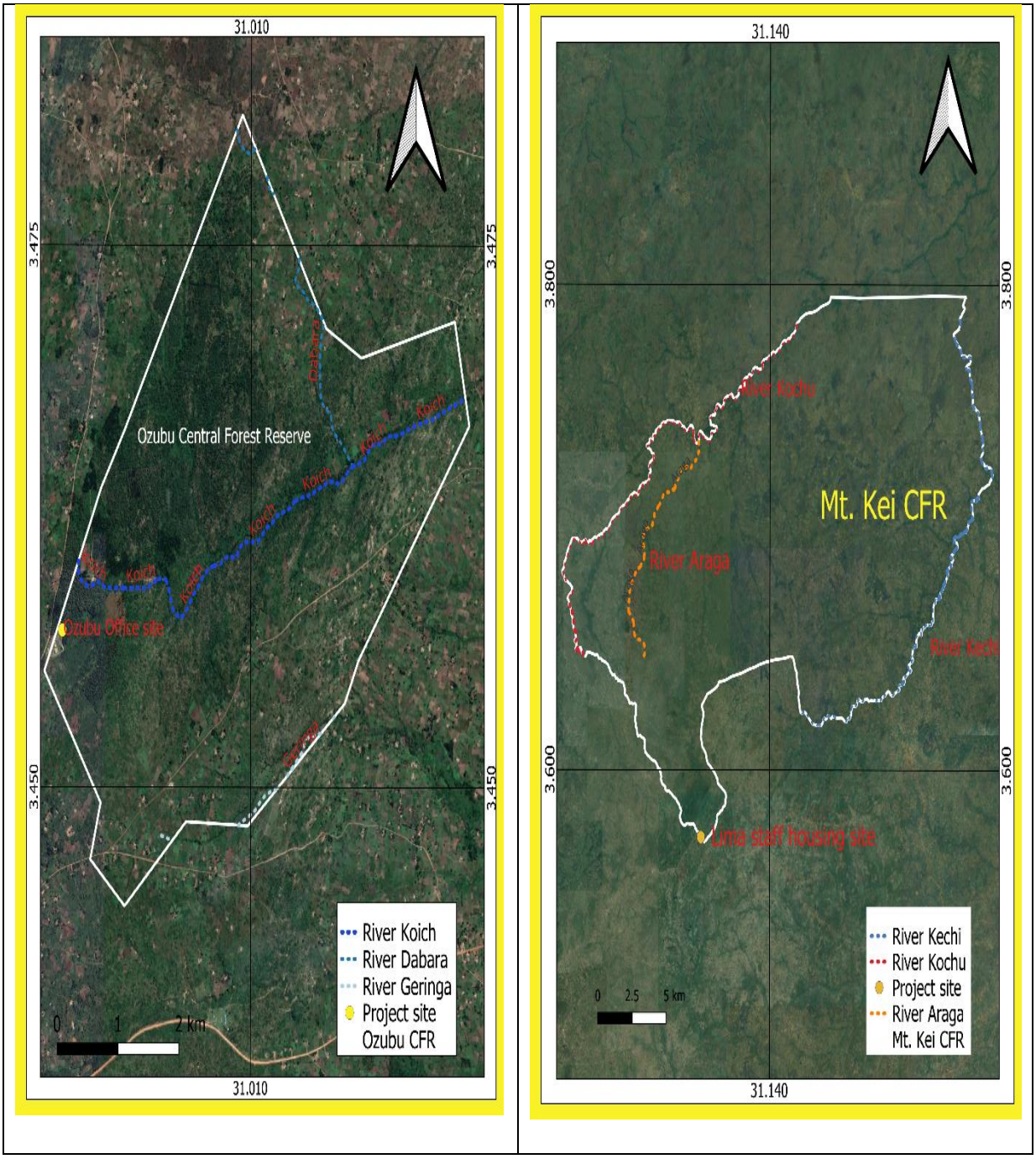

Figure 3: Google Map of Ozubu and Mt. CFR showing the proposed site

3.2 Project components

Table 9: Projects under design for Mt.Kei and Ozubu CFR

No.	Project	Components
01	Office housing	• Bathrooms Facility • 2 offices • Store • Reception • Common Kitchen Facility • Rainwater Harvest Facility • Solar system
02	Staff housing	• Toilet/Bathroom Facility (3 common) • Common Kitchen Facility • Rainwater Harvest Facility • Solar system • 2 Bedrooms per unit
02	Security/Patrol housing	Front Porch 4 Studio rooms Common toilet-bathroom Solar system Rainwater Harvesting

The pictures below show the architectural impressions of the proposed office building and staff housing to be constructed in Mt. Kei Forest Sector.

Figure 4: *Office building Artistic Impression Design*

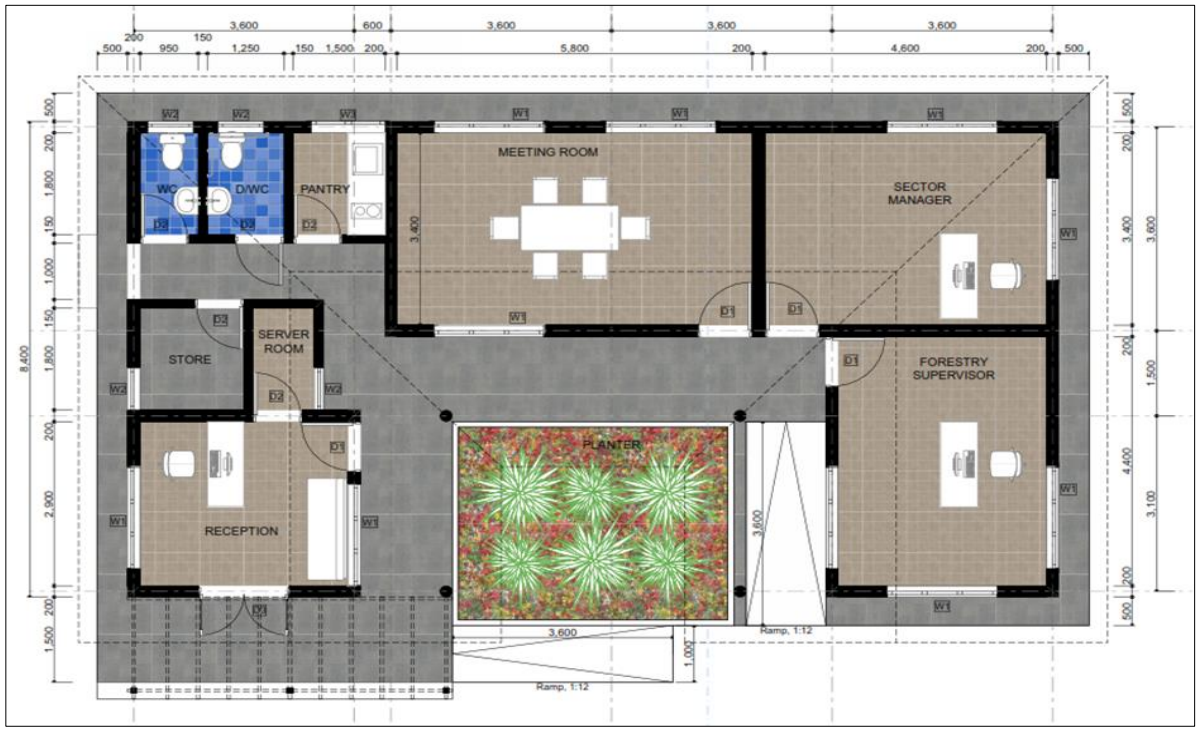

Figure 5: Office Building Floor Plan Design

Figure 6: Staff housing Artistic Impression Design

Figure 7: Staff Building Floor Plan Design

Figure 8: Security/Patrol Housing Artistic impression

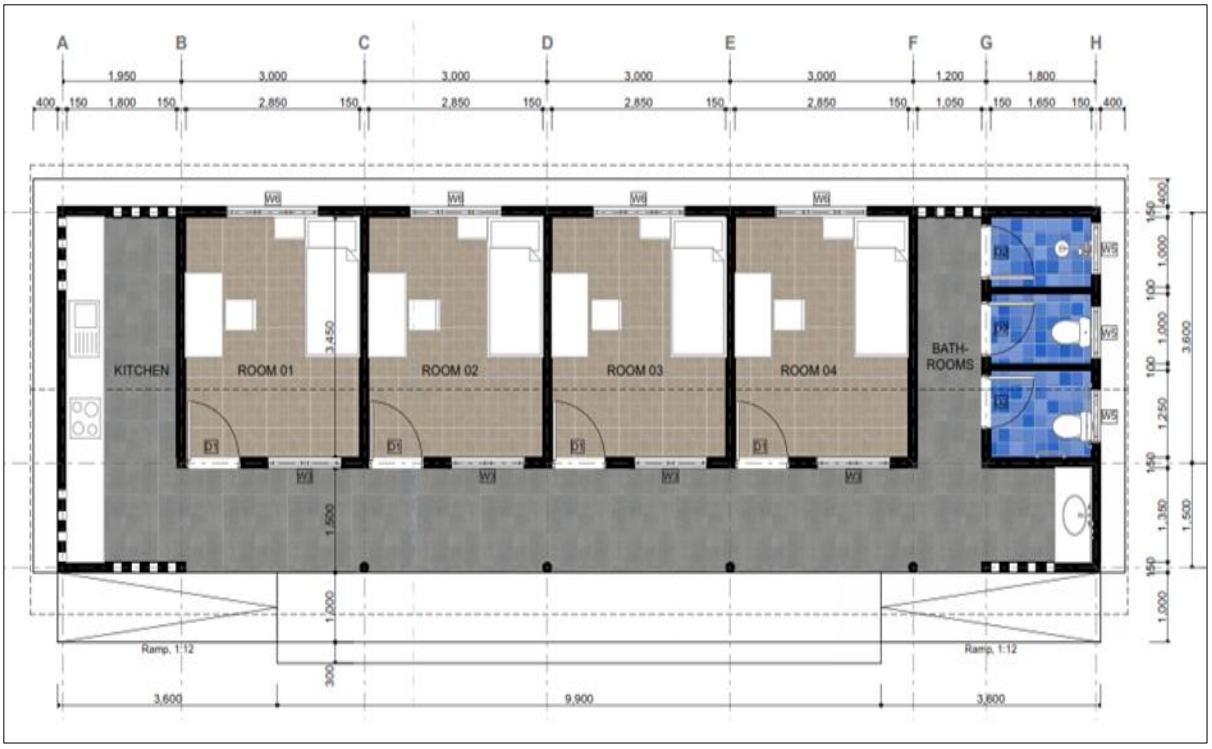

Figure 9: Security housing Floor Plan Design

Figure 10: *Ozubu Staff Accommodation Site Plan*

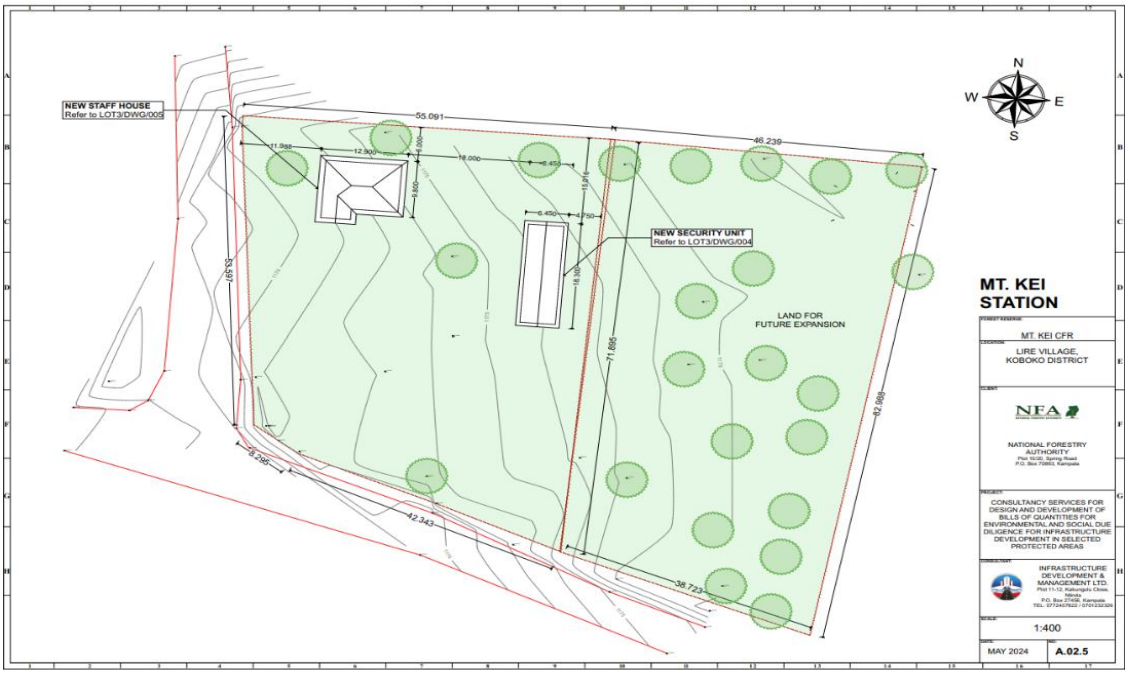

Figure 11: *Lima Staff Accommodation Site Plan*

3.3 Proposed Project Activities

3.3.1 Construction phase

The construction phase of works shall involve construction of the office and staff housing and their associated amenities. During this period, workers will be transported onto the respective work sites by the contractor's vehicles or walk from their homes hence no worker will stay on site. Each site will require 6 months for completion, but this will change depending on factors such as funding, resource mobilization, and natural calamities, among others.

3.3.1.1 Site Clearing and Excavation

The first stage of the construction phase will be site clearing for levelling and setting up the office and staff building. A section will be cleared for dumping material, where tarpaulin will be put to reduce material erosion. This will be followed by setting out of site for construction alignment and levelling by use of various equipment such as survey equipment, poles, construction squares, plump bob, and others. Excavations at the site, which will involve use of excavation machinery, will then commence.

The main method of excavation to be used is trenching to accommodate the buildings' foundations / footing. The deep excavated soil material will be disposed off-site at designated sites but the good topsoil will be used for revegetation around the reserve. No major rock obstruction was registered on sites to warrant use of explosives. Going by existing developments in the neighboring villages surrounding the reserve and the soil samples that were analyzed, the load bearing capacity of the underlying soil is adequate and safe to support the foundations without additional stabilization.

3.3.1.2 Construction inputs and equipment and the environment

The major construction raw materials include sand, cement, stones, crushed rock (including gravel/ballast), steel metals, roofing materials (including iron sheets, timber), rainwater harvesting materials (tanks, pipes, gutters), solar system (solar panels, batteries etc), painting materials, among others, will be obtained from neighboring communities where available.

Construction machinery, including trucks, concrete mixers, tools, and other relevant construction equipment will be used for the transportation of materials and the resulting construction debris.

3.3.1.3 Concrete and reinforcement work

These will include casting of reinforced concrete for the foundation (Concrete slabs) and beams. Concrete blocks will also be used during wall construction. Care should be taken to use prescribed

tensile strength of iron bars and cast-iron beams and appropriate ratios of concrete to ensure that load bearing beams and columns will not be subjected to shearing or bending/breaking under pressure. The contractor is also advised to carry out concrete tests to ascertain its specified characteristic strength.

3.3.1.4 Project labour

Construction labor force will comprise of both skilled and non-skilled workers. The contractor will be encouraged to get labors from the neighboring community. Furthermore, each site will require 68 workers (59% skilled and 41% unskilled), but this can change when construction work plans are established at the start of the construction phase. During the operation phase, a maximum of 10 people, both staff and their family, will be at each site.

3.3.1.5 Utilities and Services

The necessary provisions for comprehensive facility support include the following utilities and services;

3.3.1.5.1 Water supply, sewerage and storm water drainage

Ozubu site is located within reach of National Water and Sewerage Corporation water and sewerage infrastructure and Lima is not within the reach. Water during the construction phase will be purchased by the contractor and stored in a temporary onsite water reservoir. Temporary All sanitary facilities will be provided and installed by the contractor to be used during the construction phase.

3.3.1.5.2 Earthling and Lightning Protection

A general system for the earthling will be put in place during foundation construction. This will consist of a copper cable bonded to the outer foundation pads. This earthling will later be connected to the incoming power supply. Lightning protection shall consist of a copper tape on top with appropriate down conductors bonded to the general earth with inspection chambers and test points**.**

3.3.1.5.3 Energy Sources

During the construction phase, the main source of electricity will be a mobile generator which will provide energy required to power electric equipment on the sites. Fuel for the generator will be procured from the nearest fuel station. Where necessary, gas will be used for welding metallic sections on site.

3.3.2 Operation Phase

The operation phase of this project refers to the time after construction has ended and the office and staff building is in use. This phase will involve the use of the office for its intended purpose, and other associated functionalities for the better housing of the NFA staff members. The following issues are deemed significant for the operations phase.

3.3.2.1 Fire and Emergency

Comprehensive fire safety training and drills for the workforce will be emphasized to all the workers. Serviced fire extinguishers will be placed in strategic locations. Certified electricians will be used during maintenance of electrical components. Emergency contacts will be obtained and will be accessed by all the workers in case of any emergencies.

3.3.2.2 Energy Use and Supply

Since the Ozubu site is within close proximity of the national grid, hydroelectric power will be used as energy source and the site is next to a t-line while at Lima and solar power will be main source of power. Charcoal will be used by the NFA staff for cooking. For staff houses,office and security patrol, a 4.68 kWp smart package hybrid power box with stored energy of 37.44 kWh or 3120 Ah battery (14 units of 250 Ah) will work with 12 photovoltaic panels of 300 W each, complete with an MPPT charge controller, inverter, and other package capabilities, or an equal approved setup.

3.3.2.3 Water and Sanitation

The main water supply for the Ozubu site will be national water since the site is within the reach of National Water and Sewerage infrastructure. However, rainwater harvesting is also to be installed at the site. For Lima. Rainwater harvesting will be the primary source of water and River Kopu which is about 500m from the site. Water-based sanitary facilities will be established at the accommodation sites. Sanitary waste shall be managed by using septic tanks established at the site as onsite wastewater management facilities. These will be routinely managed and emptied using a licensed cesspool emptier once full to ensure proper sanitary waste disposal.

The sites will have water supply and drainage systems for the proposed facilities for both the wastewater from the kitchen and toilets. Ground water reservoirs with capacities of either 10,000 liters or 20,000 liters will be constructed on the site depending on the size with a connection to an elevated tank of 5000 liter to provide adequate storage. The water will then be treated with chlorine to enhance its safety as will be guided in the user manuals at commissioning of the facilities at completion.

The Lima site will have a water purifier as this will aid in providing portable water for consumption.

3.3.2.4 Waste Management

The waste that will be generated at the office and staff building will include generally non-hazardous waste, such as plastic polythene bags, material packaging bags, food remains, paper, etc. These will be stored in coded waste and shall be segregated at source. Municipal waste will be disposed of at the nearest designated Town Council waste disposal site once the collection bins are full.

4 METHODOLOGY FOR ENVIRONMENTAL AND SOCIAL ASSESSMENT

This section highlights the methods used for the environmental and social impact assessment and preparation of the project brief.

1. Baseline establishment
2. Stakeholder engagement
3. Impact analysis and identification of mitigation measures

4.1 Baseline Establishment

4.1.1 Zone of Influence

The impacts of the project activities on specific resources or receptors encompass both spatial (distance) and temporal (time) dimensions. Some activities may affect a broader area compared to others. The spatial and temporal dimensions have therefore been taken into account to define a Project's Zone of Influence.

This assessment involves establishing the biophysical and socio-economic conditions of the ZOI, including the Direct Impact Zone (DIZ) and Indirect Impact Zone (IIZ). The DIZ is defined within a radius of 200 meters from the proposed site, while the IIZ extends to a radius of 5 kilometers.

The 200m DIZ due to the fact that: -

- It is within this site that clearing shall occur, usage of equipment, contractor's material vehicle trucks movements, and all these activities are associated with impacts that will occur within this zone of influence.

The 5km IIZ was considered due to the fact that: -

- The materials for construction may be sourced from different places further away from the construction sites.

4.1.2 Air quality

The baseline for air quality assessment was quantified through the following activities:

1. Review of national policies and laws / regulations;
2. Measurement of dust was undertaken with Diyeeni Air Quality Tester, HT9600 Air Quality Monitor whereas air quality was measured using the MX6 Ibrid Multi-gas detector
3. Randomly selected points were selected for the air quality baseline survey at the proposed sites and took note of the receptors.

Figure 10: Air quality-measuring equipment used

4.1.3 Noise measurement

Baseline noise monitoring was conducted at chosen representative receptors across the proposed sites. These measurements were performed to quantify the existing noise levels, establishing a baseline for both this assessment and the project's implementation phase.

Noise levels were measured using a Casella Cel 621C2/K1 integrating 1/3 octave band sound level meter (Class 2). The noise logger was configured to record data for a duration of 5 minutes at each potential receptor.

Figure 11: ***Noise measuring equipment used***

4.2 Biodiversity Survey Methods

Desk review of available literature on the flora, fauna and their conservation status in the proposed project area was carried out before the actual field visit to identify priority species, sensitive habitats and provide an overview of the vegetation and habitats present within the study area. Previous vegetation classifications were reviewed, and relevant literature sources such as Kalema (2005), Langdale-Brown et al (1964), IUCN (2021), and Kalema & Beentje (2012) were consulted. The priority species identified included threatened, rare, unique and species of scientific and conservation interest. The information gathered from this review helped to define the most appropriate scope for the field surveys, and to ensure that the survey methods employed were tailored to the specific characteristics of the study area.

4.2.1 Flora

Floristic surveys were conducted using a combination of field observations, specimen collection, and identification. This involved moving randomly within a radius of 200m from the proposed site and recording all the plant species encountered. Taxonomic keys such as "Useful Trees and Shrubs for Uganda" (Katende, Birnie, & Tengnäs, 2000) and "Field Guide to the Forest Trees of Uganda" (James & Hamilton, 2020) and expert verification were used to identify the plant specimens to species level.

Site specific vegetation descriptions to determine habitat types were based on species dominance and floral features such as herbs, shrubs and trees along the proposed site. Plants were also categorized as Native and/or Invasive. The IUCN Red list of threatened species was used to assess the conservation status of the plants.

4.2.2 Mammals

The mammals were surveyed using three main methods:

- Direct observation/visual encounters: This entailed the collection of direct evidence of fauna activity (e.g., sightings, vocalizations). All mammals that were seen or opportunistically sighted or heard vocalizing while moving in and around the project area were identified, counted and recorded;
- Use of Signs. This entailed the collection of indirect evidence (e.g., faeces or dung, calls, footprints). Mammal species whose signs / indirect evidence were recognized were recorded for their presence; and;

- Local consultations: local people encountered in the field were contacted, and an inquiry was made on the mammals encountered in their day-to-day work, with most of the mammal names given in the local names.

Nocturnal mammals were excluded since the survey was conducted during day light hours. Mammal identification was based on Kingdon (1974), Delany (1975) and Kingdon et al. (2013). The conservation status of the encountered mammal species was ascertained using the 2021 version of the IUCN Red List of Threatened Species and the Red List of Uganda's Nationally Threatened Species (WCS, 2016). In these resources, species are assessed as to whether they are CR – Critically Endangered, EN – Endangered, VU – Vulnerable, NT - Near-Threatened, NE – Not Evaluated, LC - Least Concern or DD - Data Deficient

The use of both direct and indirect methods allowed for a more comprehensive and accurate survey of the mammal species present in Mt. Kei and Ozubu.

4.2.3 Herpetiles (reptiles and amphibians)

The Visual Encounter Survey (VES) method was used to search for Herpetiles in the study area. To increase the chances of finding animals and cover a wider survey area, a random search was conducted. This method involved a researcher moving slowly through the habitat, carefully watching the foliage above the ground, turning logs or stones, inspecting retreats, and watching out for surface-active species. In addition to VES, interviews were conducted with local people who were asked about physical signs of herpes presence in the area such as skin shades and prints, bones, and faecal samples. Herpetofauna species encountered opportunistically while moving in the project area were also recorded. The species encountered were assessed against the IUCN Red list to determine their conservation status.

4.2.4 Avian Surveys

The Point Counts method (Bennun et al., 2002) was used whereby all bird species seen and heard calling from a stationary point were recorded. A series of point counts were conducted at various locations in the study area.

The study also employed random searches for birds. This increased the chances of finding birds in addition to covering a wider survey area. The researcher moved slowly in the habitat, watching the foliage above the ground carefully, listening to bird calls and songs, and watching out for surface-

active species. The local people were also interviewed to obtain information about physical signs (feathers, nests, calls, droppings, etc.) of birds present within the area. All bird species encountered were assessed against the IUCN Red list in order to understand their conservation status

4.3 Stakeholder Engagement and Public Consultations

4.3.1 Sampling strategy

A non-probability sampling strategy was adopted to select the study participants for qualitative studies.

Key Informant Interviews*:* - specifically, a purposive sampling procedure was adopted because the key informants were information rich. This is attributed to the roles and responsibilities they perform in their respective line of duty. In total 29 key informant interviews were conducted (refer to the table below) and the key informants included the NFA field staff supervisor in charge, community, District officers, NFA Patrol team and NFA headquarter team, local leaders, Ministry Contact Personnels

Table 10: Types and Number of Key Informants

S/N	Position	Date	Gender		Total
			F	M	
1	NFA field team	02/04/2024		04	04
2	Team from NFA HQ	20/05/2024	02	04	06
3	Community members, Kakwa (05) Aringa (04)	02/04/2024	02	07	09
4.	Local leaders, LC1, LC2	02/04/2024		03	03
4	District members DEO, DCDO.DFO,	03/04/2024		03	03
5	Uganda Wildlife Authority	07/05/2024	01	02	03
6	Ministry of Water and Environment	21/05/2024		01	01

7	Ministry of Labor Gender and Social Development	06/06/2024	01	04	05

4.3.2 Focus Group Discussions (FGDs)

FGDs were conducted for each project as described in section 6 of this report. The FGD guide was used to capture socio-economic activities, land-based activities, food security issues, agricultural production constraints, no- agricultural constraints, current infrastructure condition, food security status, gender issues, water sources available to the community, social services, sources of energy, communal assets etc. Data was analyzed based on emerging themes.

4.4 Document Reviews

The socio-economic assessment was preceded by review of Uganda's relevant national policies and sectorial performance reports, and the Five-Year District and Town Council/Sub County Development Plans. In addition, project documents such as ESMF, Stakeholder Engagement Plan (SEP), Labor Management Plan (LMP), GRM procedures prepared for IFPA-CD Project, were reviewed and referred to during Project Brief preparation.

4.5 Drive through Observation

Data was collected using a drive through in the reserve. This involved making stopovers to make observations. Some of the observations made include the current status of the infrastructure, social economic activities along the assessed project sites, social services associated with the proposed infrastructure, institutions within the project vicinity. An observation checklist was used.

4.6 Impact identification and analysis

The impacts of the proposed project were predicted in relation to environmental and social receptors in the project area. This was accomplished by comparing baseline conditions with situations that would culminate when the project is implemented.

4.6.1 Impact Significance

The impact significance was obtained as a product of the impact severity and probability of occurrence. These two variables are defined below as per this study.

Table 11: Impact Significance detailed below

Impact Severity	**Probability of Occurrence**
The severity of an impact was defined as a function of a range of considerations which include: - 1. Impact magnitude; 2. Impact extent; 3. Impact duration.	This the likelihood of an impact to occur and it was rated as: - 1. Highly improbable, 2. Improbable, probable, 3. Highly probable or; 4. Definite. 5.

The table below describes the criteria for rating the various risk elements used to determine impact significance.

Table 12: Criteria for rating the various risk elements

Extent		**Magnitude**	
On site (Localised)	1	**Negligible:** No noticeable effect upon the social environment	1
Project area of influence (proposed site and its immediate environs)	2	**Minor:** Noticeable effects on the environment, but reversible over a short period of time.	2
Regional	3	**Medium:** Noticeable effects on the environment, reversible over the long term.	3
National	4	**High:** Highly noticeable effects on the environment, difficult to reverse.	4
International	5	**Very High:** Highly noticeable, irreparable effect upon the environment.	5
Duration		**Probability**	
Temporary (0-1 year)	1	**Highly improbable:** A combination of very rear factors is required for it to happen. (<20% chance of occurring)	1
Short Term (1-5 years)	2	**Improbable:** A combination of very many conceivable factors is required for this to occur. (20 – 40% chance of occurring)	2
Medium Term (5-10 years)	3	**Probable:** This impact could occur at some point/time if controls are not applied. (40% - 70% chance of occurring)	3

Long Term (10-15 years)	4	**Highly probable:** This impact will probably occur in most circumstances if controls are not applied (several times a year) (>70% - 90% chance of occurring)	4
Permanent (above 15 years)	5	**Definite:** Impossible to avoid. Could occur either immediately or within a short period of time (likely to occur most weeks or months). (>90% chance of occurring)	5

The combination of the impact severity and the probability of occurrence of the impact is shown as a matrix below.

Table 13: Derivation of impact significance

Severity (Extent + Magnitude + Duration)															
Probability		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	2	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
	3	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
	4	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60
	5	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75

4.6.2 Impact Significance Rating

Low	**<25**	Shaded green as shown above in the impact significance matrix (Table 4 above). Impacts in this criterion are considered acceptable.
Moderate	**25-49**	Shaded orange as shown above in the impact significance matrix (Table 4 above). Impacts rated as medium are considered tolerable, but efforts must be made to reduce the impact to levels that are as low as reasonably practical.
High	**>50**	Shaded red as shown above in the impact significance matrix (Table 4 above). These denote that the impact is un-acceptable and further mitigation measures must be implemented to reduce the significance.

Mitigation measures were proposed based on findings of the field surveys/analyses and stakeholder consultations. Recommendations were made in accordance with Ugandan laws and regulations, the World Bank Environmental Health Safety Sector Guidelines, sound technological measures, and standard industry best practice. Mitigation measures that require to be integrated in the early planning stages of the project were proposed following preliminary impacts identification.

4.7 Environmental and Social Management Plan (ESMP)

After the identification of mitigation measures, the environmental and social team prepared an ESMP with procedures, plans and costs, as well responsible parties for implementing the recommended measures. The ESMP has been included in the Project Brief and includes:

- The identified social and environmental impacts and risks;
- Recommendations of feasible and cost-effective measures to prevent or reduce, mitigate or compensate significant negative impacts to acceptable levels;
- Estimated magnitude of impacts and costs of mitigation measures; consideration for compensation to affected parties for the impacts that cannot be mitigated;
- Set of "best practices" measures to be followed in order to avoid some of the impacts during construction and operation phases of the project;
- Identification of the institutional needs to implement environmental and social recommendations including a review of the capacities of the relevant institutions; and

Description of the detailed arrangements required for monitoring the implementation of the mitigation measures and the impacts of the project during the construction and operation; proposed work programs, budget estimations, schedules, responsibilities for implementation and other necessary support services to implement the ESMP.

5 ENVIRONMENTAL AND SOCIAL ECONOMIC BASELINE CONDITIONS

This chapter explores the present environmental conditions within and in the vicinity of the proposed project sites, encompassing the surrounding area. The findings are organized into three categories: physical, biological, and socio-economic aspects. By examining the physical, biological, and socio-economic/cultural characteristics of the area, the environmental and social impacts of the proposed activities were determined.

5.1 General Biological Baseline

Biodiversity surveys were conducted within two sites, i.e., for the proposed construction of a sector office at Ozubu and construction of staff houses at Lima within Mt. Kei Forest reserve.

5.1.1 Flora

According to (Byaruhanga, 2001), the topography of this region is hilly, and most of the area is covered with savannah woodland dominated by Acacia species, *Balanites aegyptiaca* and *Combretum aculeatum*. According to Byaruhanga(2001), the area is classified into three major vegetation categories: A) Wooded grassland, which dominates most parts of the park and comprises Filipendula, *Hyperrhnia rufa* and *Combretum* species, mainly *C. collinum*. B) Bushed Grassland, mainly dominated by *Combretum* species and two grasses, *Hyperrhenia filipendula* and *H. rufa*. This vegetation type occupies high, well-drained areas. C) Riverine Woodland, occurring along seasonal and permanent rivers and streams. The habitat is dominated by *Acacia sieberiana* and *Borassus aethiopum.*

Mt. Kei forest reserve can broadly be classified into dry Combretum-Terminalia savanna and Butyrospermum savanna woodland (Byaruhanga, 2001). The vegetation of the proposed project sites is a combination of savanna woodland and cultivated woodlot dominated by combretum species, *Tectona grandis* with most predominant shrubs being *Combretum collinum, Senna didymobotrya and Acassia hockii.* A comprehensive list of the recorded plant species is provided in Appendix 1.

The vegetation within the proposed sites constitutes of 39.30% trees, 30.30% herbs and 30.30% shrubs.

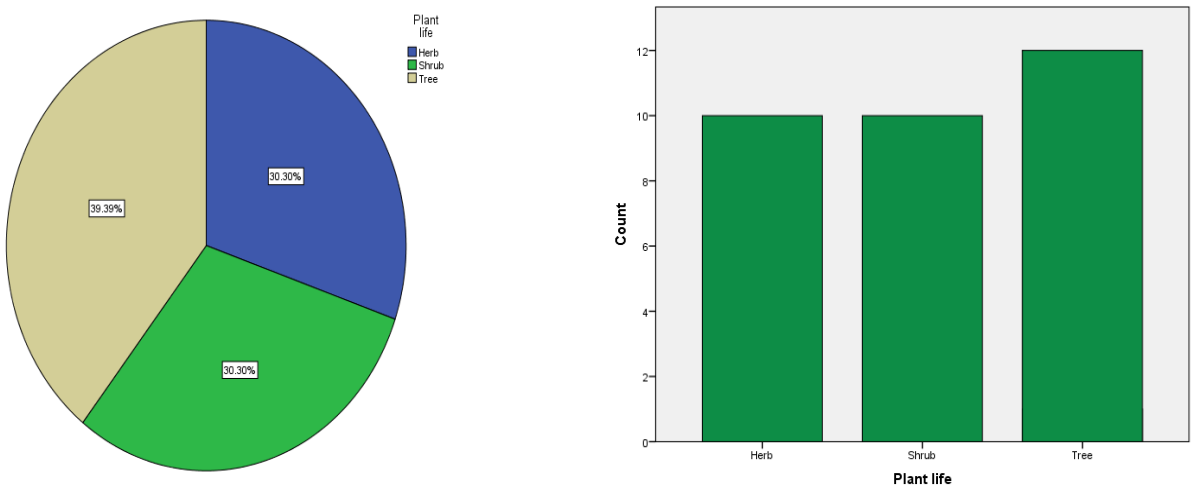

Figure 12: Chart and bar graph showing the plant species surveyed

Overall, 32 plant species belonging to 13 families were recorded in the proposed sites within Mt.Kei and Ozubu CFR with family Fabaceae obtaining the highest frequency followed by families Combretaceae and Poaceae. The figure below shows the plant families surveyed and their frequencies.

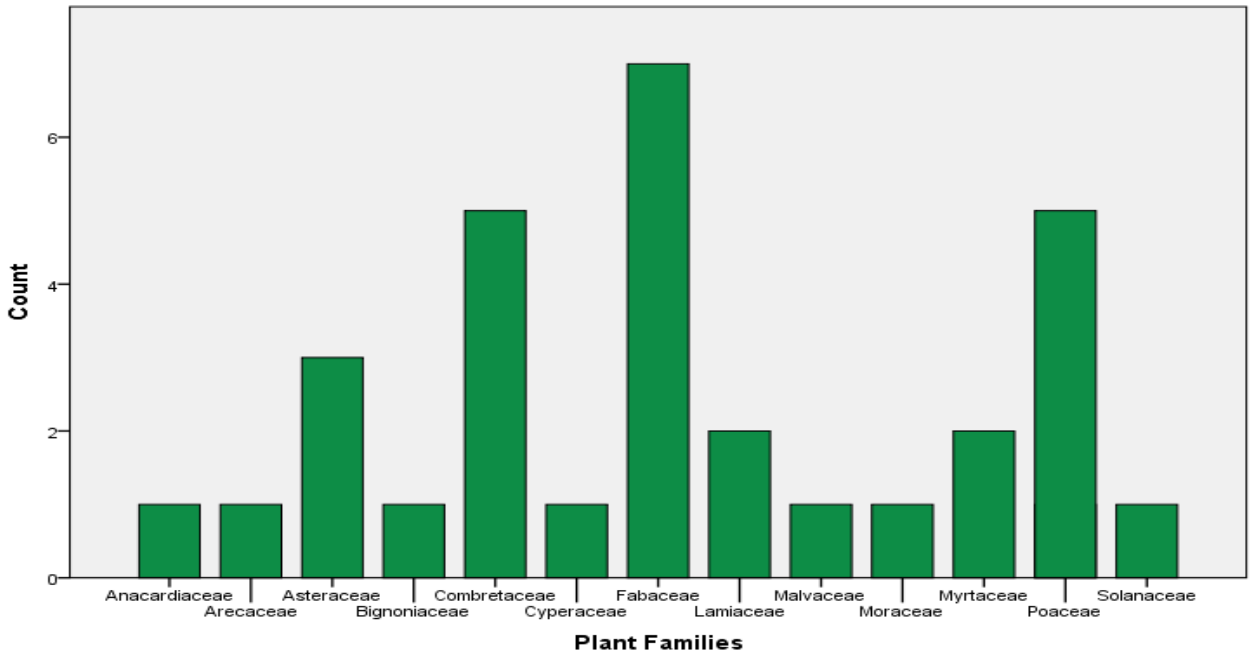

Figure 13: Bar graph showing the plant families surveyed

5.1.1.1 Site specific vegetation description

5.1.1.1.1 Ozubu site (sector office)

The site comprises predominantly cultivated teak (*Tectona grandis*) woodlot with a few *Mangifera indica* and *Eucalyptus grandis*. The existing shrubs include *Senna occidentalis, Borassus aethiopum, Lantana camara and Acassia hockii*.

Ptychadena nilotica

Teak plantation at Ozubu site

River Kochi

Figure 14: Results found at Ozubu office building site

5.1.1.1.2 Lima site (staff houses)

The site is characterized by a grass-dominated pattern surrounded by *Tectona grandis, Senna didtymobotra* within a typical savanna woodland dominated by combretum species.

Vegetation cover at Mt.Kei dominated by combretum spp

Proposed site at Lima dominated by combretum species

Figure 15: Results found at Lima Staff housing site

5.1.1.2 Ecologically sensitive habitat

River Kochi which is located about 400m away from the proposed Lima site lying at UTM coordinates 36N: 395371m N, 288290m E.

R. Kochi serves as an important habitat for different species, especially the herpetofauna. It also serves as an important water source for other wildlife in the area. The riverine ecosystem is key for shaping the climate of the area and may also harbor a number of water bird species along the river flow. Only two amphibian species of Ptychadena nilotica,and Sclerophrys regularis were recorded within R.kochi. All these species are of least concern. furthermore, no species of conservation were recorded

5.1.1.3 Invasive Species

The presence of invasive *Lantana camara, Cynodon dactylon* and *Eleusine indica* was observed within and around the proposed sites. Invasive plants often exploit ecological disturbances, which are anticipated during site clearances, thereby posing a potential threat to the ecological systems. According to NARO (2007), invasive plants can have detrimental effects on conservation efforts and may result in economic and environmental damage. They outcompete native species through aggressive recruitment and disrupt the balance of natural ecosystems, underscoring the importance of their management.

Lantana camara has a propensity for further spread if disturbances persist (Cronk & Fuller, 1995). The International Finance Corporation (IFC, 2012) Performance Standard 6, which focuses on biodiversity conservation and sustainable management of living resources, emphasizes the need for projects to address concerns associated with invasive species to ensure compliance with the standard.

5.1.1.4 Conservation status of the studied species

The majority of the recorded species are listed as Least Concern (70.79%) according to IUCN while others are either Not Evaluated (12.12%), Near Threatened (3.03%) or Data Deficient (3.03%) as seen in the figure below.

Two species are listed as of conservation concern on the IUCN red list i.e. Endangered (Tectona grandis) and Near Threatened (Eucalyptus grandis). However, both species are not native to Uganda and have been introduced to different parts of the world typically for commercial purposes. A similar case applies to Ozubu where teak and eucalyptus have been introduced for plantation farming, typically for commercial use. Therefore, the species are not nationally considered as of conservation concern.

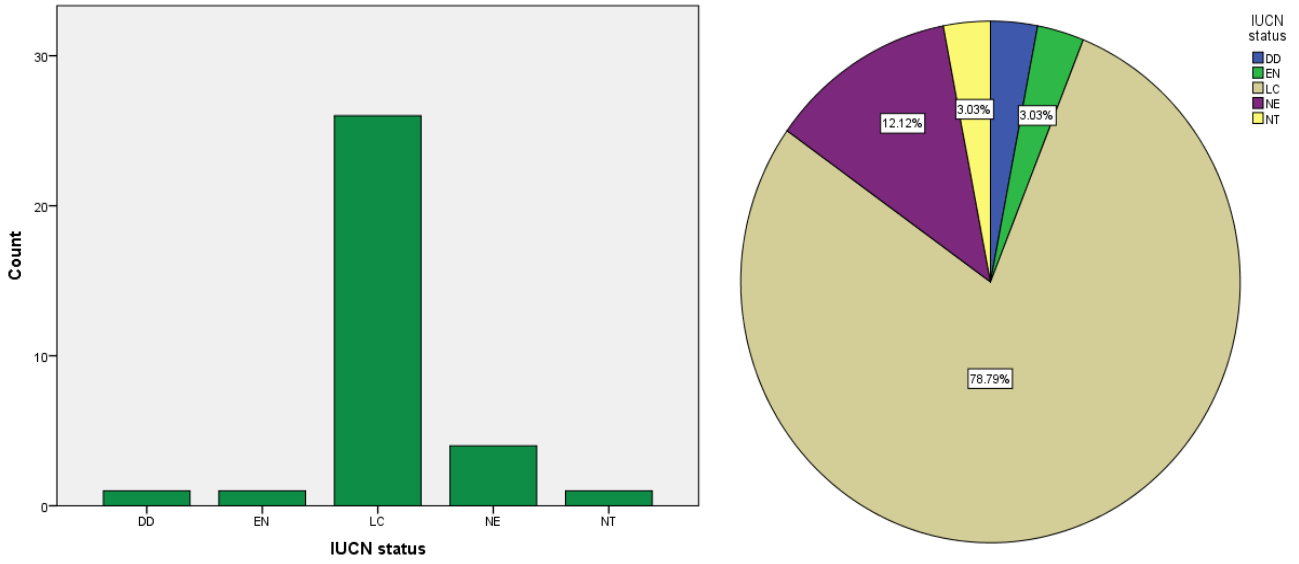

Figure 16: Bar and Pie charts showing the IUCN status of the vegetation studied

5.1.2 Fauna

The area is generally known for having a limited number of fauna species. According to Byaruhanga (2001), the majority of the wildlife in the area has been hunted to extinction. The area is known to host over 21 mammal species, 54 moth species and 126 butterfly species (Howard et al., 2000).

In addition, the reserve is considered as an important bird area of Uganda with nearly 175 bird species, including several species only found in this area in Uganda (Hughes et al.).

5.1.2.1 Mammals

The mammal surveys in the area yielded minimal results. This could also be due to limited time in the field. A total of 4 mammal species representing 3 families were recorded from both direct and indirect methods as described in the table below. All the recorded species are considered of least concern by the IUCN red list of threatened species.

Table 14: Mammals recorded

Family	Species name	Common name	IUCN Conservation status	Identification method
Muridae	*Rattus rattus*	Black rat	LC	Direct
Muridae	*Arvicanthis niloticus*	African grass rat	LC	Direct
Bovidae	*Tragelaphus sylvaticus*	Bushbuck	LC	Reported
Cercopithecidae	*Papio anubis*	Olive baboon	LC	Reported

5.1.2.2 Herptiles

Two amphibian species from the order Anura, family Ptychadenidae and Bufonidae were recorded. This order has a wider range and is adaptable to inhabit a wider range of habitats such as forest margin, savanna woodland and agricultural lands both moist and dry. One reptile species red-headed rock agama (*Agama agama)* belonging to order squamata was recorded. All herptile species recorded are considered of least concern by the IUCN redlist of threatened species.

It is important to note that a limited number of herptile species were recorded due to limited time in the field.

Table 15: Amphibians encountered

Family	Species name	Common name	IUCN status
Ptychadenidae	*Ptychadena nilotica*	Nile grass frog	LC
Bufonidae	*Sclerophrys regularis*	Common African toad	LC

5.1.2.3 Avian species

A total of 22 avian species were recorded. The species include both forest dependent and forest nondependent. Some of the species recorded are known to occur in large numbers within a geographical space while others are known to inhabit natural habitats that are modified with human settlements. Furthermore, all species recorded are of Least Concern following the IUCN red list of threatened species. A comprehensive list of the recorded birds is provided in Appendix 2.

5.2 Physical Baseline

5.2.1 Project location of Mt. Kei and Ozubu Central Forest Reserve

The area once referred to as Mount Kei Rhino Sanctuary is now recognized as Mt Kei Central Forest Reserve. Situated within the Sudan-Guinea Savanna biome, it shares borders with the Kaya River to the north and the international border with Sudan, as well as the River Kechi to the east. The southern boundary is characterized by agricultural lands and small settlements in the Koboko District, where farming predominates. Its coordinates are 03.59134 latitude and 31.09947 longitude and an elevation range of 915–1,330 meters. The reserve spans through the Koboko District with an area covering 384 square kilometers.

5.2.1.1 Ozubu office housing

It's located at UTM coordinates 36N: 383289 m N 277355m E within Mt. Ozubu CFR in Kakwa village, Ozubu parish, Ludara Sub County in Koboko District. The site is about 500m from the Kakwa community. This is a fresh site located within Ozubu forest reserve with no existing structures. The site can be accessed using the Nadia- Ludara community road which is about 200m from the site and it's in fairly good condition. There is no access road to the site, therefore, an access road is recommended. Koboko town is about 8km and 55km to Arua city. The site is adjacent to the National water and sewerage corporation Kochi main treatment plant and Kochi River at about 400m. The nearest Health Centre is in Koboko and Ludara HC 1V. The site is within the national power grid, therefore, electricity will be used as the primary source of power though solar will also be installed as a backup. The site is covered with teak plantation above 300mm diameter. The site is on a relatively raised but flat ground with gravel type of soil

Teak *plantation*

National Water and Ssewerage Cooperation Kochi main treatment plant

Figure 17: Existing vegetation and facilities

5.2.1.2 Lima staff housing

The site is located at a UTM coordinates 36N: 395371m N, 288290m E within Mt.Kei CFR in Lima village, Lima Sub County Koboko District. The site is 100m from the Aringa community 23km to Koboko town and 22km to Yumbe town. This is also a fresh site with no structures in place. The site can be accessed through the Lobe- Lima murram road which is in good condition.

The site is about 30m from Lobe – Lima Road. The nearest trading centers are Lima which is about 4.5km from the site and Lobe is about 5km from the site. The Nearest source of water is River Kopu about 800m from the site. The nearest Health Centre is Ludara HC 1V and it is about 7km to the site. The site is within the national power grid with no connections to homes, therefore, solar energy is recommended. No access road needed as the site is along Lobe-Lima community road. The site is on a flat ground.

Proposed site

Team at the site

Figure 18: Existing vegetation and facilities

5.2.2 Topography and Geomorphology

Mount Kei CFR is characterized by diverse features and formations. Rising to an elevation range of 915–1,330 meters, Mount Kei exhibits a varied landscape encompassing rugged terrain, valleys, and plateaus. Its slopes may feature steep gradients, while its peaks offer panoramic vistas of the surrounding area. The geomorphology of Mount Kei reflects its geological history, with evidence of erosion, sedimentation, and tectonic activity shaping its contours over time. The presence of rivers and streams, such as the Kaya River and the River Kechi, further contribute to the dynamic landscape of the area.

The Ozubu Central Forest Reserve features a varied topography of rolling hills, flat plains, and gentle slopes at elevations between 1,000 and 1,500 meters. This landscape supports tropical and semi-deciduous forests, with ferrallitic soils rich in iron and aluminum oxides, though generally acidic and less fertile. Geomorphologically, the area includes features shaped by historical tectonic

and erosional forces, small seasonal rivers creating narrow valleys, and a mix of sedimentary and volcanic rock formations.

5.2.3 Soils and geology

The soil and geology of Mount Kei are integral to understanding its ecological and geological significance. The region's soil is typically influenced by the underlying geological formations and climatic conditions. Mount Kei soil varies depending on factors such as elevation, slope aspect, and vegetation cover.

Geologically, Mount Kei is in an area characterized by diverse rock types and formations. These may include sedimentary, metamorphic, and igneous rocks, each with its own unique properties and composition. Over time, geological processes such as weathering, erosion, and deposition have contributed to the formation of the landscape seen today.

The soils of Mount Kei may reflect this geological diversity, with variations in texture, fertility, and nutrient content. Factors such as parent material, drainage patterns, and vegetation cover can also influence soil development and composition.

The soils and geology of the Ozubu Central Forest Reserve are predominantly ferrallitic soils, which are typical of tropical regions with high rainfall. These soils are rich in iron and aluminum oxides, giving them a reddish hue, but they are often acidic and have low natural fertility, requiring management for agricultural use. Geologically, the region lies on the East African plateau, with a foundation of ancient sedimentary and volcanic rocks shaped by tectonic activities over millions of years. This geological diversity has resulted in a mix of soft and hard rock layers that influence soil depth, drainage, and stability, providing a supportive environment for the dense forest ecosystems characteristic of the area.

5.2.4 Hydrology and Drainage

The Reserve features a complex hydrological system that is essential for sustaining its diverse ecosystems. Influenced by topography, rainfall, and key watercourses like the Kaya River and River Kechi, the reserve's drainage network supports both flora and fauna. The Kaya River defines the northern boundary, providing a continuous water supply that supports ecological balance and

local agriculture. The River Kechi, marking the eastern boundary, experiences seasonal flow variations, influencing the reserve's hydrology and serving as a natural border. In the southern region, smaller streams maintain soil moisture, crucial for agriculture, while the western area, with its higher elevation, relies on scattered streams and seasonal rainfall to support wildlife. At Ozubu, the hydrology and drainage are influenced by its proximity to the Kochi River, located 400 meters away, and its gentle slopes, which naturally direct water runoff towards the river, supporting effective drainage and at Lima, site benefits from effective drainage due to its proximity to River Kopu and gentle slopes, which direct runoff away from the site and support local agriculture.

The hydrology and drainage of the Ozubu Central Forest Reserve in Uganda are influenced by the region's tropical climate, characterized by seasonal rainfall that nourishes a network of small rivers, streams, and seasonal watercourses. These waterways create natural drainage systems that help maintain the forest's moisture levels, supporting its lush vegetation and rich biodiversity. Located on the East African plateau, the reserve has moderate drainage slopes, allowing water to flow gradually from higher elevations to the surrounding lowlands. During the rainy season, the flow rates of streams and rivers increase, shaping small valleys and affecting soil erosion and deposition.

5.2.5 Climatic patterns

5.2.5.1 Rainfall patterns

Mount Kei experiences a seasonal rainfall pattern characteristic of its location within the Sudan-Guinea Savanna biome. This pattern often entails distinct wet and dry seasons.

During the wet season, which commonly occurs from around April to October, Mount Kei receives the bulk of its annual precipitation. Rainfall is generally abundant and frequent during this period, contributing to lush vegetation growth, replenishing water sources, and supporting various forms of wildlife.

Conversely, the dry season, typically spanning from November to March, is characterized by reduced rainfall and drier conditions. This period may see occasional short showers or thunderstorms, but overall, precipitation is limited. As a result, vegetation may become sparse, water sources may diminish, and wildlife may face challenges in finding adequate food and water.

The rainfall patterns in the Ozubu Central Forest Reserve are characterized by a bimodal distribution, with two distinct rainy seasons. The primary rainy season generally occurs from March to May, while a shorter secondary rainy season spans August to November. Annual rainfall averages between 1,200 and 1,500 millimeters, though this can vary based on specific topographic and climatic conditions within the reserve. The area experiences a relatively dry period from December to February, with lower rainfall levels, contributing to seasonal shifts in river flow and soil moisture.

5.2.5.2 Temperature and Humidity

Mount Kei experiences a tropical climate characterized by warm temperatures and relatively high humidity levels due to its location within the Sudan-Guinea biome

The average annual temperature of Mount Kei generally ranges from around 20 to 25 degrees Celsius. However, there may be seasonal variations in temperature, with warmer conditions typically occurring during the dry season and slightly cooler temperatures during the wet season. Daily temperature fluctuations may also be influenced by factors such as elevation, solar radiation, and local weather patterns.

Humidity levels at Mount Kei are often moderate to high, particularly during the wet season when precipitation levels are elevated. The presence of nearby water bodies, such as rivers and streams, may further contribute to humidity levels in the region. High humidity levels can impact local weather patterns, including the formation of clouds, fog, and dew, as well as influencing plant growth and moisture levels in the soil.

Ozubu CFR experiences a tropical climate, featuring relatively stable and warm temperatures throughout the year. Average temperatures typically range from 20°C to 28°C (68°F to 82°F), with cooler temperatures at higher elevations and warmer conditions in the lowlands. The reserve experiences high humidity levels, especially during the rainy seasons, with relative humidity often exceeding 80% in the mornings and gradually decreasing to about 50-60% in the afternoons. During the drier months (December to February), humidity levels decrease slightly but remain moderate, maintaining the moist forest environment that supports the diverse flora and fauna in the reserve.

5.2.6 Noise assessment

Noise meters were used to record noise levels at the sites. Both the Ozubu amd Lima sites are situated along the community roads and near Kakwa and Aringa communities respectively, the likely receptors will be workers, communities and wildlife in the reserve.

The proposed sites had noise levels below the recommended permissible limits as shown in the Table below.

Table 16: Baseline noise results at the proposed sites

Project activity	**GPS Coordinates (UTM 36N)**	**Noise results**			**Noise source**	**Noise receptor**
		Min (db)	**Av (db)**	**Max (db)**		
Ozubu site	383289 m N 277355m E	28	36	52	• Sounds from the birds on the proposed site • Minimal traffic along the Ludara- Nidia Road • Kakwa community	• Community
Kakwa community	381446m N 277061m E	42	52	73		
Nadia-Ludara road	382399m N 277282m E	36	53	70		
River Kochi	382628m N 277644m E	34	42	62		
Lima site	395371m N 288290m E	63	68	95	• Sounds from the birds on the proposed site • Minimal traffic along the Kakwa and Aringa road • Lima community	• Community
Lobe – Lima Road	395056m N 288334m E	60	65	76		
Aringa Community	394968m N 288380m E	40	52	68		
Standard of noise limits Construction site day 75 night 65						

5.2.7 Air quality

Since the site is in a remote area, its ambient air is not polluted but this is expected to change temporarily when the construction activities commence. An assessment to determine the baseline conditions was done to obtain values for compliance monitoring as shown in Table below;

Table 17: Baseline Air quality results at the proposed sites

Project activity	**GPS Coordinates (UTM 36N)**	**Air results**			**Source**	**Receptor**
		AQI	P2.5 µm	P10 µm		
Ozubu	383289 m N 277355m E	32	7	10	Emission fumes from moving motor-vehicle traffic Dusty community road	Community
Lima	395371m N 288290m E	26	6	9	Dusty murram road	Community

5.3 Socio-Economic Baseline

5.3.1 Administrative structure

The site is located in the district of Koboko and the political head of the district is LCV Chairperson while the technical head is the Chief Administrative Officer. These are supported by the line officers at different levels.

5.3.2 Socio-Economic characteristics

Mt. Kei is surrounded by diverse ethnic groups, each with distinct languages and economic practices though the dominant is the Kakwa tribe who speak Kakwa language, and the main economic activities are bee keeping, and farming and the Aringa community who are mainly farmers.

5.3.3 Access to Health Services

Delivery of health services in the area around the reserve is done mainly by the Government Health Units.

Table 18: Health centers within the project area

Sn	Health Centre	Location
1	Koboko HC IV	Koboko town
2	Ludara HC IV	Ludara

Construction sites are prone to accidents and injuries due to the nature of the work involved. Having a nearby health facility ensures that immediate medical attention can be provided to injured workers. This can significantly reduce response time and improve the chances of a successful recovery. The contractor can also have an MoU with the health facilities to provide free HIV/AIDs counseling and testing outreaches to both the workers and adjacent community.

6 STAKEHOLDER CONSULTATION

6.1 Introduction

This chapter presents a synopsis of the views of the different stakeholders such NFA top management, and NFA Patrol teams, UWA, MWE, community close to the reserve, local leaders, District officers. The consultation meeting with top management was carried out at NFA Headquarters at GPS coordinates latitude 0.321513 and longitude 32.614679. NFA field staff were consulted on-site as data was being collected and the coordinated are with the site description context, the local community leaders surrounding the Forest reserve the consultative meeting was held next to River Kochi at GPS coordinates lat 3.465530, long 30.994928 and Koboko District offices at GPS lat 3.405189, long 30.95995 comments and feedback were recorded in the comment section. The World Bank environmental and social safeguard standards and Government of Uganda (GoU) guidelines require the people likely to be affected and those that have an interest in the project to be consulted so that their views and fears are incorporated in planning. Community perspectives are important for project planning and implementation.

6.2 Objectives of consultation

The objectives of the consultation were:

- To provide information about the project and its potential impacts to those interested in or affected by the project, and solicit their opinion in this regard;
- To provide opportunities to stakeholders to discuss their opinions and concerns;
- Assess the potential environmental impacts of the forestry construction project on the forest ecosystem, biodiversity, water resources, and soil quality within the protected area. This involves identifying potential risks and developing mitigation measures to minimize adverse effects on the environment
- Ensure compliance with national and international laws, regulations, and agreements governing forest protection, conservation, and sustainable management.

In the context of this project, a number of benefits are associated with early and continuous stakeholder consultation and engagement, right into the detailed assessment stage, to project implementation.

- Delays shall be minimized;
- Improve on decision making and secure greater transparency and accountability;

- Understanding and characterizing the potential environmental, socio - economic and health impacts of the project;
- Developing effective mitigation measures and management plans;

6.3 Our Approach

6.3.1 Stakeholder Identification and Engagement

To develop an effective consultation program, it was necessary to determine exactly who the stakeholders were, basing on the definition that a stakeholder is "any individual or group who is potentially affected by a project or can themselves affect a project". In addition, stakeholder identification and engagement were carried out in line with the Project Stakeholder Engagement Framework and Plan of the project.

The Table below shows the identified relevant stakeholders to this project.

Table 19: Stakeholders Consulted on the Project

Category	**Stakeholders consulted**
Central Forest Reserve	Forest Supervisor Forest Manager
Community	Local leaders Community Members (Kakwa and Aringa)
NFA Headquarter	Executive Director Tourism Department Ecological Monitoring and Research Conservation Department Legal Department Finance and Administration Department Environment Planning Unit
District	Environment Officer District Community Development Officer District Forest Officer
National	Ministry of Water and Environment

	Uganda Wildlife Authority (UWA) Ministry of Gender, Labour and Social Development

For each engagement, the consultant disclosed information along the thematic areas here below;

1. Introduction of project team.
2. Purpose of the meeting
3. Project Description and Planned Activities
4. Project Partners and their roles;
5. Perceived project impacts (positive and negative) and proposed mitigation

6.3.2 Engagement Activities

Stakeholder consultations were undertaken in April 2024 to disclose the proposed project to the NFA field staff, to seek their views about its development and operation. The nearest Kakwa and Aringa Communities were consulted since they were within the site vicinity. In addition, district representatives were engaged to seek their opinions on the proposed projects.

During the stakeholder engagements, the stakeholders raised concerns/issues. Some of the key concerns raised during the various stakeholder engagement meetings are summarized in the table below.

Table 20: Summary of Key Issues Raised by Stakeholders

Stakeholder	**Key Issues Raised**	**Consultants' response**
Community leaders (LC1, LC2)	• Employment Opportunities (LC1) • Improve on the Road (LC2) • Improve on Security in the area **(LC1)**	• **The** consulting team assured the community leaders that various opportunities will be created to be occupied by the community members. • The consulting team recommended enhancing security measures through NFA patrol team, and

		collaboration with local law enforcement agencies.
National Forestry Authority (NFA) field Team	• Provide Safety Kits. (Rangers) • Provision of Power. (Rangers) • Provision of Uniforms for identity. (Supervisor) • Provision of water at the housing facilities. (Supervisor)	• Safety kits will be provided, ensuring everyone has the necessary protective equipment. • A reliable power sources, (solar panels) will be installed, to ensure a continuous power supply. • Uniforms will be provided to improve team identity and professionalism • National water is available at Ozubu site though rainwater harvesting will also be installed and in Lima, rain water harvesting will be installed.
District team • District Environmental Officer (DEO) • District Community Development Officer.	• Ensure that ownership of land is identified (DCDO) • Ensuring the project complies with local, national, and international environmental laws and regulations is crucial. (DEO) • Employment opportunities. (DCDO) • Providing training and capacity-building programs	• The site is within the NFA protected area and NFA owns the land. • The consulting team assured us of adhering to all relevant environmental laws and regulations. • The consulting team assured to create job opportunities for local residents throughout the project.

• District Forestry Officer	for local residents to enable them to benefit from the project. (DCDO) • Ensure HIV/AIDS awareness in the management Plans. • Implementing measures to protect critical habitats and prevent illegal logging or encroachment. (DCDO) • Ensuring that biodiversity conservation plans are integrated into the project's planning. (DFO) • Ensuring the project complies with all relevant forestry laws, regulations, and policies. (DFO)	• Training programs to enhance local residents' skills and capacity to benefit from the project will be provided. • HIV/AIDS awareness programs in the project's management plans has provided. • Proposed measures to protect critical habitats and prevent illegal activities have been developed. • The consulting team committed to integrating biodiversity conservation plans into the project's planning stages. • Consultants reassured compliance with all forestry laws, regulations, and policies.
Community Members (Kakwa and Aringa)	• There could be potential benefits in terms of improved infrastructure, such as roads. (Kakwa community) • Construction could lead to restrictions on access to forest resources that community members rely on for	• Proposed alternative solutions and compensatory measures to mitigate restrictions on access to forest resources was disc. • The consulting team assured the community members that

	subsistence and income. (Aringa community) • Job Opportunities. (both community representatives from Aringa and Kakwa)	various opportunities will be created for them.
Uganda Wildlife Authority (UWA) Manager Environmental Impact Assessment	• Avoid Pollution and Disturbance • Ensuring that the project complies with local, national, and international wildlife protection laws and environmental regulations.	• The consulting team assured UWA that measures would be taken to minimize pollution and disturbance during the project, including careful planning and implementation of best practices. • The project would adhere to all relevant wildlife protection laws and environmental regulations.
National Forestry Authority (NFA) Top management	• The Consultant presented a draft report highlighting the field findings, design concept, renovations, budget estimates, environmental assessment and revised schedule. • The Consultant noted that there was a discrepancy in the proposed infrastructure developments in the ToRs and the field	

	findings. According to the Tor's a total of 52 buildings had been proposed while the field findings had a total of 104 sites. He requested the client to guide on the scope to be covered.	
Ministry of Water and Environment (W&E) Officers in Department of Water Resources Management	• The Code of conduct for workers should be laid out. Occupational health and safety need to be emphasized on sites such as sexual Orientation should be carried out to the workers. • There needs to be no land encumbrances on the sites where the facilities are to be set up (the site is within the gazetted CFR)	• The consulting team agreed to implement a strict code of conduct for workers, emphasizing occupational health and safety, including training on issues such as sexual orientation sensitivity. • The consulting team acknowledged the importance of clear land ownership and assured the ministry that the project site is within the protected area, and it's owned by NFA so there won't be any land encumbrances.

Evidence of different stakeholders that were consulted

Engagement with NFA supervisor

Engagement with local council

Engagement with the community

Engagement with the community

Consultation with Ministry of Water and Environment

Consultation with Top Management

Figure 19: Pictorial of Stakeholder Engagement

7 CONSIDERATION OF ALTERNATIVES

7.1 Alternative Analysis

According to National Environment (Environmental and social assessment) regulations 2020 section 6 sub-section 5C, and the World Bank ESF, ESS1 requirements, alternative analysis in Environmental Assessments process informs on the viability of the project with regards to environmentally friendly and socially acceptable project options. While undertaking project alternative analysis, it is important to ensure that the best selected option meets project objectives, resource requirements for short-listed technologies, and broad environmental planning and economic considerations.

The Environmental studies sought to consider possible alternatives to the proposed project. These alternatives included, among other considerations, the "No Project Alternative", the Alternative Locations and the Alternative Designs. This study has, therefore, sought to identify and assess alternatives to the proposed developments so as to have the best working models that may have none or those that have the least minimal effects.

7.2 The 'No' project alternative

The "No Project" alternative implies the project does not proceed, thereby maintaining the status quo. The status of the environmental resources neither improves nor worsens since the state of the resources is not interfered with. However, the "No Project Alternative" means foregoing all the environmental, social and economic benefits that are anticipated from the implementation of the project. The proposed developments have been identified to have great environmental, social and economic benefits in the identified project zone of influence. This option is the most suitable alternative from an extreme environmental perspective, as it ensures non-interference with the existing conditions. The anticipated insignificant environmental impacts resulting from construction and occupation activities would not occur.

This option has not been selected given the benefits that the project will bring to the conservation of the reserve, therefore the "no project" alternative is not recommended.

7.3 Proposed project alternative

The construction of the office building will provide good management of the reserve. However, just like every development has a downside to it, construction of the project facilities is associated with a number of potential negative impacts such as accidents, waste generation, vegetation clearance, noise generation, among others most especially during the construction phase that need to be planned for.

7.4 Discussion on Alternatives

Since no alternative locations were provided, there was no analysis of alternatives that was carried out for this report. In addition, no alternatives designs were presented for these projects, and therefore not alternative discussion was done for the design. Therefore, analysis of alternatives typically based on the "project" or "no project" as described in the above sub sections. The Project alternative was, therefore, selected to ensure the benefits of the project are accrued as long as the mitigation measures proposed in the report are fully adhered to during implementation of the project. In addition, this option was selected because NFA chose the selected sites in the different areas of the reserve after scrutiny, and these were the sites where least disturbances and minimal clearance of indigenous vegetation is expected.

8 IMPACT ANALYSIS AND MITIGATION

8.1 Introduction

Impact analysis involved determination of nature of impacts, their magnitude, extent and duration to define the level of significance. Potential positive and negative impacts were identified both for the construction phase and operation phases.

8.2 Positive impacts

8.2.1 Enhanced Forest Protection

The establishment of office facilities will increase presence and surveillance within the reserve. NFA field staff can conduct regular patrols, monitor the forest promptly, and deter illegal activities such as poaching and habitat destruction. By curbing illegal activities, the project promotes a safe and secure environment for wildlife, contributing to the preservation of biodiversity, thereby making the reserve more attractive to tourists. This will enhance revenues, thereby ensuring benefits to the surrounding communities through job creation, directly, and via broader economic impacts, indirectly.

Enhancement Measures

- Install advanced surveillance systems such as cameras, drones, and sensors to monitor the forest continuously and provide real-time data for quick decision-making.
- Ensure sufficient resources, such as vehicles, communication tools, and funding, are allocated to support the enhanced surveillance and protection efforts.
- Maintain the office facilities and surveillance equipment regularly to ensure they remain functional and effective over time.
- Work closely with local law enforcement agencies to ensure that any illegal activities detected are promptly and effectively addressed.

8.2.2 Improved Emergency Response

The construction of field staff houses allows for improved emergency response capabilities within the reserve. Field teams can promptly respond to incidents fire outbreak, illegal tree cutting. Quick and effective response minimizes the impact on biodiversity and ensures the well-being of wildlife populations. The project's infrastructure supports the conservation efforts by providing a base for immediate action and coordination in critical situations.

Enhancement Measures

- Provide comprehensive training for field staff on emergency response procedures, including fire management, wildlife rescue, and handling illegal activities like tree cutting.
- Equip field teams with the necessary tools and equipment, such as firefighting gear, communication devices, first aid kits, and vehicles, to respond quickly and effectively to emergencies.
- Create a detailed rapid response plan that outlines specific actions for different types of emergencies, ensuring that all staff members know their roles and responsibilities during a crisis.

8.2.3 Sustainable Infrastructure and Operations

The proposed construction can incorporate sustainable practices, including energy-efficient and climate-smart designs (such as use of rainwater harvesting and use of solar power), waste management systems, and eco-friendly materials. By adopting sustainable infrastructure and operational practices, the project reduces its ecological footprint and promotes environmental stewardship. This sustainable approach aligns with the World Bank ESS6 on biodiversity conservation and sustainable management of living natural resources and demonstrates a commitment to preserving the natural integrity of Mt Kei.

Enhancement Measures

- Install advanced energy management systems to monitor and optimize the use of renewable energy sources like solar power, ensuring that energy consumption is kept at sustainable levels.
- Design and implement effective rainwater harvesting systems that can capture and store rainwater for use in non-potable applications, reducing reliance on external water sources.
- Provide training for all staff members on sustainable practices and the importance of environmental stewardship, fostering a culture of sustainability within the project.
- Source and use materials that are certified as environmentally friendly, such as recycled or sustainably sourced building materials, to minimize the environmental impact of construction.

8.2.4 Employment Opportunities

Establishment of the project shall require both skilled and unskilled labour to ensure the project is in place. This shall provide opportunity for employment of locals adjacent the proposed site area, especially in regard to manual labour, and hence improving their standards of living.

Enhancement Measures

- Ensure that all employees, especially local hires, receive fair wages and work in safe, healthy conditions in compliance with labor laws and international standards.
- Establish a transparent and inclusive recruitment process that actively engages local community leaders and organizations, ensuring that job opportunities are widely known and accessible.
- Implement monitoring systems to track employment outcomes and gather feedback from local workers and community members, allowing for adjustments to improve job access and satisfaction.
- Offer job placement assistance and career support services to help local workers transition to other employment opportunities once the project phase requiring manual labour is completed.

8.2.5 Market for Construction Materials

Construction materials such as bricks, sand, aggregates, and cement shall be required to ensure the facilities are set up. These will be acquired from the neighbouring trading centres and hence increase income for the business operators around the reserve.

Enhancement Measures

- Ensure that local suppliers receive fair prices for their materials through transparent and equitable contracting processes, helping them to sustain and grow their businesses.
- Develop procurement policies that prioritize sourcing construction materials from local suppliers in the neighbouring trading centres, ensuring that the economic benefits stay within the community.
- Implement timely payment systems to ensure that local suppliers receive payments promptly, which can help maintain their cash flow and prevent financial difficulties.
- Engage with local communities and business operators to inform them about upcoming material needs and opportunities, ensuring they are prepared to meet the demand.

8.3 Construction Phase Negative impacts

8.3.1 Impacts on Biological Environment

8.3.1.1 Destruction of Floral characteristics

During site preparation activities prior to construction, part of the vegetation within the footprint of the project site will be cleared. The vegetation to be cleared is mainly composed of low vegetation such as grass and shrubs, as well as invasive plant species with a few trees of conservation concern according to IUCN redlist mainly *Tectona grandis* (Gua et al., 2022) which have been introduced for commercial farming and production of timber as a way to reduce the dependence from natural forests. These are however not nationally considered as a species of conservation concern (WCS, 2016) Appendix 1.

Removal of vegetation cover eliminates essential resources, such as food, nesting sites, and protective cover, impacting the survival and reproductive success of many species. Vegetation loss is a permanent impact but can be compensated through re-vegetation and landscaping. However, considering the scale of the project and type of vegetation found on site and within the project influence area, no significant adverse effects or loss of habitats are anticipated or effect on the ecology of the area.

MITIGATION	IMPACT					SIGNIFICANCE	
	NATURE	EXTENT	DURATION	MAGNITUDE	PROBABILITY	RATING	DESCRIPTION
NO	Negative	2	1	2	2	10	Low
YES	Negative	1	1	2	2	8	Low

Mitigation Measures

1. Only vegetation that shall be within the work area shall be cleared and leave out vegetation that does not affect the establishment of the camp site components.

2. Selective removal of trees that could be habitat to some species shall be done to ensure minimal habitat distortion. This will be overseen by NFA environmental team.
3. Selective clearing rather than indiscriminate vegetation removal shall be prioritized by conducting thorough surveys to identify and protect areas of high biodiversity and rare plant species.
4. Develop and implement a re-vegetation program to compensate for the lost vegetation preferably with indigenous species

8.3.1.2 Tree Cutting for Timber

Some vegetation especially trees of commercial importance may be cut down by the contractor teams and split to make timber wood which is highly sought after. This can lead to the distortion of the properties and performance of the CRF in the area and as well affect habitat of some wildlife species which use these tree resources.

MITIGATION	IMPACT					SIGNIFICANCE	
	NATURE	EXTENT	DURATION	MAGNITUDE	PROBABILITY	RATING	DESCRIPTION
NO	Negative	3	1	3	4	28	Moderate
YES	Negative	2	1	2	2	19	Low

Mitigation Measures

- Sensitize contractor's workers on the dangers and illegality of tree cutting trees from the CFR during the implementation of their activities.
- Train NFA rangers on the possible tricks the contractor workers may use to illegally cut trees and provide appropriate monitoring tools.
- Thoroughly check contractor vehicles as they enter and exit the CFR to ensure there is no timber being taken out.
- Ensure to limit construction activities during the day time to reduce the risk of tree cutting and ensure all workers leave the CFR by 6pm.

- Ensure close monitoring and supervision of the construction activities to ensure that all workers are accounted for at all times by NFA rangers.

8.3.1.3 Disturbance of wildlife

The protected area has various mammal and avifauna species. The noise from machinery, and human presence associated with clearing and other construction activities can disrupt normal behavior patterns, breeding activities, and even lead to temporary displacement of these wildlife. Prolonged disturbance and stress can have detrimental effects on the overall health and well-being of the animal population.

MITIGATION	IMPACT					SIGNIFICANCE	
	NATURE	EXTENT	DURATION	MAGNITUDE	PROBABILITY	RATING	DESCRIPTION
NO	Negative	2	1	3	4	24	Low
YES	Negative	2	1	2	2	10	Low

Mitigation Measures

1. Sensitization of workers on the dos and don'ts while working in Mt.Kei and Ozubu CFR shall be carried out by patrol team before and during the construction phase.
2. Earthworks shall be limited to proposed built areas as per the approved site layout plans
3. NFA staff shall be with construction team at all times to ensure construction activities cause minimal disturbances to the wildlife.
4. Working hours shall be restricted to day time work and this will ensure less disturbance to the reserve.

8.3.1.4 Risk of introduction of invasive species

Invasive species may be introduced through the vehicles that will be delivering construction materials to different sites. These may come on tires of vehicles or even through human dispersal.

In addition, invasive species may arise due to use of fill materials which may contain these species as well as the type of plants used in revegetation.

MITIGATION	IMPACT					SIGNIFICANCE	
	NATURE	EXTENT	DURATION	MAGNITUDE	PROBABILITY	RATING	DESCRIPTION
NO	Negative	2	2	3	4	28	Moderate
YES	Negative	1	1	2	2	8	Low

Mitigation Measures

1. Vehicle shall be checked and cleaned before entering the protected area by setting up cleaning pools at access points of the construction site.

2. All vehicles shall be required to keep on the motorable routes and off tracking shall be discouraged

3. Constant monitoring shall be done to identify any invasive species and the identified species should be uprooted and taken out of the reserve and given out to communities adjacent to the CFR to use as firewood.

4. For materials such as murram and sand to be obtained from outside the reserve, sources should be inspected by NFA and the contractor to ensure there are no invasive species.

8.3.1.5 Risks on Reserved species

Species nationally regarded as reserved or protected as per the national forestry and tree planting guidelines, 2016 were recorded. These included Mangifera indica, and Ficus natalensis

However, all the species were recorded outside the direct Impact zone, except for one young individual of Mangifera indica (mango) which was recorded within the direct impact zone at ozubu site. The construction of the buildings may lead to cutting down of the individual during clearing phase.

Mitigation measures

- Compensatory planting of Mangifera indica within a suitable location identified through forest reserve
- Management or community collaboration.
- Vegetation clearing should only be limited to the direct impact area.

8.4 Impacts on Physical Environment

8.4.1 Air and dust emissions

The construction activities often result in increased dust and gas emission. These pollutants emanate from movement of construction machinery and trucks as well as dust generated during construction including movement from borrow areas.

Dust emission during the excavation and ground leveling depends on the excavated and backfilled volume. The concentration of dust emitted from the excavation, backfilling and ground leveling causes impacts on the air environment at the site (mainly in embankment items). Workers are directly affected from the impacts. However, as the works are scattered and far from residential areas, dust emission is only generated in the construction progress, the impact is assessed at low.

Construction of items under the project will have to use some construction machines and equipment. Most of the devices use diesel, so the process of operation will emit pollutants such as: particulate material, CO, SO_2, NOx, etc. Emission arising from the operation of machines and equipment on the construction site depends on quantity, quality of construction machines, equipment and construction methods.

With the implementation of the suggested mitigation measures, the significance of the impact can be reduced from **MODERATE NEGATIVE to LOW NEGATIVE.**

IMPACT	MITIGATION	IMPACT					SIGNIFICANCE	
		NATURE	EXTENT	DURATION	MAGNITUDE	PROBABILITY		
Air and Dust emissions	No	Negative	2	2	4	5	40	Moderate
	Yes	Negative	1	2	2	2	10	Low
Mitigation	i. Prevention measures such as dampening dust by use of water (sprinkling water on surfaces that produce dust or covering them) shall be practiced;							

	ii. PPEs such as nose masks will be provided to the workers on the construction site; iii. Control over areas generating dust particles. Such areas shall be regularly cleaned; iv. Workers will be encouraged to go for regular health check-ups to ascertain their health standards; v. Regular air quality tests will be undertaken to enhance air quality monitoring; vi. Wet sweeping of the surfaces that produces a lot of dust particles; vii. Establishment of optimum green spaces in the compound particularly at the perimeter fence as the vegetation helps in dust control from the air; viii. Regular monitoring of air quality (both gases and particular) levels through-out the project's construction lifecycle; ix. Adequate sensitization of the drivers; i. Ensure proper maintenance and operation of construction equipment; x. Keeping vehicle idling time to the very minimum.
Cumulative Impact	No
Reversibility	Yes

8.4.2 Noise and vibration generation

Construction activities tend to cause noise which affects the immediate environment and even disrupt other nearby operations. The noise will affect small animals and birds which are sensitive to noise. Construction noise is a major source of environmental noise pollution and a cluster of equipment at these sites under construction can produce a steady roar through the day.

However, it is important to note that the social receptors are used to noise levels that fall within the mix residential limits.

Noise from the construction sites shall be generated due to: -

i. Use of construction machineries such as excavators and, wheel loaders, among others
ii. Use of mechanical equipment and electric motors
iii. Movement of trucks within to and from the site

With the implementation of the suggested mitigation measures, the significance of the impact can be reduced from **MODERATE NEGATIVE to LOW NEGATIVE.**

IMPACT	MITIGATION	IMPACT					SIGNIFICANCE	
		NATURE	EXTENT	DURATION	MAGNITUDE	PROBABILITY		
Noise and excessive vibration generation	No	Negative	2	2	4	5	40	Moderate
	Yes	Negative	1	2	2	2	10	Low
Mitigation Measures	i. Avoiding or minimizing transportation through or processing material in community areas (like concrete mixing). ii. Routine noise and vibration level assessment will be undertaken to ensure that the noise levels are kept within the recommended standards iii. Where possible construction equipment will be fitted with silencers to reduce on the noise generated; iv. Adequate servicing of all machinery, trucks and vehicles so as to ensure reduction of noise generated especially by friction v. Construction activities shall be carried out only during the day vi. Construction vehicle's drivers and machine operators should be sensitized to adopt a habit of switching off engines of their vehicles or machinery when they are not in use. vii. The contractor will provide a well-marked billboard at the construction site gates. This is meant to notify the public of the construction activity and timings. viii. Unnecessary hooting will be avoided at all costs by the construction vehicles and even during project occupation.							
Cumulative Impact	No							
Reversibility	Yes							

8.4.3 Soil erosion

Since the construction phase will involve use of heavy plant machinery and excavations, soil disturbance is bound to happen. Therefore, the Contractor should put in place mitigation measures to aim at minimum soil disturbance and soil erosion. With the implementation of the suggested mitigation measures, the significance of the impact can be reduced from **MODERATE NEGATIVE to LOW NEGATIVE.**

IMPACT	MITIGATION	IMPACT					SIGNIFICANCE	
		NATURE	EXTENT	DURATION	MAGNITUDE	PROBABILITY		
Soil erosion	No	Negative	2	2	4	5	40	Moderate
	Yes	Negative	1	2	2	2	10	Low
Mitigation	i. The Contractor will ensure that excavations are undertaken safely in that							

	shoring and good slope banking is put in place and by adhering to all safety rules ii. The excavated materials will be used during the restoration activities. iii. Emergency measures and procedures for protection of soils such as trenching around the project site shall be put in place. iv. Revegetation of cleared areas will be done after conclusion of construction activities.
Cumulative Impact	No
Reversibility	Yes

8.4.4 Waste Management

Construction operations will generate solid and liquid wastes within the site. The wastes may include; metal rods, pieces of iron sheets, broken glass, pieces of wood, empty containers, broken stones and human waste.

Non-hazardous solid waste generated will include paper, plastics, cement bags, scrap wood and metals, and small geotechnical drilled material, among others. Hazardous waste, such as human waste, oil spills and oily waste material and sanitary wastes, will also be adequately addressed as explained below.

With the implementation of the suggested mitigation measures, the significance of the impact can be reduced from **MODERATE NEGATIVE to LOW NEGATIVE.**

IMPACT	MITIGATION	IMPACT					SIGNIFICANCE	
		NATURE	EXTENT	DURATION	MAGNITUDE	PROBABILITY		
Solid waste	No	Negative	2	2	4	5	40	Moderate
	Yes	Negative	1	2	2	2	10	Low
Mitigation Measures	i. Waste segregation at source into different waste categories both hazardous and non hazardous before disposal shall be encouraged; ii. All the solid waste will be collected by NEMA licensed waste collectors and disposed of in a certified facility. Licensed waste management firm for disposal of large quantities of solid waste shall be contracted; iii. Domestic solid waste to be temporarily stored in refuse bins before disposal by licensed contractor							

	iv. All reusable materials will be reused to minimize on quantity of solid waste generated v. The construction contractor will liaise with private waste handlers to pick the hazardous waste from the site for proper disposal. vi. Mobile sanitary facilities will be set up at the site and a licensed handler will pick the waste on a routine basis during the construction phase. vi. The wastes will be properly segregated and separated to facilitate recycling of some useful waste materials. For example, broken stones can be used for backfills. Integrated solid waste management system may also be adopted through hierarchy of options like source reduction, recycling, composting and reuse. vii. The Proponent will ensure that measures are put in place to ensure that construction materials required for the project are carefully budgeted to ensure the amount of construction materials left are kept to the minimal level possible.
Cumulative Impact	No
Reversibility	Yes

8.5 Impacts on Socio-Economic Environment

8.5.1 Gender Based Violence

Both women and men experience gender-based violence, but women and girls are more vulnerable. However, GBV risk analysis for this project indicates the risk is on a low scale. Some of the possible impacts may include: -

1. Any form of sexual abuse;
2. Denied opportunities to work due to sex;
3. Unequal payment for the same work done;
4. Discrimination;

GBV could result in the following effects on the affected community; increase spread of HIV/AIDS, unwanted pregnancies, social demoralization, health problems to the sexual reproduction organs, community / family reject or neglect, family breakages among other vices.

Any form of impacts to human right of both the male and female are considered to be **MODERATE NEGATIVE** if not mitigated. However, implementation of the proposed mitigation measures will reduce the impact to **LOW NEGATIVE.**

IMPACT	MITIGATION	IMPACT					SIGNIFICANCE	
		Nature	Extent	Duration	Magnitude	Probability		
Gender Based Violence	No	Negative	4	1	3	4	32	**Moderate**
	Yes	Negative	1	1	2	2	8	**Low**
Mitigation Measures	I. Sensitization of construction workers will be included in the construction contract such that these are conducted throughout the projects,. II. Any form of GBV will be referred to police for handling and where necessary psycho-social support shall be provided by a qualified GBV service provider.; III. Workers will be required to sign a code of conduct - as per the standard World Bank contract template and the Labour Management Plan developed for the project							
Cumulative Impact	Yes							
Reversibility	No							

8.5.2 Occupational Health and Safety

Construction activities such as excavation and concreting can pose occupational hazards and risks to construction workers. They can cause respiratory infections and injuries to limbs and body due to exposure to, dust and combustion gases, operation of equipment and handling of construction materials. Accidents may occur during construction as a result of workers falling from heights or being hit by falling construction materials or tools. Dust and combustion gases can irritate the eyes causing trachoma and respiratory problems.

The operation of construction equipment and handling of materials can result in injuries to the workers especially in the absence of appropriate protective devices. The health of the site workers may be further compromised by the food which is often supplied by mobile individuals with no licenses to handle food and some of the foodstuffs may be prepared in unhygienic manner

There are safety risks associated with working at construction sites with various types of materials and machines, equipment, and with many vehicles passing by. Furthermore, risks related to electricala installation for grid connection and solar installation, such as electrocution, falls from heights can also cause harm to workers during the construction phase.

With the implementation of the suggested mitigation measures, the significance of the impact can be reduced from **MODERATE NEGATIVE to LOW NEGATIVE.**

IMPACT	MITIGATION	IMPACT					SIGNIFICANCE	
		NATURE	EXTENT	DURATION	MAGNITUDE	PROBABILITY		
Occupational health and safety	No	Negative	3	2	4	4	36	moderate
	Yes	Negative	2	2	2	3	10	Low
Mitigation Measures	➢ Depending on the occupational safety and health hazards encountered while performing assigned tasks, workers may require using properly fitting personal protective equipment (PPE) to avoid injuries and illness. They (workers) will be provided with full protective gear. These include working/safety boots, overalls, helmets, goggles, earmuffs, masks, gloves etc. ➢ All equipment will be inspected before use for appropriate safeguards. ➢ Controlled working hours will be provided and employees will not extend working hours unnecessarily ➢ The contractor will adopt effective emergency response plans. A good start to learning how to respond to an emergency is through certification in Basic First Aid, mostly for snake and insect bites. Regular drills and emergency situations will be followed to impart the anticipated insight and awareness to the workers. ➢ A first aid kit will be provided within the site. This should be fully equipped							

	always and should be managed by qualified persons. ➢ Safety awareness may be gained through regular safety training or personal interest in safety and health. ➢ Local individuals preparing food for the workers at the site will be controlled to ensure that food is hygienically prepared. Allow only authorized food vendors to supply food for the workers in the site ➢ The Contractor will be having workmen's compensation cover. It should comply with Workmen's Compensation Act, as well as other Ordinances, Regulations and Union Agreements. ➢ Workers will always be sensitized on social issues such as drugs, alcohol, diseases etc. ➢ Ensure that trained personnel are employed to install solar panels and as well provide grid electricity connection to the respective sites. ➢ Provide appropriate safety wear during electric installations to reduce the risks of electrocution of the workers.
Cumulative Impact	Yes
Reversibility	No

8.5.3 Violence against Children (VAC)

Violence against Children (VAC) is also very common case in Uganda. In the 2018, Violence against Children Survey conducted by MGLSD reported that the most common cases of VAC included sexual abuse and exploitation child sacrifice, child labor, child marriage, child trafficking others (no district data is available so national data was used). It is, therefore, very possible that a construction project may attract under aged workers seeking employment and opportunities to earn a living. With the implementation of the suggested mitigation measures, the significance of the impact can be reduced from **MODERATE NEGATIVE to LOW NEGATIVE.**

IMPACT	MITIGATION	IMPACT					SIGNIFICANCE
		NATURE	EXTENT	DURATION	MAGNITUDE	PROBABILITY	

Violence Against Children	**No**	**Negative**	**3**	**2**	**4**	**4**	**36**	**Moderate**
	Yes	**Negative**	**1**	**2**	**2**	**2**	**10**	**Low**
Mitigation Measures	i. Adequate sensitization for the contractor, not to recruit children ii. Contractor will keep record of the age numbers for all their employees so as to avoid employing those below the age of 18; and verification documents such as copies of National IDs shall be kept on site iii. No cases of VAC will be tolerated on the infrastructure projects and these will be punishable by law.							
Cumulative Impact	No							
Reversibility	Yes							

8.5.4 Transmission of HIV/AIDs and other diseases:

The prevalence of HIV/AIDS (1.8 rate) in Koboko District could increase due to free flow of workers. Each construction site will have approximately 68 people. The increased number of people in the protected area may result in increased infections of diseases, particularly HIV/AIDS. With the implementation of the suggested mitigation measures, the significance of the impact can be reduced from **MODERATE NEGATIVE to LOW NEGATIVE.**

IMPACT	**MITIGATION**	**IMPACT**					**SIGNIFICANCE**	
		NATURE	**EXTENT**	**DURATION**	**MAGNITUDE**	**PROBABILITY**		
Transmission of HIV/AIDs and other diseases:	**No**	**Negative**	**3**	**2**	**4**	**4**	**36**	**Moderate**
	Yes	**Negative**	**1**	**2**	**2**	**2**	**10**	**Low**
Mitigation Measures	I. Partnering with local health centers to enhance the efforts to regularly educate workers about the spread and prevention of infectious diseases like HIV/AIDS through expert-led sessions, ensuring they receive accurate and up-to-date information. II. Regular provision of adequate prevention measures such as condoms; III. Encourage workers to go for HIV voluntary counseling, testing and referral services;							

	IV. IEC materials on HIV/AIDs prevention will be placed at the site
Cumulative Impact	No
Reversibility	No

8.5.5 Insecurity

Security is a prerequisite for any development. During construction security is very important in any project site. This ensures that materials are safe but also controls movement within the site especially for the intruders who might be injured by the materials and other hazardous features available within the site. The significance of the impact is **VERY LOW NEGATIVE.**

IMPACT	**MITIGATION**	**IMPACT**					**SIGNIFICANCE**	
		NATURE	**EXTENT**	**DURATION**	**MAGNITUDE**	**PROBABILITY**		
Insecurity	**No**	**Negative**	**2**	**2**	**3**	**3**	**21**	**Low**
	Yes	**Negative**	**1**	**2**	**2**	**2**	**10**	**Low**
Mitigation Measures	i. The project sites will be enclosed using suitable hoarding to avoid contamination to the environment and to control movement within the sites. ii. The contractor will provide adequate security during the construction period when there are no works being done on the sites. iii. The guards stationed at the gates should document movements in and out of the sites/ property.							
Cumulative Impact	No							
Reversibility	No							

8.6 Operational Phase Negative impacts

8.6.1 Poor Waste management

During operation of the project, waste is expected to be generated by those who will be using the office and the visitors. The main waste streams expected will include food waste, plastic material such as water bottles and human waste. Plastic wastes degrade the aesthetics of the reserve hence

making the reserve unappealing, while poor human waste management can cause diseases due to poor sanitation practices such as cholera.

IMPACT	MITIGATION	IMPACT					SIGNIFICANCE	
		NATURE	EXTENT	DURATION	MAGNITUDE	PROBABILITY		
Waste Management	**No**	**Negative**	**2**	**2**	**3**	**3**	**21**	**Low**
	Yes	**Negative**	**1**	**2**	**2**	**2**	**10**	**Low**
Mitigation Measures	**i.** Sensitisation of Patrol teams on proper waste management practices shall be done to ensure proper implementation of waste management strategies during the operational phase. **ii.** Coded waste bins shall be provided and placed around the quarters to ensure waste segregation and onsite collection. iii. All waste collected shall be disposed of outside the protected area in an environmentally sound manner by certified waste handlers iv. Sanitary facilities should be routinely cleaned to minimise risks of diseases							
Cumulative Impact	No							
Reversibility	No							

8.6.2 Risk of Fire Outbreaks

There is a likelihood of fire out breaks at the proposed office building. Fire could be a result of short circuits, human error/ignorance, kitchen activities, accidental fires from smoking or arson related fires. Fire outbreaks and explosions can cause loss of property and injure staff who are in the office or nearby animals at the time of explosion.

IMPACT	MITIGATION	IMPACT					SIGNIFICANCE	
		NATURE	EXTENT	DURATION	MAGNITUDE	PROBABILITY		
Fire outbreak	No	Negative	2	2	3	3	21	Low

	Yes	Negative	1	2	2	2	10	Low
Mitigation Measures	I. NFA will install and properly maintain fire-fighting equipment, train staff in basic fire-fighting methods and ensure that the fire escape routes are known and are always free from any obstacles. II. The building walls will be painted with flameproof paint and fitted with smoke detectors and fire alarms. III. There will be a properly accessible fire assembly points on site. IV. Regular servicing and testing of fire equipment will be done to ensure proper functioning. V. Fire prone behavior such as smoking will be strictly prohibited onsite.							
Cumulative Impact	No							
Reversibility	No							

8.6.3 Poor Water Consumption

Since the Patrol team will be using water with their families, there is a likelihood of wastage of water during the operation phase. Increased water usage can strain local water resources, potentially affecting water availability for wildlife and natural vegetation

Mitigation Measures

- Install water reservoir tanks at the facilities to collect rainwater and minimised dependency on local water resources.
- Sensitize NFA patrol team on water saving techniques to use for domestic water consumption.
- Install water-saving devices such as low-flow faucets and toilets.
- Sensitize NFA patrol team on boiling all drinking water to reduce risks of diseases.

8.6.4 Structural Failure of Buildings

Poorly constructed buildings can collapse, leading to injury, loss of life, and environmental damage within the Reserve. This can as well lead to destruction of NFA Patrol team' property

Mitigation Measures

- Ensure buildings are designed and constructed according to stringent safety and quality standards during the construction phase.
- Carry out inspections to regularly check for and address structural weaknesses if identified.
- Use high-quality materials and design buildings to maximize natural ventilation.

8.6.5 Natural Disasters Related Risks

During the operation phase, there is a likelihood of experiencing natural disasters such as storms, high winds, flooding etc which can destroy the structure or even cause injuries and death to the Patrols staying within,

Mitigation Measures

- Ensure that the constructed buildings withstand high winds and storms by using reinforced structures and storm-resistant materials.
- Ensure to design and establish effective drainage systems around the facilities to channel water away.
- Develop and regularly update comprehensive emergency preparedness plans to cater for natural disasters.
- Conduct drills and training sessions to ensure all personnel are familiar with emergency procedures.

9 ENVIRONMENTAL SOCIAL MANAGEMENT AND MONITORING PLAN

9.1 Introduction

Environmental and Social Management involves the implementation of mitigation measures to eliminate or reduce significant adverse environmental and social-economic impacts of a project to acceptable levels. Environmental monitoring is a long-term process, which should begin at the start of construction and should continue throughout the life of the project. The purpose of monitoring is to establish benchmarks so that the nature and magnitude of anticipated environmental and social impacts can be continually assessed. The overall objective of environmental and socio-economic monitoring is to ensure that recommended mitigation measures are actually implemented during office and staff house building construction and operation.

9.2 Environmental and Social Management Plan (ESMP)

The goal of the ESMP is to ensure that environmental and socio-economic issues continue to be fully integrated into the decisions of the developer while promoting resource allocation efficiency throughout the lifetime of the project. It provides a framework for managing and monitoring impacts for the life of the project. It is designed to ensure that the commitments/mitigation measures in this project brief, and in any subsequent assessment reports, together with any license approval or similar conditions, are implemented.

This ESMP has been designed as a summary of proposed mitigation measures, monitoring, and institutional measures to be taken during implementation and operation to eliminate or reduce adverse environmental and social impacts to acceptable levels as per provisions within the National Environment Act, No.5 of 2019. The time frame for implementation of these mitigation measures and monitoring is also specified. The NFA Team shall conduct monitoring, record-keeping and reporting, so as to ensure the contractor's keeps in with the environment regulations. The Contractor will prepare their own Contractors' ESMP (C-ESMP) and report on its implementation monthly to NFA.

9.2.1 Roles and Responsibilities for ESMP Implementation

This section details institutional responsibilities for environmental and social management and monitoring.

The overall responsibilities of coordination of the projects lies in NFA as the executing agency for the World Bank project. NFA working in close collaboration with technical team from the district local governments such as Environmental officers, Engineers etc. will ensure compliance with environmental laws, policies and regulations. Technical experts who are well-trained and highly qualified with the capacity to implement the Environmental and Social Management Plan (ESMP) will be identified.

Oversight responsibilities will be undertaken by the Project Technical Committee from NFA.

9.2.2 ESMP Implementation arrangement

ESMP during construction requires the involvement of several stakeholders and agencies, each with different roles and responsibilities including NFA, the Contractors, the Construction Supervision Consultant (CSC), to ensure effective implementation of the ESMP, the following structure shall be used to ensure the project is executed in line with the contractual expectations.

9.2.3 Responsibilities of Stakeholders

The roles and responsibilities of the key parties and their relationships regarding the implementation of the ESMP in both construction and operation phases are described as follows:

Table 21: Responsibilities of the various stakeholders

Community/ Agencies	**Responsibilities**
NFA	NFA will be responsible for monitoring the overall project implementation, including environmental and social compliance of the subproject. NFA will have the final responsibility for ESMP implementation and environmental performance of the subproject during the construction and operational phases. Specifically, NFA will: • Closely coordinate with local authorities in the participation of the community during project preparation and implementation; • Ensure adequate ESHS terms and conditions are include in all bid documents and subsequent contracts • Monitor and supervise ESMP implementation including incorporation of ESMP into the detailed technical designs and bidding and contractual documents; as well as during the operation phase of the project. • Ensure construction contractor obtains all necessary EHS permits and authorizations • Ensure that an environmental management system is set up and functions properly; and • Be in charge of reporting on ESMP implementation and Environmental and Social incident reporting to the World Bank. In order to be effective in the implementation process, NFA will assign Environmental Staff(s) (ES) to help with the environmental aspects of the project
NFA Environmental and Social Staff(s) (ES)	The ES is responsible for monitoring the implementation of the subproject ESMP. Specifically, ES will be responsible for: • helping NFA incorporate ESMP and other ESHS terms and conditions into the detailed technical designs and civil works bidding and contractual documents; • helping NFA incorporate responsibilities for ESMP and other ESHS terms and conditions and supervision into the TORs, bidding and contractual documents for the Construction Supervision Consultant (CSC); • providing relevant inputs to the consultant selection process;

	• reviewing reports submitted by the CSC; • conducting periodic site checks; • helping the NFA on solutions to handle Environmental, occupational health and safety, and social issues of the subproject; and • preparing environmental and social performance section on the progress, environmental and social incident reports and review reports to be submitted to the responsible authorities (World Bank)
Construction Supervision Consultant (CSC)	i. The CSC will assign Environmental and Social Staff(s) and will be responsible for routine supervision and monitoring of all construction activities and for ensuring that Contractors comply with the requirements of the contracts ii. The CSC will engage sufficient number of qualified staff members (e.g., Environmental Engineers) with adequate knowledge on environmental protection and construction project management to perform the required duties and to supervise the Contractor's performance. iii. The CSC will also assist the Local governments in reporting and maintaining close coordination with the local community.
Contractor	i. The contractor will assign Environmental and Social Staff(s) to carry out Environmental and Social mitigation measures proposed in ESMP. - Based on the approved environmental specifications in the bidding and contractual documents, the Contractor is responsible for establishing a Contractor ESMP (CESMP) for each construction site area, submit the plan to NFA and CSC for review and approval before commencement of construction and report monthly on CESMP implementation. In addition, it is required that the Contractor get all permissions for construction (traffic control and diversion, excavation, labor safety, etc. before civil works) following current regulations. ii. The Contractor is required to appoint a competent individual as the contractor's on-site Safety and Environment Officer (SEO) who will be responsible for monitoring the contractor's compliance with health and safety requirements, the CESMP requirements, and the environmental specifications iii. Take actions to mitigate all potential negative impacts in line with the objective described in the C-ESMP and promote actions that enhance positive impacts. iv. Actively communicate with local residents and take actions to prevent disturbance during construction. v. Ensure that all staff members and workers understand the procedure and their tasks in the environmental management program.

	vi. Report to the Local governments and CSC on any difficulties and their solutions. vii. Report to local authority and NFA and CSC if environmental accidents occur and coordinate with agencies and keys stakeholders to resolve these issues.
Local government (Sub County level)	• Oversee implementation of project under recommendations of NFA to ensure compliance of Government policy and regulations. • District Environmental Officers through NEMA are responsible for monitoring the compliance with the Government environmental requirements
NFA field-based staff	• The NFA field-based staff have the right and responsibility to routinely monitor environmental performance during construction to ensure that their rights and safety are adequately protected and that the mitigation measures are effectively implemented by contractors. • If unexpected problems occur, they will report to the CSC and Local governments.

9.2.4 Grievance Management

NFA has a grievance handling mechanism which is used in management of community grievances that occur in projects they implement. The community members will make use of the local level GRC available in the area to raise their concerns. This grievance handling system shall be applicable for the project to ensure that it is executed in an appropriate manner. In addition, ESS2 of the World Bank's Safeguards Framework requires that all contractors on a funded project shall establish a grievance mechanism for all direct workers and contracted workers to ensure that workers' concerns at the workplace are raised. The contractor will be required to have such a mechanism in place immediately after contract signing and prior to mobilization on site and since the workers will have representation on the GRC, the GRC will be established once workers have been mobilized.

9.3 Reporting arrangements

ESMP monitoring and reporting requirements are summarized in Table below.

Table 22: Monitoring arrangements and reporting requirements by the various stakeholders

No.	Report Prepared by	Submitted to	Frequency of Reporting
1.	Contractor to the Employer	NFA	The Contractor is obliged to report (immediately of certain aspects and monthly with respect to a wider range of aspects including the environmental and social performance of the project) to the CSC The contractor shall report incidents to the CSC in respect to the incident reporting procedure for the project as laid out in the ESCP.
2.	Construction Supervision consultant (CSC)	NFA	The CSC is required to report (immediately or monthly) to the employer every month. The CSC shall report project incidents to the Client (NFA) in respect to the incident reporting procedure for the project as laid out in the ESCP.
3	NFA to the Funder	World Bank	NFA shall report project incidents to the Funder (World Bank) in respect to the incident reporting procedure for the project as laid out into the ESCP.

CSC's report on environmental performance/compliance of the project should be included in the progress report submitted to NFA before each subproject implementation support mission and must include sufficient information on:

- preparation and disclosures of environmental safeguards instruments for subprojects;
- incorporation of new subproject project briefs in the bidding and contractual documents;
- monitoring and supervision of ESMP implementation by the contractor, the construction supervision engineer, and the PCs;
- any challenges in safeguard implementation, solutions, and lessons learned
- Status on both community and workers grievances.
- Information on incidents.

9.3.1 Communication and Progress Reports

This section describes the monitoring program and reporting required for ensuring effective implementation of this Environmental and Social Report, including assignment of responsibilities and environmental performance monitoring to be conducted as part of the project.

9.3.2 Routine Reports

The Supervisor will inspect the works for compliance with the contract specifications, proposed construction mitigation measures and all relevant environmental regulatory requirements concerning the project on a continuous basis.

The Environmentalist will also conduct random inspections while construction activities are occurring on site. Inspection/supervision will include all construction work, pits, waste collection and disposal areas, and other project facilities. The inspection will include but not be limited to:

- Inspection of construction areas for signs of environmental spills or emergencies;
- Inspection of construction equipment for oil and fuel leaks.

9.3.3 Emergency/Environmental Response

For monitoring emergencies, the Supervisor will target the following:

1. The contractor's activities for non-compliance with environmental specifications
2. Grounds for non-compliance are identified. If non-compliance is not rectified and the significance of the non-compliance warrants it, the procedure to halt construction will be initiated.

The Supervisor / Environmentalist can instruct the contractor to halt work if:

1. Construction activities are unexpectedly and significantly affecting environmentally sensitive areas or features;
2. There is likelihood or actual occurrence for an environmental emergency;
3. A physio-cultural resource has been found during project execution.

A government agency has ordered the work to halt to enable supervision of remedial activities before work can commence.

It is also important to note that the project's Environmental and Social Commitment Plan requires that severe incidents should be reported within 24 hours of occurrence.

9.4 Audits and Project Completion Reports

9.4.1 Environmental and Social Compliance Audit

The contractors shall carry out internal audits towards the end of the project, and these shall be undertaken jointly with the Supervising Engineer's team to determine:

1. if activities conform to measures and procedures identified in this project brief,
2. if there is compliance with legal requirements,
3. to inform management of the performance of project on ESHS and,

4. Identify non-conformities and implement corrective actions.

The E&S Team shall prepare internal audit procedures that define the objective, scope, frequency and methodologies, as well as the responsibilities for conducting audits and reporting the results.

The draft audit reports will be submitted to CSC through the supervising Engineer and the local authorities, before submitting to NEMA so that the Employer provides comments and are addressed by the independent consultants undertaking the audit.

9.5 Final Environmental Social Management and Monitoring Report

The implementation of this ESMP shall be documented and will provide information that will be used to prepare a Final Environmental and Social Management Report (FESMMR) after completion of the works.). The FESMR will detail how this ESMP shall be implemented, and summaries of non-conformances and how they were corrected as well as summary of where contractor performed excellently. It will include restoration works undertaken in all components of the Project.

Preparation of the FESMMR shall commence at least three months to the completion date, and the draft report shall be shared with the Supervising consultants who shall in turn, after provided comments share with the local authorities' E&S team. The FESMMR will include evidence of restorations of all campsite areas, embankments among others, as well as evidence that all grievances have been heard with feedback given to the aggrieved; and that compensation measures for injured workers and community injurious affections resulting from the contractor's actions other than land takes have been taken.

Table 23: Environmental Social Management and Monitoring Plan

Environmental/ social impact	Proposed mitigation and Enhancement measures		Monitoring Indicators	Capacity building required	Recommended Frequency of Monitoring	Responsible Actors	Cost Estimates (ugx)
Enhanced Forest Protection	NFA to provide monitoring and supervision equipment to field staff such as smartphones, cameras and GPS machines.	Always during the operation phase.	• Reduced forest illegalities	Training on use of monitoring equipment	Monthly	NFA field-based team	5,000,000
Improved Emergency Response	Avail emergency response kits to field staff, specific to their work area.	At commencement of operational phase.	• Reduced biodiversity loss during emergencies • Improvement in emergency handling procedures	Training on emergency preparedness, response and management.	Quarterly	NFA field-based team	3,000,000
Sustainable Infrastructure and Operations	Provide eco-friendly energy sources such as solar for the facilities.	Throughout operational phase.	• The presence of sustainable and eco-friendly equipment at the sites.	Training on the need for and use of eco-friendly equipment.	Quarterly	NFA field-based team	4,000,000
Employment opportunities	• Timely payment. • Having formal contracts for the workers.	Throughout construction and operational phases.	• Employment records of workers in adherence to the law • 41% of contractor workers. sourced	Hire of skilled and unskilled labour.	Quarterly reports	Contractor, NFA, local leaders.	200,000,000

	• The contractor should involve local leaders in the recruitment process to ensure full and fair participation of local communities and screening out of lawbreakers. • To the extent possible, equal employment opportunities shall be available for women during construction.		from the local communities				
Market for Construction Materials	• Give priority to local suppliers of material where necessary. • Advertise requests for suppliers within the community areas. • Timely payment of contractors for the materials supplied.	Throughout construction phase	• Local suppliers with contracts to supply material to the project.	Sensitization of the procurement department and the local community.	Quarterly	NFA Procurement	400,000,000

Destruction of Floral characteristics	• Clear only vegetation that shall be within the work area and leave out vegetation that shall not affect the establishment of the campsite components. • Selective removal of trees that could be habitat to some species shall be done to ensure minimal habitat distortion. This shall be overseen by the NFA environmental team. • Prioritize selective clearing rather than indiscriminate vegetation removal. • Develop and implement a re-vegetation program to compensate for the lost vegetation	Throughout the construction phase	• Minimal clearance of vegetation and soil stripping • Restoration plans in place • Neighboring vegetation kept intact	Sensitization	Monthly during the construction period	Contractors, CSC	10,000,000

	but invasive species will be avoided						
Tree Cutting for Timber	• Sensitize contractor's workers on the dangers and illegality of tree cutting trees from the CFR during the implementation of their activities. • Train NFA rangers on the possible tricks the contractor workers may use to illegally cut trees and provide appropriate monitoring tools. • Thoroughly check contractor vehicles as they enter and exit the CFR to ensure there is no timber being taken out. • Ensure to limit construction activities during the day time to reduce the risk of tree cutting and ensure all	Throughout the construction phase	• Restoration plans in place • Neighboring vegetation kept intact. • Record of Sensitization and training records. • Register of work closing time.	Sensitization and Public awareness campaigns	Monthly during construction period	Contractors, CSC	9,000,000

	workers leave the CFR by 6pm. • Ensure close monitoring and supervision of the construction activities to ensure that all workers are accounted for at all times by NFA rangers.						
Risk of Introduction of Invasive Species	• Inspection of vehicles shall be done and where necessary equipment and vehicles shall be cleaned using cleaning pools to prevent the unintentional spread of invasive species. • Soil erosion control measures shall be put in place to minimize	Throughout the construction phase	• Absence of invasive species around the construction areas. • Record of invasive species that are cleared around the site. • Presence of cleaning pool for vehicles	Sensitization of contractor's workers.	Quarterly	Contractors NFA field-based team	5,000,000

	soil disturbance and prevent the spread of invasive plants. • Where invasive species have been identified within the construction area, these will be uprooted and revegetation will be done with native species. • Ensure implementation waste management protocols to properly handle, segregate, and dispose of construction waste in accordance with local regulations, and ensure that all						

	waste materials are inspected and cleaned before disposal to prevent the spread of invasive species. • Sources of construction materials such as murram, aggregates and sand shall be inspected to ensure they are free from invasive species.						
Air and dust emissions	i. Prevention measures such as dampening dust by use of water (sprinkling water on surfaces that produce dust or covering them) shall be practiced; i. PPEs will be provided such as	Throughout the construction phase	• Availability, provision and proper use of appropriate PPE against dust • Sensitization programs for drivers in place.	education and control through enforcement	Weekly, monthly	Contractors, CSC,	6,000,000

	nose masks to the workers on the construction site; i. Control over areas generating dust particles. Such areas shall be regularly cleaned; v. Workers will be encouraged to go for regular health check-ups to ascertain their health standards; v. Regular air quality tests will be undertaken to enhance air quality monitoring; i. Wet sweeping of the surfaces that produces a lot of dust particles; i. Establishment of optimum green spaces in the compound particularly at the perimeter fence as the vegetation helps		• Dust related complaints recorded from constructor workers and neighboring communities				

	in extracting pollutants from the air. i. Dust masks will be used where dust levels are excessive x. Regular monitoring of air quality (both gases and particular) levels throughout the project's construction lifecycle. x. Adequate sensitization of the drivers i. Maintaining equipment appropriately; • Keeping vehicle idling time to the very minimum.						
Noise and vibrations generations	• Continuous noise and vibration level monitoring will be undertaken to ensure that the noise levels are kept within the	Throughout the construction phase	Construction equipment noise emissions within acceptable limits.	Education and control through enforcement Sensitization campaigns	Bi-weekly or Monthly	Contractors, CSC,	3,000,000

	recommended standards • All construction equipment will be fitted with silencers to reduce the noise generated; • Adequate servicing of all machinery, trucks and vehicles to ensure reduction of noise generated especially by friction • Construction activities shall be carried out only during the daytime. • Construction vehicle drivers and machine operators should be sensitized to adopt a habit of switching off the engines of their vehicles or machinery when they are not in use. • The Proponent should provide a well-marked						

	billboard at the construction site gates. This is meant to notify the public of the construction activity and timings. • Unnecessary hooting will be avoided at all costs by the construction vehicles and even during project occupation.						
Soil erosion	• The Contractor will ensure that excavations are undertaken safely in that shoring and good slope banking is put in place and by adhering to all safety rules; • The excavated materials will be used during the restoration activities; • Emergency measures and procedures for	During the construction and operational phases	• Soil deposited in the neighboring area drains • Storm water control plan in place	Sensitization and awareness campaigns	Daily monitoring whenever a heavy storm pours during construction period	Contractors, CSC	12,000,000

	protection of soils shall be developed. • Revegetation of cleared areas will be done after conclusion of construction activities. •						
Waste Management	• Waste segregation at source into different waste categories before disposal shall be encouraged. • A licensed waste management firm for the disposal of large quantities of solid waste shall be contracted. • Domestic solid waste is to be temporarily stored in refuse bins before disposal by a licensed contractor. • All reusable materials will be reused to minimize	Throughout the construction phase	• Dumpsites available in place. • Waste corded bins • Site cleanliness • Number of waste/debris on site • Disposal methods of solid waste from the site • Records for hazardous waste • Gender sensitive sanitary facilities available.	Sensitization and awareness activities. Environment sensitization programs	Daily, weekly and monthly Random site inspection	Contractors, CSC	15,000,000

	on quantity of solid waste generated. • The construction contractor will liaise with private waste handlers to have sound waste handling and disposal. • The wastes will be properly segregated and separated to facilitate the recycling of some useful waste materials. For example, broken stones can be used for backfills. An integrated solid waste management system may also be adopted through the hierarchy of options like source reduction, recycling, composting and reuse.						

	• The Proponent will ensure that measures are put in place to ensure that construction materials required for the project are carefully budgeted to ensure the amount of construction materials left is kept to the minimal level possible. • All the solid wastes will be collected by NEMA-licensed waste collectors and disposed of in a certified facility. • Provide mobile toilets at the site to collect human waste.						
Gender Based Violence	• Sensitization of construction works shall be undertaken and will be included in the construction contract such that these are conducted	During the construction and operational phases	• Record of sensitizations on GBV aspects. • Police cases on GBV related to project workers	Sensitization and awareness campaigns		Contractors, CSC	5,000,000

	throughout the projects. • Any form of GBV will be referred to the police for handling and where necessary psycho-social support shall be provided by the GBV service provider; • Workers will be required to sign a code of conduct as per the standard World Bank contract template and the Labour Management Procedures developed for the project; •		• Cases handled by GBV service provider.				
Violence Against Children	• Adequate sensitization for contractors not to recruit children. • The contractor will keep a record of the	Throughout the construction phase	• Employment record details. • Human resource manual in place.	Awareness activities and education	Quarterly	Contractors, CSC	5,000,000

	age numbers of all their employees to avoid employing those below the age of 18 and verification documents such as copies of national identification will be kept on site. • No cases of VAC will be tolerated on the infrastructure projects and these will be punishable by law. • The project will therefore work with the Police and the associated local Probation officers to see that there are no VAC cases on the project		• No police cases regarding children on the project.				
Transmission HIV/AIDs and other diseases	• Workers shall be regularly sensitized on the spread of infectious diseases such as HIV/AIDS;	During the construction and operation phase	• Record of sensitizations carried out. • Record of condoms purchased and	Sensitization	Quarterly	Contractors, CSC,	10,000,000

	• Regular provision of adequate prevention measures such as condoms; • Encourage workers to go for HIV voluntary counselling, testing and referral services; • Conduct free counseling and testing services with the support health facility in the area.		distributed to workers.				
Insecurity cases	• The project sites will be enclosed using suitable hoarding to avoid contamination of the environment and to control movement within the sites. • The contractor will provide adequate security during the construction period when no works are being done on the sites.	Throughout the construction and operation phases	• Security guards • Lighting in place	Security awareness campaigns	Random site inspection	Contractors, CSC, NFA Patrol teams	9,000,000

	• The guards stationed at the gates should document movements in and out of the sites/ property. out of the sites/ property.						
Poor waste management	• Sensitization of Patrol teams on proper waste management practices shall be done to ensure proper implementation of waste management strategies during the operational phase. • Coded waste bins shall be provided and placed around the quarters to ensure waste segregation and onsite collection. • All waste collected shall be disposed of	Throughout the operation phase	1. No littered waste around the quarters 2. Coded bins on site 3. Clean sanitary facilities segregated by gender	awareness and education on waste management	Daily	NFA Staff	25,000,000

	outside the protected area in an environmentally sound manner by certified waste handlers. • Sanitary facilities should be routinely cleaned to minimize risks of diseases						
Risk of Fire Outbreaks	• NFA will install and properly maintain fire-fighting equipment, train staff in basic fire-fighting methods and ensure that the fire escape routes are known and are always free from any obstacles. • The building walls will be painted with flameproof paint and fitted with smoke	Throughout the operation phase	• The presence of well serviced fire extinguishers. • No record of fire incidents	awareness and education on fire management Fire drills	Quarterly	NFA staff	4,000,000

	detectors and fire alarms. • There will be properly accessible fire assembly points on site. • Regular servicing and testing of fire equipment will be done to ensure proper functioning. • Fire prone behavior such as smoking will be strictly prohibited onsite.						
Poor Water Consumption	• Install water reservoir tanks at the facilities to collect rainwater and minimize dependency on local water resources. • Sensitize rangers on water saving techniques to use for domestic water consumption.	Throughout the operation phase	• Presence of rainwater collection facilities. • Number of sensitizations on water usage. • Clean drinking water available. •	Sensitization on proper water consumption. Routine maintenance of water storage facilities.	Daily	NFA	2,000,000

	• Install water-saving devices such as low-flow faucets and toilets. • Sensitize rangers on boiling all drinking water to reduce risks of diseases. •						
Structural Failure of Buildings.	• Ensure buildings are designed and constructed according to stringent safety and quality standards during the construction phase. • Carry out inspections to regularly check for and address structural	Throughout the construction and operation stage	• Approved building occupation permits on site. • Record of routine maintenance of the facilities. •	Routine maintenance and rehabilitation.	Biannually	NFA Engineering team	3,000,000

	weaknesses if identified. • Use high-quality materials and design buildings to maximize natural ventilation. •						
Natural Disaster Related Risks	• Ensure that the constructed buildings withstand high winds and storms by using reinforced structures and storm-resistant materials. • Ensure design and establish effective drainage systems around the	Throughout the construction and operation phase	• Presence of an emergency response plan that includes natural disasters. • Record of drills on emergency response. •	Provide professional support during emergency drills.	Biannually	NFA staff	2,000,000

	facilities to channel water away. • Develop and regularly update comprehensive emergency preparedness plans to cater for natural disasters. • Conduct drills and training sessions to ensure all personnel are familiar with emergency procedures. •						

9.6 Decommissioning/Restoration/Rehabilitation plan

During decommissioning of construction activities, the contractor shall ensure that all construction equipment is demobilized from the site before handover. As part of the restoration activities, grasses and trees that are indigenous to Mt. Kei CFR shall be planted around the established office building. In scenarios where the contractor opened auxiliary components to support the construction activities, a restoration plan shall be prepared and submitted to the Consultant and Client for approval.

The proposed decommissioning and restoration strategy shall be detailed to consider the prevailing conditions then. At this stage of the project conceptualization, it is not yet clear if:

On completion of the project's construction phase, all environmental components disturbed by the project should be restored to their original state. This follows the National Environment Act, Cap 2019.

10 CONCLUSIONS AND RECOMMENDATONS

10.1 Introduction

The Environment assessment study revealed that the proposed project has got both socio-economic and environmental benefits and costs. It emerged that the benefits exceed the costs. Also, all the identified environmental and social impacts can be mitigated to a level of minimum or no significance throughout the project cycle. Further, none of the potential impacts would result in permanent irreversible damage to the ecosystem components.

10.2 Conclusions

The report has identified reasonable measures to mitigate the potential impacts arising from the construction and operation of the proposed office building has assessed the significance of each of these impacts under both the pre- and post-migration of labour force scenarios. Professional experience, specialist knowledge, relevant literature and local knowledge of the area have all been used to assess the potential impacts associated with the proposed project.

The proposed office building will have several positive impacts including creation of employment, conservation of wildlife biodiversity. The negative environmental impacts from the project's establishment include noise and dust pollution during construction and decommissioning phases.

The contractors shall have to be committed to putting in place several measures to mitigate the negative environmental, safety, health and social impacts associated with the development cycle of the proposed development project. It is recommended that in addition to this commitment, the proponent shall focus on implementing the measures outlined in the ESMP as well as adhering to all relevant national and international environmental, health and safety standards, policies and regulations that govern establishment and operation of such projects.

10.3 Recommendations

To supplement the environment and social project brief assessment with its ESMP prepared, the contractor should be called upon to develop the following Environmental and Social management plans:

1. A Spill Prevention and Counter Measure Plan;
2. Waste Management Plan;
3. Occupational Health and Safety Plan;
4. HIV/AIDS Prevention Plan;

5. Erosion and Sediment Control Plan;
6. Environmental Restoration plan;
7. Stakeholder engagement plan
8. Grievance Management Plan

The developer should obtain any necessary permits including water abstraction permits, waste discharge permits, and construction permits among others.

It is therefore recommended that the proposed project be approved subject to the following conditions:

1. The developer will have to adhere to proper environmental and social practices.
2. The developer will comply with the laws of the country and the World Bank Safeguards Standards.
3. The developer will ensure implementation of the proposed ESMP
4. The developer will engage the neighborhood association on legal compliance and approvals and good environmental and social practices in project implementation.
5. Green building practices are to be adopted to achieve significant impact on combating climate change and help to create truly sustainable communities.
6. All necessary approvals will be obtained and conditions of such approvals complied with.
7. In order to ensure to maximize the perceived project benefits, mitigation measures of identified potential risks must be put into consideration.

Based on the above, the consultancy team recommends that NEMA approves this project for implementation.

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APPENDICES

Appendix 1: Plant Species recorded within the proposed sites

No.	Species name	Family	Plant life	IUCN status
1.	*Erythrina abyssinica*	Fabaceae	tree	LC
2.	*Terminalia mollis*	Combretaceae	tree	LC
3.	*Terminalia elleptica*	Combretaceae	tree	NE
4	*Tectona grandis*	Lamiaceae	tree	EN
5	*Combretum collinum*	Combretaceae	shrub	LC
6	Mangefera indica	Anacardiaceae	Tree	DD
7	*Albizia coriaria*	Fabaceae	tree	LC
8	*Combretum adenogonium*	Combretaceae	tree	LC
9	*Combretum molle*	Combretaceae	tree	LC
10	*Vernonia amygdalina*	Asteraceae	shrub	NE
11	*ocimum gratissimum*	Lamiaceae	herb	LC
12	*Megathyrsus maximus*	Poaceae	shrub	NE
13	*Senna didymobotrya*	Fabaceae	shrub	LC
14	*Acacia hockii*	Fabaceae	Shrub	LC
15	*Ficus natalensis*	Moraceae	tree	LC
16	*Kigelia africana*	Bignoniaceae	tree	LC
17	Psidium guajava	Myrtaceae	shrub	LC
18	*Eucalyptus grandis*	Myrtaceae	tree	NT
19	*Mimosa pudica*	Fabaceae	shrub	LC
20	*Erigeron canadensis*	Asteraceae	shrub	LC
21	*Cassia fistula*	Fabaceae	shrub	LC

22	*Cynodon dactylon*	Poaceae	herb	LC
23	*Elymus repens*	Poaceae	herb	LC
24	*Tagetes minuta*	Asteraceae	herb	LC
25	*Eleusine indica*	Poaceae	herb	LC
26	*Chloris pilosa*	Poaceae	herb	LC
27	*Solanum incunum*	Solanaceae	herb	LC
28	*Digitaria sanguinalis*	Poaceae	herb	LC
29	*Sida acuta*	Malvaceae	herb	LC
30.	*Cyperus rotundus*	Cyperaceae	herb	LC
31.	*Senna occidentalis*	Fabaceae	shrub	LC
32	*Borassus aethiopum*	Arecaceae	shrub	LC

Appendix 2: Avifauna recorded within the proposed sites

	Scientific name	Common name	IUCN status
1	*Pogoniulus scolopaceus*	Speckled Tinker bird	LC
2	*Buteo auguralis*	African red-tailed buzzard	LC
3	*Ploceus intermedius*	Lesser masked weaver	LC
4	*Lophaetus occipitalis*	Long crested eagle	LC
5	*Corvus albus*	Pied crow	LC
6	*Ploceus melanocephalus*	Black-headed weaver	LC
7	*Cinnyris erthrocercus*	Red chested sun bill	LC
8	*Compethera nubica*	Nubian woodpecker	LC
9	*Motacilla aguimp*	African pied wagtail	LC
10	*Columba guinea*	Speckled pigeon	LC
11	*Cypsiurus papyrus*	African palm swift	LC
12	*Merops bulocki*	Red chested bee-eater	LC
13	*Ploceus melanocephalus*	Black-headed weaver	LC
14	*Laniarius erythrogaster*	Black headed gonolek	LC
15	*Lophoceros fascatus*	African pied hornbill	LC
16	*Bostrychia hagedash*	Hadada ibis	LC
17	*Bubulcus ibis*	Cattle egret	LC
18	*Cecropis abyssinica*	Lesser stripped swallow	LC
19	*Crinifer zonurus*	Eastern plantain eater	LC
20	*Streptopelia capicola*	Ring necked dove	LC
21	*Turtur chalcospilos*	Emerald spotted wood dove	LC
22	*Lamprotornis purpuroptera*	Ruppell's starling	LC

Appendix 3: Minutes of Stakeholder Engagements

NATIONAL FOREST FIELD TEAMS

Project Name	***PROPOSED CONSTRUCTION OF THE OFFICE AND STAFF HOUSING FACLIITES***
	Proposed Construction of Accommodation Facilities in MT. KEI
Subject	**Meeting with the NFA Field teams**
Meeting Status	**Physical Meeting at NFA Koboko Office**
Date	**02nd April 2024**
Time	**4:00pm-5:00pm**
Members Present	Simon Peter Ssali John Martin Ogolla Kirabo Rita Precious Prossy Nakawuka Eng Ronald Menya Asmua Pilili
Location	NFA Site

Minute	Discussion	Action
	Agenda 1. Prayer 2. Self-introduction 3. Communication from the consultant team 4. Communication from NFA team 5. Reactions and Way forward 6. Closure	All to Note
1.0	**Prayer** An opening prayer was led by Precious	All to Note
2.0	**Self-introduction** The environment consultant team and the NFA team The community leaders and the other com introduced themselves	All to Note
3.0	**Communication from the consultant team** The consultant team introduced the project where in the developer (NFA) intends to set up office in thirteen Central Forest Reserves NFA procured a consultant to undertake an environmental Assessment study as per agreement since its situated within a Protected Area to identify impacts of the construction and propose mitigation measures the purpose of the meeting was to involve staff so as to get their views on the project.	NFA to Note.

4.0	**Communication from NFA Field team** The Patrol team should have separate spacious rooms The safety measures for workers should clearly be elaborated The team welcomed the project and asked when the project begins. Patrol team should be safe and enhance the reserve's management they lack Health and Safety kits Lack of Safety gear such as safety shoes and Uniforms. Fire out breaks set up by community members more manpower is required	Consultant to Note
5.0	**Reactions and Way forward** Consultant will discuss with NFA team to provide Safety kits to the patrol teams. Sensitization of the people within the project areas to avoid fires in the forests Time management on the duration of the project The designs shall include rooms for patrol teams and will have solar and water systems NFA to provide security while monitoring all activities on site. Contractor on site will consider the nearby communities for employment	All to Patrol team to Note
6.0	**Closure** The meeting closed at 6:30pm	All to Note

NFA SUPERVISIORS

Project Name	**PROPOSED CONSTRUCTION OF NEW OFFICE AND STAFF HOUSING INFRASTRUCTURE**
	Proposed Construction of Office and staff housing at MT KEI
Subject	**Meeting with the NFA supervisors**

Meeting Status	**Physical Meeting at NFA Arua office**
Date	**02th April 2024**
Location	**NFA office and Site**
Time	**5:00pm-7:00pm**
Members Present	Simon Peter Ssali Adupa Issac John Martin Ogolla Nyeko Milton Kirabo Rita Abiyo Patrick Prossy Nakawuka Eng Ronald Menya Busobozi Harunah

Minute	Discussion	Action
	Agenda 1. Prayer 2. Self-introduction 3. Communication from the consultant team 4. Communication from NFA team 5. Reactions and Way forward 6. Closure	All to Note
1.0	**Prayer** An opening prayer was led by Eng Menya Roald	All to Note
2.0	**Self-introduction** The environment consultant team and the NFA team The community leaders and the other com introduced themselves	All to Note

3.0	**Communication from the consultant team** The consultant team introduced the project where in the developer NFA anticipates to set up New Office and staff housing in thirteen Central Forest Reserves. NFA procured a consultant to undertake Bills of Quantities and carry out an Environmental Assessment study within a Protected Area to identify impacts of the construction and propose mitigation measures the purpose of the meeting was to involve staff so as to get their views on the project.	NFA to Note.
4.0	**Communication from NFA Supervisors** Requested the number of blocks or units and the designs that would be accommodated at the site facility. Supervisors pointed out the need for a comprehensive impact assessment to evaluate potential environmental repercussions, especially regarding habitat disruption and tree removal Any construction should prioritize using sustainable materials and energy-efficient designs to reduce the carbon footprint. Contractor to manage all impacts shall be managed namely waste related impacts. They requested to know the time the project will begin HIV/AIDS awareness should be introduced under these Projects Supervisors have emphasized the need for strict adherence to all applicable environmental regulations and permits throughout the project lifecycle The safety measures for workers should clearly be elaborated Supervisors also pointed out the lack of Safety kits and Uniforms	Consultant to Note
5.0	**Reactions and Way forward** Consultant caring out initiate an in-depth Environmental Social impact assessment (ESIA) to thoroughly analyse the project's effects on local ecosystems. In this case a Project brief will be submitted to the authorities (NEMA) Sensitization of the people within the project areas and the contractors work force on Human Immunodeficiency Virus, while AIDS stands for	NFA Supervisors to Note

	acquired immunodeficiency syndrome (HIV/AIDS) and general conduct while within the community Time management on the duration of the project will be observed by the supervising Consultant and NFA team Strict laws should be set on the contractor's workers discipline especially when socializing with the local community and NFA staff mostly the Rangers NFA to provide security while monitoring. Consultant team fully committed to complying with all relevant laws, regulations, and permitting requirements Contractor on site will consider the near communities for employment if the members are in line with the job requirement	
6.0	**Closure** The meeting closed at 5:40pm	All to Note

NFA TOP MANAGEMENT

Project Name	**PROPOSED CONSTRUCTION OF THE NEW OFFICE AND STAFF HOUSING INFRASTRUCTURE**
	Proposed Construction of the Office building and staff housing at Mt. Kei
Subject	**Meeting with the NFA Top Management**
Meeting Status	**Physical Meeting at NFA head office,** Plot 10/20, Spring Road, P.O. Box 70863, Kampala - Uganda
Date	20/05/2024
Time	10.00am
Members Present	Abraham N Kamunsingwa Prossy Nakawuka Eng Ronald Menya Kirabo Rita Tom Sefuma Shallon Challenge Franklin Kasumba Dennis Ssekiwere Stuart
Minute	**Discussion**
1.0	**Agenda** 1. Opening Prayer 2. Self-introductions 3. Communication from the chair 4. Presentation of the draft report 5. General Discussions 6. Way forward 7. Closure
2.0	**Prayer**

2.1	An opening prayer was led by Shallon Challenge
3.0	**Self-introduction**
4.0	**Communication from Chair** Stuart Maniraguha
4.1	Congratulated IDM for being awarded the assignment and thanked the team for the progress so far made with the assignment.
4.2	Reminded the team about the tight timelines involved.
4.3	Noted that the draft report was received, reviewed and comments were raised by the client.
4.4	Asked the NFA team to confirm if the comments raised on the draft report had been addressed in the Power Point Presentation
	Communication from IDM
4.4	The Consultant presented a draft report highlighting; the field findings, design concept, renovations, budget estimates, environmental assessment and revised schedule.
4.5	The Consultant noted that there was a discrepancy in the proposed infrastructure developments in the ToRs and the field findings. According to the Tor's a total of 52 buildings had been proposed while the field findings had a total of 104 sites. He requested the client to guide on the scope to be covered.
	The Consultant presented different options of the new design concepts for the office blocks, staff housing and security patrol units as well as visitor washrooms.
4.6	The client was requested to choose the preffered design options so that detailed working drawings could be prepared.
4.7	Samples of the existing dilapidated structures that require renovation were also presented for the client to appreciate the current status of the buldings.
	Outline budget estimates were presented which indicated an increase in the initial budget due to an increase in the number of buildings.

4.8	The environmental assessments indicated that there was need for mitigation measures to be put in place to address the negative impacts during project implementation. These will be detailed in the ESMPS or Briefs.
4.9	Consultant noted that it would not be possible to conclude the assignment by 30th May 2024 as had been initially anticipated.
5.0	
5.1	General discussions
5.2	It was noted that the key challenges face by the Consultant be highlighted in the draft report.
5.1	Consultant was requested to include in the budget estimates the unit costs of the different types of buildings.
5.2	The Consultant was guided on the Lots that constitute the works as follows: Lot 1-Southwest Range: Kashoha-Katomi, Kalinzu and Echuya CFR Lot 2-Budongo Range: Budongo,Bugoma, Kagome, Nyakarongo CFR Lot 3-Muziz Range and West Nile; Rwensambya, Itwara, Mt Kei, and Era.
5.3	It was noted that some sites had land wrangles which should be resolved by NFA NFA confirmed that they have a budget for extension of water and Electricity as well as fencing of the different sites and that these components should be included in the final project costs.
5.4	It was noted that Project briefs should follow the approved World Bank format already approved on a similar project done for UWA by the same Consultant. A sample of the Project Brief and ESMP was to be shared with NFA for review and approval.
5.4	NFA to help the Consultant to reach out to other stakeholders for Engagement as required by the World Bank. These include;

5.6	• Ministry of Tourism • Ministry of Water • Uganda Wildlife Authority • Uganda Tourism Board. • Ministry of Labour Gender Social Development
5.7	WAY FORWARD
5.8	Design option 1 for the new office housing was selected by NFA but the consultant was advised to add a server room, pantry and Ramp for the PWDs
5.9	Design option 2 for the staff housing was selected by NFA but the consultant is to include wardrobe units in the bedrooms.
6.0	Design option 1 was chosen for the security/patrol housing.
6.1	Visitor washrooms design to be revised to include the PWDs facilities, nursing mothers' room and urinals for the gentlemen.
6.2	Consultant to address the comments and share the revised new report for transmission to world Bank.

DISTRICT LOCAL GOVERNMENT OFFICIALS

Project Name	**PROPOSED CONSTRUCTION OF NEW OFFICE AND STAFF HOUSING INFRASTRUCTURE**
	Proposed Construction of Office building and staff housing at Mt.Kei and Ozubu CFR
Subject	**Meeting with the Koboko District Local Government Officials**
Meeting Status	**Physical Meeting at Koboko District Local Government Offices**
Date	**03/04/ 2024**
Location	**District Office**
Time	**10:40am-11:30am**
Members Present	Eng Ronald Menya Alege Steven Kirabo Rita Gibert Ojia Simon Peter Ssali Engabua Simon John Martin Ogolla Akandru Marion

Minute	**Discussion**	**Action**
1.0	**Agenda** 1. Prayer 2. Self-introduction 3. Communication from the consultant team 4. Communication from the District Environmentalist 5. Communication from the District CDO 6. Communication from DFO 7. Reactions and Way forward	All to Note

	8. Closure	
2.0	**Prayer**	All to Note
2.1	An opening prayer was led by John Martin Ogolla	
3.0	**Self-introduction**	All to Note
	The Environment consultant team	
3.1	The District Environmentalist, Chief Development Officer and Forest Officer introduced themselves	
4.0	**Communication from the consultant team**	District Officials to Note.
4.1	The consultant team introduced the project where in the developer (NFA) intends to set up New Office and Staff housing in thirteen Central Forest Reserves	
4.2	NFA procured a consultant to Design and undertake an environmental Assessment study in the selected Protected Area to identify impacts of the construction and propose mitigation measures the purpose of the meeting was to involve the District Local Government Officials so as to get their views on the project.	
4.3	**Communication from District Environmentalists**	Consultant to Note
	The welcomed the project in the different districts.	
4.4	They noted that NEMA should be aware of the developments through the documentation that are to be submitted in regards to the both staff and office housing.	
4.5	District Environmentalists highlighted the need for adopting sustainable construction practices to minimize environmental impact	
4.6	Sanitation facilities should be availed for the proposed developments.	
4.7	General Waste management facilities should be provided.	
	There should be minimum vegetation disturbance in the areas for which the developments are situated.	
	Communication from CDOs	
4.9	They positively welcomed the project.	
5.0	They requested that HIV/AIDS Awareness should be carried out especially to the Contractors' Workers in the different areas.	
5.1	Community people should as well benefit from the project.	

	construction project should bring tangible benefits to the local community through infrastructure development and job creation opportunities **Communications from the DFO** Stressed the importance of complying with all relevant forest regulations and obtaining necessary permits before commencing construction activities**.** It was suggested that the construction project should incorporate robust forest fire prevention measures to mitigate the risk of wildfires, especially during periods of high fire danger**.** Concerns about the transparency of the project, including access to information and clarity about project goals and impacts**.**	
6.0 *6.1* *6.2* *6.3* *6.4* *6.5*	**Reactions and Way forward** Communication to NEMA of the project. General Waste Management by the Contractors. We will prioritize the use of eco-friendly materials, energy-efficient design principles, and construction techniques that minimize resource consumption and waste generation. Contractor to minimizing habitat disturbance and will explore opportunities for habitat restoration and enhancement as part of the project. Contractor to complying with all applicable environmental laws, regulations, and permitting requirements Contractor to maximizing the positive impact of the construction project on the local community. Contractor to adhering to all applicable forest regulations and permitting requirements	All to Note
7.0 *7.2*	**Closure** The meeting closed at 11:30am	All to Note

UGANDA WILD LIFE AUTHORITY (UWA)

Project Name	**PROPOSED CONSTRUCTION OF NEW OFFICE AND STAFF HOUSING FACILITIES**

	Proposed Construction of New office and Staff Housing at Mountain Kei
Subject	**Meeting with the Uganda Wildlife Authority**
Meeting Status	**Physical Meeting**
Date	13/05/2024
Location	**UWA Head Office**
Time	2.00pm
Members Present	Ssemwaka Steven Justine Namara Eng Ronald Menya Charles Tumwesigye John Martin Ogolla Jimmy Baluku Prossy Nakawuka Simon Peter Ssali

Minute	**Discussion**	**Action**
1.0	**Agenda** 1. Prayer 2. Self-introduction 3. Communication from the consultant team 4. Communication from UWA team 5. Reactions and Way forward 6. Closure	All to Note
2.0 *2.1*	**Prayer** An opening prayer was led by John Martin Ogolla	All to Note

3.0	**Self-Introduction** The Environment consultant team and UWA Team introduced themselves	All to Note
3.1	**Communication from the Consultant team**	
3.2	The consultant team introduced the project where in the developer (NFA) intends to set up new office and Staff Housing Facilities in thirteen Central Forest Reserves NFA procured a consultant to undertake Designs, Bills of Quantities and carry out an environmental Assessment study as per agreement since its situated within a Protected Areas such as MT Kei, Budongo, and many more	MTWA to Note
3.3 3.4 3.5 3.6	**Communication from UWA** When does the project commence. Ensure to compensate for lost or degraded areas. Ensuring that the project complies with local, national, and international wildlife protection laws and environmental regulations. Conducting thorough Environmental Social Impact Assessments (ESIA) and Wildlife Impact Assessments to identify potential impacts and develop mitigation plans. Non-native Species, Construction and associated human activity can introduce invasive species that compete with native wildlife, alter habitats, and spread diseases.	Consultants to Note
3.7 3.6 3.8 3.9	**Reactions and Way forward** NFA will communicate when the project will commence. Project briefs have been carried which will be submitted to the authority to comply with the Environmental laws and regulations while the Environment Social Management Plans will be submitted to NFA to track monitoring.	MTWA to Note

	Long-term Surveillance, continue monitoring for invasive species after construction is completed to ensure early detection and control.	
4.0	**Closure** **The meeting closed at 10:30 am**	All to Note

AREA LOCAL LEADERS

Project Name	**PROPOSED CONSTRUCTION OF STAFF AND OFFICE HOUSING** Proposed Construction of New office and Staff Housing Facilities in Mt Kei
Subject	**Meeting with the local leaders**
Meeting Status	**Physical Meeting**
Date	**03/04/2024**
Location	**Ozubu site**
Time	5.30pm
Members Present	Precious Prossy Nakawuka Eng Ronald Menya Kirabo Rita Simon Peter Ssali John Martin Ogolla Hussein Karala Drani Rashid Agele Kasim Alaha Dada

Minute	**Discussion**	**Action**
1.0	**Agenda** 1. Prayer 2. Self-introduction 3. Communication from the consultant team 4. Communication from Local Leaders team 5. Reactions and Way forward 6. Closure	All to Note

2.0	**Prayer** Prayer led by Agele Kasim	All to Note
2.1	**Self-Introduction** The Environment consultant team Local leaders	All to Note
2.2	**Communication from the consultant team** The consultant team introduced the project where in the developer (NFA) intends to set up new office and Staff housing facilities, in thirteen Central Forest Reserves NFA procured a consultant to undertake Designs, Bill of Quantalities and carry out an environmental Assessment study as per agreement since its situated within a Protected Area to identify impacts of the construction and propose mitigation measures the purpose of the meeting was to involve Local Leaders	Leaders to Note
2.3 *2.4*	**Communication from Local Leaders** Availability of employment opportunities for the local community. Awareness of HIV/AIDS to the community Safety along the roads since there is high traffic	Consultant to Note
	Response from the consultants	
2.6 *2.7*	Impacts of HIV/AIDs and livelihood of the people during both the construction and operation phases will is stated in the monitoring plans Strict laws are set on the contractor's workers discipline especially when socializing with the local community.	Local Leaders to Note

2.8 *2.9*	Sensitization of the people within the project areas and the contractors work force on HIV/AIDS and general conduct while within the community has been clearly been stated in the monitoring plans. Safety on the roads such as signage will be installed on the roads for safety awareness and a supervising Consultant will be procured	
3.1	**Closure** The meeting closed at 6.30pm	All to Note

COMMUNITY MEMBERS

Project Name	**PROPOSED CONSTRUCTION OF THE OFFICE BUILDING AND OFFICE HOUSING**
	Proposed Construction of Office building and staff housing at Mt. Kei
Subject	**Meeting with the Community**
Meeting Status	**Physical Meeting at Ozubu site**
Date	**03/04/2024**
Time	**6:30pm-7:15pm**
Members Present	Precious Abele John Prossy Nakawuka Alum Peter Simon Peter Ssali Omony Okot John Martin Ogolla

Minute	**Discussion**	**Action**
1.0	**Agenda** 1. Prayer 2. Self-introduction 3. Communication from the consultant team 4. Communication from community representative	All to Note

	5. Reactions and Way forward 6. Closure	
2.0	**Prayer** Prayer led by Prossy Nakawuka	All to Note
2.1 2.2	**Self-Introduction** The Environment consultant team Community members	All to Note
2.3 2.4	**Communication from the consultant team** The consultant team introduced the project where in the developer (NFA) intends to set up new Office and Staff Housing facilities, in thirteen Central Forest Reserves NFA procured a consultant to undertake Designs Bills of Quantities and to carry out an environmental Assessment study as per agreement since its situated within a Protected Area to identify impacts of the construction and propose mitigation measures the purpose of the meeting was to involve Local Leaders	
2.4 2.5 2.6	**Communication from the community** Employment Opportunity for the locals Time when the project commences They requested for tree seedlings	Consultant to Note
2.7 2.8	**Response from the consultants** Communication will be made through the Local leaders when the project is to commence. NFA field team is in touch with the local leaders	Community members to Note

2.8	Employment Opportunities community members will be considered. NFA team would communicate to the community on how to acquire the tree seedlings	
3.0	**Closure** The meeting closed at 7.15pm	All to Note

MINISTRY OF WATER AND ENVIRONMENT

Project Name	***PROPOSED CONSTRUCTION AND RENOVATION OF OFFICE AND STAFF HOUSING FOR NATIONAL FORESTRY AUTHORITY***	
Subject	**Meeting with Ministry of Water and Environment (Environment Support Service Department)**	
Meeting Status	**Physical Meeting**	
Date	**21st May 2024**	
Time	**10:00am-11:00am**	
Members Present	Mununuzi Nathan Franklin Kasumba Eng Ronald Menya Kirabo Rita Abraham Kamunsingwa Prossy Nakawaya	
Minute	**Discussion**	**Action**
1.0	**Agenda** 1. Prayer 2. Self-introduction 3. Communication from the consultant team 4. Communication from the Senior Environment Officer 5. Reactions and Way forward 6. Closure	All to Note
2.0 2.1	**Prayer** An opening prayer was led by Franklin Kasumba	All to Note
3.0 3.1	**Self-introduction** The Environment consultant team Senior Environment Officer	All to Note
4.0 4.1 4.2	**Communication from the consultant team** The consultant team introduced the project where in the developer (NFA) intends to set up new Office and Staff facilities and renovate existing structures in the different protected forest areas. NFA procured a consultant to undertake an environmental Assessment study as per agreement since it's situated within a Protected Area to identify impacts of the construction and propose mitigation measures. The purpose of the meeting was to involve the Ministry so as to get their views on the project.	Environment Officer to Note.

	Communication from the Senior Environment Officer	Consultant to Note
4.3	Positively welcomed the project.	
4.4	Noted that NEMA should be aware of the developments through the documentation that are to be submitted in regards to the new facility developments.	
4.5	Mitigation measures should be costed and should be included in the final project cost	
4.6	Follow up should be done to Environmentally sensitive areas regarding the extent of vegetation destruction and any residual impacts on even auxiliary sites (ESMP).	
4.7	Sites for material acquisition should be identified	
4.8	Transportation of materials to the sites should be streamlined	
4.9	Labour management should be emphasized i.e., openness in recruitment, child labour should not be accepted and community members should be given priority in recruitments.	
4.10	The Code of conduct for workers should be laid out Occupational health and safety needs to be emphasized on the sites Sexual Orientation should be carried out to the workers	
4.11	There needs to be no land encumbrances on the sites where the facilities are to be set up i.e., land titles need to be availed.	
4.12	Grievance mechanisms need to be put in place	
4.13	There should be minimum vegetation disturbance in the areas where the developments are to take place.	
4.14	Noted that there should be no disturbances with the existing area biodiversity	
5.0	**Reactions and Way forward**	All to Note
5.1	Communication to NEMA of the project.	
5.2	Sensitization of the people within the project areas and the contractors work force on HIV/AIDS and general conduct while within the community	
5.3	General Waste Management by the Contractors.	
5.4	Security should be enhanced mostly by the NFA patrol	
5.5	HIV/AIDS testing and counselling services.	
5.6	Minimum Vegetation cover disturbance by the Contractors	
5.7	Code of conduct will be included in the ESMP	
5.8	Occupational Safety shall be considered for the workers	

5.9	Labour management will be implemented i.e., Employment for community members shall be considered	
5.10	Contractor will be required to provide an ESMP to guide the execution of works	
5.11	Trees will be replanted for areas where tree vegetation will be cut down	
5.12	The development sites are accessible due to the close proximity to the access roads.	
5.13	NFA will have land issues resolved before commencement of the project.	
5.14	Project Grievance Mechanism will be considered for the community members and other stakeholders.	
6.0	**Closure**	All to Note
6.2	The meeting closed at 11:00am	

MINISTRY OF GENDER, LABOUR AND SOCIAL DEVELOPMENT

Project Name	***PROPOSED CONSTRUCTION AND RENOVATION OF STAFF HOUSING FOR NATIONAL FORESTRY AUTHORITY***	
Subject	**Meeting with the Ministry of Gender, Labour and Social Development**	
Meeting Status	**Physical Meeting**	
Date	**06/06/ 2024**	
Time	**2:00pm-3:00pm**	
Members Present	Abraham N. Kamunsingua Eng Ronald Menya Kirabo Rita Ogwal Alex Kizito Ivan Akuno Moses Kemigisha Eldrine Franklin Kasumba Micheal Tengeka	
Minute	**Discussion**	**Action**
1.0	**Agenda**	All to Note
2.0 *2.1*	**Prayer** An opening prayer was led by Kirabo Rita	All to Note
2.2	**Self-Introduction** The Environment consultant team The Ministry of Labour Gender and Social Development (MLGSD)	All to Note
2.3	**Communication from the consultant team** The consultant team introduced the project where the developer (NFA) intends to set up Accommodation facilities, and Gates in eleven (11) Protected areas.	MSLGSD to Note

	NFA procured a consultant to undertake an environmental Assessment study as per agreement since its situated within a Protected Area to identify impacts of the construction and propose mitigation measures the purpose of the meeting was to involve Ministry of Labour Gender and Social Development (MLGSD)	
2.4 *2.5* *2.6* *2.7*	**Communication from MLGSD Member** The construction project presents an opportunity to promote local employment and skills development through the hiring of labor from nearby communities and the engagement of local contractors and suppliers. Regular monitoring and evaluation of the construction process should be conducted to ensure compliance with relevant regulations and standards, as well as to address any emerging issues or challenges in a timely manner. Local leaders will need to have some safety as there in the park while monitoring on the ongoing project	Consultant to Note
2.8 *2.9* *3.0* *3.1*	**Reactions and Way forward** The Supervising Consultant will regularly monitor and evaluate the impact of local employment and skills development initiatives associated with the construction project. Regularly will monitor and evaluate the impact of local employment of about thirty people both skilled and unskilled and skills development initiatives associated with the construction project. Assigned dedicated project personnel or supervisors to oversee the safety of local leaders on-site and will provide support as needed. These individuals will be trained in safety management and emergency response procedures	MLGSD to Note
3.2	**Closure** The meeting closed at 3.00pm	All to Note

Appendix 4: Engagement contacts

Stakeholder consultations

Name of Agency/Stakeholder: NFA Main Offical Range - West Nile

Purpose of consultation (tick appropriate box): ESIA; Project briefs ✓; INCEPTION; OTHER (specify);

DATE: 2 | 04 | 2024 VENUE: AT SITES

Project name: Construction of Office in Ozubu Centeral forest Reserve in Koboko district

Developer:

Name of person/official	Position	Telephone number	Email	Signature
NYEKO Milton	Range Manager	0772189999	nyekomi@gmail.com	
BUSOBOZI HARUNAH	Sector Manager	0773 141247	hbusobozi6@gmail.com	
ABITO A PATRICK	forest Supervisor	0772158810	patrickabitoalule24@gmail.com	
ADUPA ISAAC	FOREST SUPERVISOR	0781861566	isaacdupes@gmail.com	
HUSSEIN KARAZA	LC I NYARABU	0788983644	-	
DRANI RASHID	LC I KANGAI	0773365057		
AGELE KASSIM	LC I MOJE	0772519636	- -	
Aliedriga hassan	Commity member	0774928680	- -	
ASMUA PHILLIP	PATROLMAN	0788983644		
AL HAJI BADA	LC II CHAIRMAN CFR	0775066383		
AYIMA AKIMU	MEMBER LEI	- - -		
Akandru Mariam	DNRO-Koboko	0772573262	akandrumariam@gmail.com	
Alege Hadu Steven	Environment officer	0764124338	alegewadia@gmail.com	
GILBERT OJJIA	FOREST OFFICER	0773392174	gilbertojia@yahoo.com	

Engabua Simon	Community Development Officer	077-5545732	Sengabua@gmail.com	
Abele John	CM	078482813 2		AB
Atia flower	C.M	0762483112		
Alum Peter	C.M	0778507844		
Emong Ade Dan	CM	0774[illegible]		
IKA OBOTH	CM	0775060746		
OMONY OKOT	CM	0772228558		

Stakeholder consultations

Name of Agency/Stakeholder: TOP MANAGEMENT.

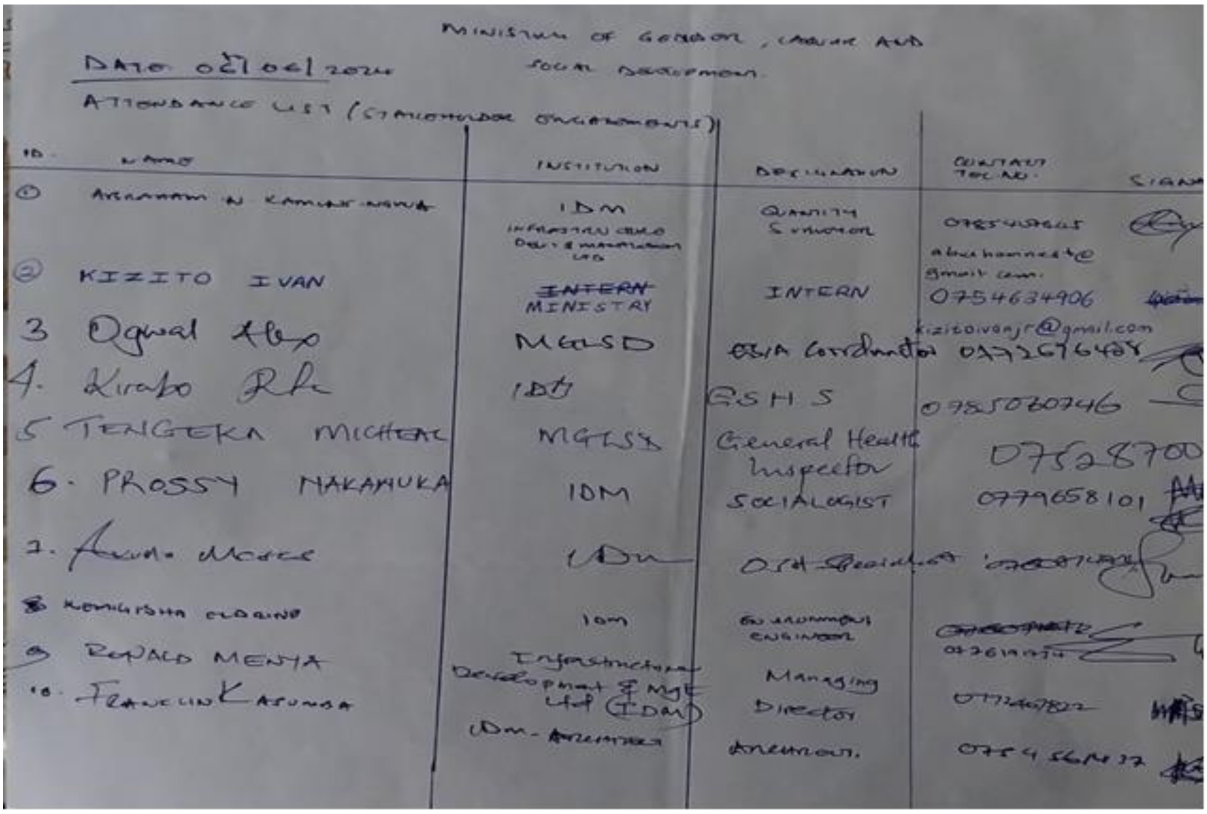
Purpose of consultation (tick appropriate box)	
ESIA	
Project briefs	✓
INCEPTION	
OTHER (specify);	

DATE: 20/05/2024 VENUE: NATIONAL FOREST AUTHORITY

Project name: CONSTRUCTION OF NEW OFFICE AND STAFF HOUSING IN CENTRE FORESTY RESERVES (CF[illegible]

Developer:

	Name of person/official	Position	Telephone number	Email	Signature
1	Nanteza Tikka	Procurement officer IFPA-CD Project	0788076045	nantikka@gmail.com	
2	Eng. Paul Ssesanga	PAE MOWT	0772412054	Ssespl@yahoo.com	
3	Levi Etwalu	PO-IFPA-CD NFA	0772581494	Letwalu@yahoo.com	
4	Lemo Ronald	NFA	0782998211	ronald.lemo@nfa.go.ug	
5.	FRANKLIN KASUMBA	ARCHITECT - IDM/CONCEPT	0754961437	FLKASUM@GMAIL.com	
6.	ABRAHAM N. KAMUNTINGWA	IDM (Tech. & QS Asst)	0785407445	abrahamnext@gmail.com	
7.	RONALD MENYA	IPAL-MD	0772407822	ronaldmenya2016@gmail.com	
8.	Kirabo Rita KAMUGUNGUNU	GSHS IDM	0785820746	ritahkirabo078@gmail.com	
9.	Shallon Challenge	EMRO NFA	0772265636	Shallon.Challenge@nfa.go.ug	Challenge.
10.	Dennis Sekiwere	IDM.	0709031059	sekiwere91@gmail.com	
11.	Tom Cefuuna	Quantity Surveyor - IDM	0772491689	tcefuuna_cs@hotmail.com	
12.	Stuart Maniraguha	IFP-NFA	0782786048	stuartmani@gmail.com	

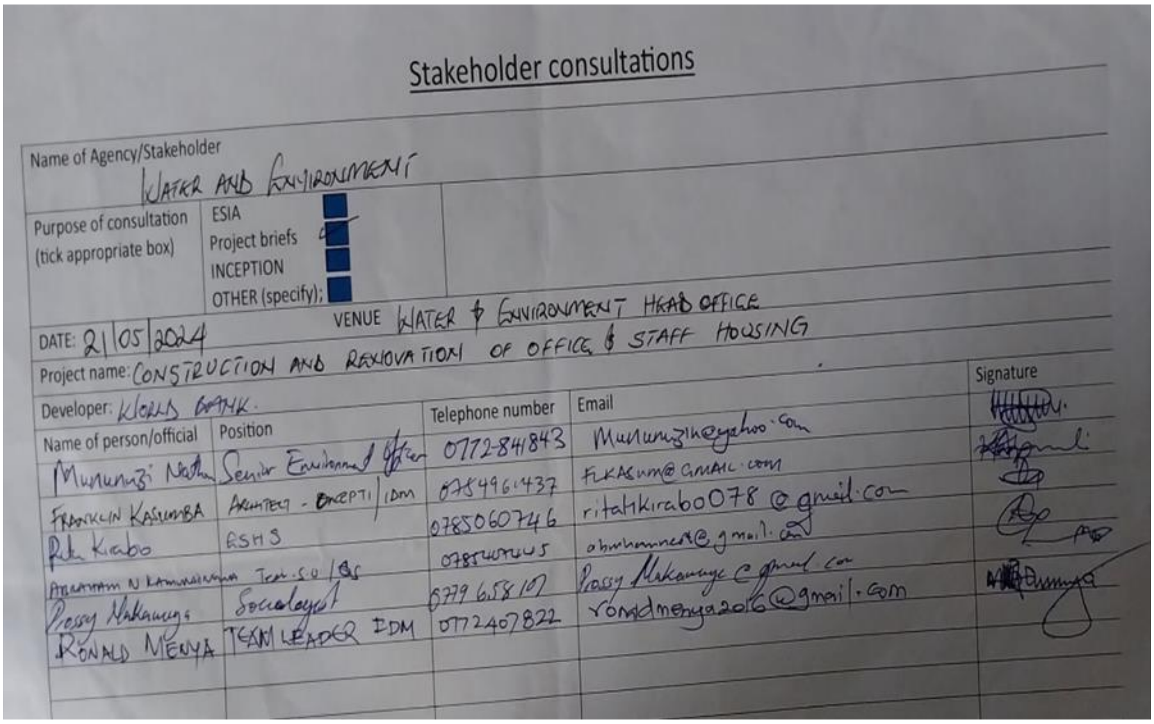


MINISTRY OF GENDER, LABOUR AND SOCIAL DEVELOPMENT

DATE 02/06/2024

ATTENDANCE LIST (STAKEHOLDER ENGAGEMENTS)

NO.	NAME	INSTITUTION	DESIGNATION	CONTACT TEL NO.	SIGN
1	ABRAHAM N KAMUKAMA	IDM Infrastructure Dev & Management Ltd	Quantity Surveyor	0785451... abrahamnee@gmail.com	[signature]
2	KIZITO IVAN	~~INTERN~~ MINISTRY	INTERN	0754634906 kizitoivanjr@gmail.com	[signature]
3	Ogwal Alex	MGLSD	ESIA Coordinator	0772676...	[signature]
4	Kirabo Rita	IDM	ESHS	0785060746	[signature]
5	TENGEKA MICHEAL	MGLSD	General Health Inspector	075287...	
6	PROSSY NAKAMUKA	IDM	SOCIALOGIST	0779658101	[signature]
7	Asiimwe Moses	IDM	OSH Specialist	[illegible]	[signature]
8	KOMUGISHA GLORIA	IDM	Environmental Engineer	[illegible]	[signature]
9	RONALD MENYA	Infrastructure Development & Mgt Ltd (IDM)	Managing Director	0772407822	[signature]
10	FRANKLIN KASUMBA	IDM - Architect	Architect	0754 56...	[signature]



Stakeholder consultations

Name of Agency/Stakeholder: WATER AND ENVIRONMENT

Purpose of consultation (tick appropriate box): ESIA / Project briefs / INCEPTION / OTHER (specify);

DATE: 21/05/2024 VENUE WATER & ENVIRONMENT HEAD OFFICE

Project name: CONSTRUCTION AND RENOVATION OF OFFICE & STAFF HOUSING

Developer: WORLD BANK.

Name of person/official	Position	Telephone number	Email	Signature
Mununuzi Nathan	Senior Environment Officer	0772841843	Mununuzin@yahoo.com	[signature]
FRANKLIN KASUMBA	Architect - Excepti / IDM	0754961437	FLKASUM@GMAIL.COM	[signature]
Rita Kirabo	ESHS	0785060746	ritahkirabo078@gmail.com	[signature]
Abraham N Kamukama	Tech. S.O / QS	07854[illegible]	abrahamnee@gmail.com	[signature]
Prossy Nakamuka	Sociologist	0779658101	Prossy Nakamuka@gmail.com	[signature]
RONALD MENYA	TEAM LEADER IDM	0772407822	ronaldmenya2016@gmail.com	[signature]

Appendix 5: Chance Finds Procedure

This document describes the Chance Find Procedure for the project outlining the procedures that will be undertaken should potential cultural heritage discoveries occur during the construction of the components associated with the Project.

The Chance Find Procedure has been developed in alignment with international good practice, including the World Bank Environmental and Social Standards (notably ESS8), and also complies with Uganda's requirements as well as the legal and regulatory framework.

Cultural heritage is defined as resources with which people identify as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. Cultural heritage encompasses tangible and intangible heritage, which may be recognized and valued at a local, regional, national or global level.

Purpose of the Chance Find Procedure

A Chance Find Procedure is a project-specific procedure which is to be followed if previously unknown cultural heritage is encountered during project activities. The Chance Find Procedure sets out how chance finds associated with the project will be managed.

The Chance Find Procedure aims to:

- Protect physical cultural resources from the adverse impacts of physical investment activities and support their preservation;
- Promote the equitable sharing of benefits from the use of Physical Cultural Resources; and
- Raise awareness of all construction workers and management on site regarding the potential for accidental discovery of cultural heritage resources.

This Chance Find Procedure therefore intends to provide NFA and their contractors with an appropriate response as per the relevant national legislation and international good practice. As such, all contracts for civil works will include this Chance Find Procedure.

In order for the Chance Find Procedure to be effective, the site manager must ensure that all personnel on the proposed development site understand the Chance Find Procedure and the importance of adhering to it if cultural heritage resources are encountered.

Procedures for accidental discovery of cultural resources (chance finds)

This Chance Finds Procedure covers the actions to be taken from the discovering of a heritage site or item to its investigation and assessment by a professional archaeologist or other appropriately qualified person to its rescue or salvage.

If cultural resources (e.g. archaeological sites, historical sites, remains, objects, graveyards or individual graves) are discovered when undertaking the project construction activities, the following procedure will be executed;

1. Halt the construction activities around the chance find to avoid any (or further) damage;
2. Report the discovery to your supervisor or the Environmental Officer or supervising consultant immediately;
3. Delineate and fence the discovered site or area and provide a 25-meter buffer zone around all sides of the find;
4. Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard will be arranged until the responsible local authorities can take over;
5. Forbid any removal of the objects by the workers or other parties;
6. Note the type of archaeological materials you think you have encountered, their location (GPS) and if possible, the depth below the surface where the find occurred;
7. Photograph the exposed materials, preferably with a scale (e.g. a file binder, coin, rules etc.);
8. Notify the responsible local authorities and the relevant Institute of Archaeology immediately (within 24 hours or less);
9. Responsible local authorities would oversee protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by experts. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; these include the aesthetic, historic, scientific or research, social, and economic values;
10. Decisions on how to handle the finding shall be taken by the responsible authorities. This could include changes in the physical investment layout (such as when finding an irremovable remain of cultural or archaeological importance) conservation, preservation, restoration, and/or salvage;

11. Implementation of the authority decision concerning the management of the finding shall be communicated in writing by relevant local authorities;
12. The mitigation measures could include the change of proposed Project design/ layout, protection, conservation, restoration, and/or preservation of the sites and/or objects;
13. Construction work at the site could resume only after permission is given from the responsible local authorities concerning the safeguard of the heritage; and
14. The physical investment proponent is responsible for cooperating with the relevant local authorities to monitor all construction activities and ensure that adequate preservation actions are taken and hence the heritage sites are protected.

In addition, the contractor is obliged to declare the chance find discovery at the earliest possible date to the National Forestry Authority.

2021

Appendix 6: Cost Summary

NFA IFPA-CD PROJECT COST SUMMARY

LOT PACKAGE	FOREST RESERVE	SITE LOCATION	DESCRIPTION	NO. OF UNITS	PROPOSED BoQs	CONSULTANT ESTIMATE (UGX)
LOT 1 (SOUTH WEST RANGE)	KALINZU CENTRAL FOREST RESERVE	Kalinzu Central station	Preliminaries LOT1	1	Bill No.2 Preliminaries	201,502,330
			Renovation of an office building unit comprising of reception room, bathroom/kitchen and one room that acts as a bedroom and one other room	1	LOT 1-BILL No.3	38,659,000
			Renovation of external store and kitchen comprising of 3 rooms	1	LOT 1-BILL No.4	25,407,130
			Demolish and Reconstruction of a new toilet	1	LOT 1-BILL No.5	113,642,100
			Renovation of a mixed office and housing unit block comprising of 2No reception rooms, store/kitchen and 4 rooms for sleeping	1	LOT 1-BILL No.6	57,993,000
			Renovation of external store and kitchen comprising of 6 rooms	1	LOT 1-BILL No.7	34,004,260
			Construction of new Visitor Washrooms	1	LOT 1-BILL No.8	110,642,100
			Renovation of 3-stance latrine	1	LOT 1-BILL No.9	23,354,800
		Kalinzu beat	Demolition and reconstruction of a new staff housing block	2	LOT 1-BILL No.10	311,747,800
			Demolition and reconstruction of a new external kitchen and store	1	LOT 1-BILL No.11	18,000,000
			Renovation of a single stance latrine	1	LOT 1-BILL No.12	110,642,100
			Renovation of an office Housing comprising of a store/toilet, reception room and 2 rooms	1	LOT 1-BILL No.13	48,816,000
			Renovation of an external store and kitechen comprising of 3 rooms	1	LOT 1-BILL No.14	10,450,000
			Renovation of a 2-stance external latrine	1	LOT 1-BILL No.15	8,436,000
			Construction of new Visitor Washrooms	1	LOT 1-BILL No.16	110,642,100

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LOT PACKAGE	FOREST RESERVE	SITE LOCATION	DESCRIPTION	NO. OF UNITS	PROPOSED BoQs	CONSULTANT ESTIMATE (UGX)
		Bitereko beat	Demolition and reconstruction of new toilet	1	LOT 1-BILL No.17	113,642,100
			Demolition and reconstruction of an external store and kitechen comprising of 3 rooms	1	LOT 1-BILL No.18	18,000,000
			Renovation of an office building unit comprising of reception room and 2 other rooms	1	LOT 1-BILL No.19	44,039,090
			Renovation of a staff housing comprising of 6 rooms and 2 stores	1	LOT 1-BILL No.20	57,059,000
			Demolition and reconstruction construction of new toilet	1	LOT 1-BILL No.21	113,642,100
			Demolition and reconstruction of a new external kitchen and store comprising of 6 rooms	1	LOT 1-BILL No.22	36,000,000
	KASYOHA - KITOMI CENTRAL FOREST RESERVE	Kakasi beat	Construction of new staff housing with 2 bedrooms, kitchen, lounge, store and toilet	2	LOT 1-BILL No.23	311,827,800
			Construction of new office block	1	LOT 1-BILL No.24	187,681,400
		Ndekye Beat	Renovation of office building comprising of a store, reception room and 2 rooms	1	LOT 1-BILL No.25	42,055,000
			Renovation of an external store and kitchen comprising of 3 rooms	1	LOT 1-BILL No.26	24,022,500
			Renovation of Timber structure as office building	2	LOT 1-BILL No.27	2,000,000
			Renovation of a 2-stance latrine with bathroom/urinal	1	LOT 1-BILL No.28	9,651,000
		Katelera Forest station	Renovation of a mixed with accomodation comprising of office room, and 3 other rooms	1	LOT 1-BILL No.29	42,821,000
			Renovation of an external kitchen and store consisting of two rooms	1	LOT 1-BILL No.30	16,595,000
			Renovation of a 2-stance latrine	2	LOT 1-BILL No.31	18,626,000

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LOT PACKAGE	FOREST RESERVE	SITE LOCATION	DESCRIPTION	NO. OF UNITS	PROPOSED BoQs	CONSULTANT ESTIMATE (UGX)
			Renovation of an external kitchen and store consisting of 6 rooms	1	LOT 1-BILL No.32	22,584,000
			Renovation of an office building unit comprising of 6 rooms	1	LOT 1-BILL No.33	62,210,000
		Bihanga Beat	Renovation of an office building unit.	1	LOT 1-BILL No.34	42,767,000
			Construction of a new external toilet	1	LOT 1-BILL No. 35	110,642,100
			Demolition and reconstruction of a new staff housing block	1	LOT 1-BILL No.36	151,272,900
	ECHUYA CENTRAL FOREST RESERVE	Kagano-Echuya forest station	Renovation of an office building comprising of reception room and 3 other rooms	1	LOT 1-BILL No. 37	46,755,400
			Renovation of an office building comprising of 2 reception room and 6 other rooms	1	LOT 1-BILL No. 38	71,437,275
			Demolition and reconstruction construction of an external kitchen and store	1	LOT 1-BILL No. 39	18,000,000
			Demolition and reconstruction construction of new toilet	1	LOT 1-BILL No. 40	113,642,100
			Demolition and reconstruction construction of new toilet	1	LOT 1-BILL No. 41	113,642,100
			Renovation of an external store and kitchen with 6 rooms	1	LOT 1-BILL No. 42	34,022,260
	SUB TOTAL 1			**44**		**3,048,575,845**
	ADD CONTINGENCY					152,428,792
	SUB TOTAL 2					**3,201,004,637**
	ADD VAT 18%					576,180,835
TOTAL LOT 1						**3,777,185,472**
LOT 2 (BUDONGO RANGE)	BUDONGO FOREST RESERVE	Nyabyeya	Preliminaries LOT2	1	Bill No.2 Preliminaries	221,638,918
			Renovation of an office Building consisting of 2 rooms	1	LOT 2-BILL NO.3A	30,209,000
			Construction of a new Office Block	1	LOT 2-BILL NO.3	187,681,400
			Construction of a new staff house	1	LOT 2-BILL NO.4	155,873,000

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LOT PACKAGE	FOREST RESERVE	SITE LOCATION	DESCRIPTION	NO. OF UNITS	PROPOSED BoQs	CONSULTANT ESTIMATE (UGX)
		West Wayiliba Beat	Renovation of staff housing unit consisting of a Living room, a bedroom, internal store, external store and a toilet	1	LOT 2-BILL NO.5	38,310,000
			Renovation of a single stance latrine	1	LOT 2-BILL NO.6	2,667,000
		Amaply beat	Demolition and reconstruction of a new staff housing block	1	LOT 2-BILL NO.7	158,873,900
		Hanga Beat	Renovation staff housing comprising of a living room, and two bedrooms	1	LOT 2-BILL NO.8	30,779,000
			Renovation of a uniport structure as staff housing	1	LOT 2-BILL NO.9	28,822,500
			3- stance external latrine	1	LOT 2-BILL NO.10	5,055,000
		Kabalye Beat	Renovation of a circular meeting point of overall dia 5100mm	1	LOT 2-BILL NO.11	5,146,000
			Renovation of staff housing unit comprising of 4 rooms	1	LOT 2-BILL NO.12	46,430,000
			Renovation of external Kitchen and store unit comprising of 3 rooms	1	LOT 2-BILL NO.13	14,188,500
			Renovation of a single stance external latrine	1	LOT 2-BILL NO.14	4,725,000
			Renovation of staff housing unit block.	1	LOT 2-BILL NO.15	72,509,000
			Renovation of an external Kitchen and store unit.	1	LOT 2-BILL NO.16	26,401,000
			Renovation of a 2- stance external latrine	1	LOT 2-BILL NO.17	10,148,000
		Nyakafungo Beat	Renovation of a staff housing unit comprising of 4 rooms and one store	1	LOT 2-BILL NO.18	43,963,000
			Renovation of an external store and kitchen compring of 3 rooms	1	LOT 2-BILL NO.19	13,466,000
			Renovation of a single stance External Latrine	1	LOT 2-BILL NO.20	5,892,000
		Biiso Beat	Renovation of a staff housing unit comprising of 3 rooms	1	LOT 2-BILL NO.21	33,891,000
			Demolition and reconstruction of a new toilet	1	LOT 2-BILL NO.22	110,642,100

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LOT PACKAGE	FOREST RESERVE	SITE LOCATION	DESCRIPTION	NO. OF UNITS	PROPOSED BoQs	CONSULTANT ESTIMATE (UGX)
			Renovation of a uniport structure as staff housing	1	LOT 2-BILL NO.23	32,446,000
		Siiba Beat	Renovation of a staff housing Uniport structure comprising of 4 rooms	1	LOT 2-BILL NO.24	32,367,000
			Construction of a new staff housing	1	LOT 2-BILL NO.25	155,873,900
			Renovation of a 2- stance Latrine	1	LOT 2-BILL NO.26	7,186,000
		Katanga Beat	Renovation of a staff housing unit comprising of 4 rooms and a store	1	LOT 2-BILL NO.27	41,907,000
			Renovation a 2-stance latrine	1	LOT 2-BILL NO.28	113,642,100
			Renovation of a single stance with latrine and urinal	1	LOT 2-BILL NO.29	7,999,000
			Renovation of an external store and kitchen comprising of 3 rooms	1	LOT 2-BILL NO.30	21,799,000
	BUGOMA FOREST RESERVE	Kisindi Forest Station	Renovation of a staff housing block	1	LOT 2-BILL NO.31	50,250,500
			Renovation of a 2- stance external latrine	1	LOT 2-BILL NO.32	9,252,000
			Renovation of an external store and kitchen comprising of two rooms	1	LOT 2-BILL NO.33	17,286,000
			Demolition and reconstruction of a new staff house	2	LOT 2-BILL NO.34	317,747,800
			Demolition and reconstruction of an external kitchen and store	2	LOT 2-BILL NO.35	36,000,000
			Demolition and reconstruction of a new toilet	2	LOT 2-BILL NO.36	221,284,200
			Renovation of a staff housing unit comprising of 3 rooms	1	LOT 2-BILL NO.37	43,258,000
			Renovation of a single stance latrine	1	LOT 2-BILL NO.38	6,403,750
			Construction of new office block	1	LOT 2-BILL NO.39	187,681,400
	NYAKARONGO FOREST RESERVE	Bigaaga town	Construction of new staff housing	1	LOT 2-BILL NO.40	155,873,900
			Construction of a new office block	1	LOT 2-BILL NO.41	187,681,400

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CIVIL ENGINEER ERB NO: 931

LOT PACKAGE	FOREST RESERVE	SITE LOCATION	DESCRIPTION	NO. OF UNITS	PROPOSED BoQs	CONSULTANT ESTIMATE (UGX)
	KAGOMBE FOREST RESERVE	Nyanseke Parish	Construction of a new staff housing	1	LOT 2-BILL NO.42	155,873,900
			Construction of a new security Housing	1	LOT 2-BILL NO.43	142,282,700
			Construction of new office block	1	LOT 2-BILL NO.44	187,681,400
	SUB TOTAL 1			46		**3,379,089,168**
	ADD CONTINGENCY					168,954,458
	SUB TOTAL 2					**3,548,043,626**
	ADD VAT 18%					638,647,853
TOTAL LOT 2						**4,186,691,479**
LOT 3 (MUZIZI RANGE AND WESTNILE)	MT. KEI FOREST RESERVE		Preliminaries LOT 3	1	Bill No.2 Preliminaries	136,088,365
		Ozubu	Construction of new office block	1	LOT 3-BILL NO.3A	187,681,400
			Construction of new security housing	1	LOT 3-BILL NO.3	142,282,700
			Construction of a new staff housing	1	LOT 3-BILL NO.4	155,873,900
		Mt.Kei	Construction of a new security housing	1	LOT 3-BILL NO.5	142,282,700
			Construction of new staff housing	1	LOT 3-BILL NO.6	155,873,900
	ERA FOREST RESERVE	Era	Construction of new staff house	2	LOT 3-BILL NO.7	311,747,800
			Construction of new security housing	1	LOT 3-BILL NO.8	142,282,700
	RWENSABYA FOREST RESERVE	Kabweza village	Construction of staff housing	1	LOT 3-BILL NO.9	155,873,900
			Construction of new security unit	1	LOT 3-BILL NO.10	142,282,700
			Construction of new office blocks	1	LOT 3-BILL NO.11	187,681,400
	ITWARA FOREST RESERVE	Kabarole - Fort Portal Offices	Renovation of office building unit block comprising of a toilet, reception, store and two office rooms	1	LOT 3-BILL NO.12	32,575,000
		Kyamuhoro site	Construction of new staff housing	1	LOT 3-BILL NO.13	155,873,900

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			Construction of new office block	1	LOT 3-BILL NO.14	187,681,400
	SUB TOTAL 1			14		2,236,081,765
	ADD CONTINGENCY					111,804,088
	SUB TOTAL 2					2,347,885,853
	ADD VAT 18%					422,619,454
TOTAL LOT 3						2,770,505,307
TOTAL FACILITIES				104		10,734,382,258
CONSULTANT'S FEE 8%						858,750,580.64
TOTAL PROJECT COST (VAT INCLUSIVE)						11,593,132,839

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