



MINISTRY OF EDUCATION AND SPORTS (MOES) – UGANDA

**UGANDA SKILLS DEVELOPMENT PROJECT (USDP) MINISTRY
OF EDUCATION AND SPORTS -UGANDA**

**THE ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT -
PROJECT BRIEF OF CIVIL WORKS FOR RENOVATION AND
UPGRADING OF INSTITUTIONAL BUILDINGS TO BE UNDERTAKEN**

KITGUM TECHNICAL INSTITUTE

**LOCATED IN NYANZA CELL, PAGER DIVISION, PONGDWONGO
PARISH, KITGUM MUNICIPALITY KITGUM DISTRICT AT
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ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
BTVET	Business, Technical and Vocational Education and Training
CoE	Centre of Excellence;
ESS	Environmental and Social Standards
ESIA	Environmental and Social Impact Assessment;
ESMP	Environmental and Social Management Plan
FI	Farm Institute
ICT	Information Communication Technology
IDA	International Development Association
IUCN	International Union for Conservation of Nature
MOES	Ministry of Education and Sport;
NDP	National Development Plan
NEMA	National Environment Management Authority
PB	Project Brief
PWD	People with Disabilities
UAC	Uganda Agricultural College
USDP	Uganda Skill Development Project;
UTC	Uganda Technical College
VTIs	Vocational and Technical Institutions

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EXECUTIVE SUMMARY

A. Introduction

The Government of Uganda launched a Business Technical and Vocation Education and Training (BTVET) strategic plan 2012/13 to 2021/22 entitled "Skilling Uganda" in 2012. The Skilling Uganda strategy aims to transform the BTVET system from an educational sub-sector into a comprehensive system of skills development for employment, enhanced productivity and growth. The strategy emphasizes on a paradigm shift for skills development, which essentially aims at realigning the policy and institutional framework as well as investment in skills development to transform the current supply-driven system to demand driven, employable skills and competencies to the labour market and the growing Ugandan economy.

The Business, Technical and Vocational Education and Training (BTVET) in Uganda has suffered from weaknesses in five major areas. These include; relevance to economic growth, quality of skills provision, access and equity, organizational effectiveness and financial and internal efficiency. The system does not produce the appropriately skilled workforce that Uganda requires to increase income and employment and to compete internationally. The training institutions do not deliver training commensurate to the required standards and few students access this training.

To overcome the above challenges, in 2012, the Government of Uganda through Ministry of Education and Sports (MoES) launched a BTVET Strategic Plan 2012/13 to 2021/22 entitled "Skilling Uganda". This plan underscored a paradigm shift in skills development in the country. The plan emphasized creating employable skills and competencies relevant to the labour market rather than educational certificates as was before.

The Plan has five specific objectives to reach the development objective1:

- i. Raise the economic relevance of BTVET;
- ii. Increase the quality of skills provision;
- iii. Provide equitable access to skills development;
- iv. Achieve greater organizational and management effectiveness in BTVET; and
- v. Increase internal efficiency and resources available for BTVET.

For this plan to be implemented, Ministry of Education and Sports has received financing from the World Bank in the form of a credit (hereinafter called "credit") towards the cost of Uganda Skills Development Project (USDP), which has been initiated as a way of addressing the requirements of BTVET Strategic Plan. For this project to be implemented, environmental and social safeguards assessment, detailed design among others has to be undertaken for all the institutes selected to be either the Centres of Excellence or the networking institutes.

The institutes selected to be part of this project were all packaged depending on the area of training they deliver and in this particular case UTC-Lira (the proposed Centre of Excellence) and her Networking Institutes (Kalong, Ora, and Kitgum technical colleges) were all selected and packaged under Lot 1.

Under this brief, the assessment was conducted on Kitgum Technical Institute whose facilities are to be upgraded by implementing a number of projects such as construction as a library among others, so as to improve on the services being delivered to the students and Ugandans at large.

Kitgum Technical Institute was established in 1950 by the Roman Catholics, as a Rural Trade School which later upgraded into a Junior Technical School in 1970, and later be a Technical Institute in 1986. The Technical Institute currently runs National Certificate Level programs under a regular (2 years) program and these include:-

- Motor Vehicle;
- Electrical Installation;
- Carpentry & Joinery;
- Welding and Fabrication;
- Block/Brick laying and Concreting Practice;
- Plumbing;
- Tailoring and Cutting Garments.

B. Project Description

Before we can describe the proposed projects to be implemented, it is important to understand the current situation of the institute especially in relation to those facilities that have been proposed for development. Therefore, this section of the report describes the current status at the institute covering the baseline conditions ranging from the teaching facilities and training facilities and other utilities. It is upon this background that the proposed projects were proposed for development.

a) *Current facilities;*

Teaching Facilities:	The space for Library (169 m ²) is too small to handle various facilities such as reading room, internet corner, browsing facilities, commons learning etc.
Library:	

Training Facilities:

Workshop

- Motor Vehicle Workshop: No Motor Vehicle workshop in the premises although remains one of the major program. Training conducted on open yard. Need for new MV workshop;
- Carpentry Workshop: No Carpentry workshop in the premises although remains one of the major program. Training conducted on open yard. Need for new Carpentry workshop;
- Welding and fabrication workshop: Currently shared with boy's dormitory. New building to be constructed and relocated in the workshop area.
- BCP Workshop: Small area workshop and open yard with shelter in poor condition. Inadequate space to accommodate

various building specializations such as brick laying, plumbing and electrical installations. Need expansion and renovation of the open yard;

- **Plumbing Workshop:** The workshop is too small to accommodate student's demonstration and practice area. It shall be expanded equipped with additional machinery and tools for cutting, bending, fixing and repairing of steel and UPVC pipes.
- **Tailoring Workshop:** The workshop shall expand to include additional rooms for preparing, cutting and sewing, and displaying rooms.

Laboratory Existing computer lab is too small.

Administration Office The staff offices are too confined to accommodate the existing number of staff. Over 50% of the staff have no office. They are using the common office located in the admin building.

Accommodations: There existed 11 staff houses, which five units are abandoned due to extreme deterioration and the inhabitable condition of the building. Among the six remaining and currently serving staff quarters, three buildings are in very poor condition,

Currently there exist 480 students enrolled in Kitgum Technical Institution under regular program, which 100 are girl students accounting of only 21% of the population

External Facilities The Kitgum site is situated on 55 acres of land and 2.2 Km of perimeter length with no defined perimeter fence.

- **Perimeter Fencing**
- **Storm water drainage system;** No main ground water reservoir and centralized water tanks in the premises.

Utility No Connection of water supply to grid. Dependent on shallow well

a) *Proposed facilities*

Proposed field	Proposed Development
Utility	Borehole water source to be explored, ground water reservoir and elevated water tanker. Piping system to be installed.
Teaching Facility	New Library
Training Facility	New building for computer lab with 60 computers capacity with full internet connection
	New Motor Vehicle Workshop;
	New Carpentry Workshop;
	Tailoring and Garments lab to expand;

	New Welding and Fabrication Workshop;
	BCP Workshop to expand with open yard shade; and
	New Plumbing Workshop
Student's Hostel	Additional student's dormitory for accommodating up to 250 students, which partly shall go for girl's dormitory.
Admin Building and Staff Offices	New administration buildings with staff office accommodating the entire staff both teaching and non-teaching staff.
	Existing pit latrines to change into water borne toilets. A stand-alone toilet for staff and guests shall be constructed.
Accommodations	Multi-purpose hall with a capacity of handling about 1000 personnel;
	Staff hostel in the form of apartments to accommodate about 80 teaching and non-teaching staff;
	A total of 5,760 m2 building area need to be constructed.
	Kitchen to expand and the existing main hall to serve as dining hall after providing the required furniture.
Ancillary Buildings	General store, archives, medical centre and generator house and guard house.
	Security fence and entry/exit gate to be constructed along the boundary of the institution.

b) Construction activities

Some of the following activities shall be done by the contractor especially during the construction phase of the proposed facilities;

- Mobilization of Project Team and Re-sources to site**

The contractor will notify, gather and deploy all team members / work force to the proposed site, ready for the assignment. The construction of the facilities will employ over 50 workers.
- Site Clearing and Excavations**

The site where the above developments are to be constructed will have to first be cleared.
- Compaction works**

Compaction works will follow the excavations stage this will involve use of machinery e.g. compactors and graders and generators for energy supply.
- Materials Transportation**

Site preparation and construction of the aforementioned facilities will require various types and amounts of material which will have to be sourced from the project area and the neighbouring community.
- Fencing**

Fencing of the construction site shall be suitably secured to prohibit access by the students, animals, and generally unauthorized persons.

c) Project Cost.

The total project cost is estimated at 1,856,800 (USD) which is One Million, Eight Hundred and Fifty Six Thousand and Eight Hundred US Dollars only

C. Environmental and Social Impact Assessment methodology

According to the EIA Guidelines (1997), it is the general practice that for projects implemented within Uganda, an EIA has to be conducted for such that all the possible significant impact on the environment are identified and adequate mitigation measures are eliminated or mitigated.

A number of methods have therefore been applied, and these include;

- i) Literature review (review of design, reports and other relevant publications including legislation);
- ii) Field investigations; these included, Biodiversity, Physical, Social and Economic assessment as well as cultural heritage;
- iii) Stakeholder consultations, these were carried out at throughout the assessment process to ensure that all stakeholder concerns are incorporated into project planning and implementation.
- iv) Impact assessment methodology; this process includes the impact prediction, impact evaluation and lastly mitigation and enhancement.

D. Legal and statutory requirements

According to the World Bank environmental categorisation, construction of the proposed projects is classified under category B. This is commensurate with the recommendations of the Environmental and Social Framework Work 2014 and Project Appraisal Document. Similarly, according to Third Schedule of the National Environment Act, Cap. 153 all works with a possibility of causing significant impacts should under Environmental and Social Assessments which has been done and complied into a Project Brief.

This section of the report therefore discusses the relevant policies, legislations and institutional frameworks within which the EIA study has been conducted.

Policy Framework

- Uganda's Vision 2040;
- The National Environment Management Policy, 1994;
- Agriculture Sector Development Strategy and Investment Plan: 2010/11- 2014/15;
- Gender in Education Sector Policy, 2016;
- The Second National Development Plan (NDPII) 2015/16-2019/20;
- Skilling Uganda BTVET STRATEGIC PLAN 2012/3 to 2021/2;
- National Industrial Sector Strategic Plan 2010-2020

Legal Framework

- Constitution of the Republic of Uganda, 1995
- National Environment Act, Cap 153
- Education Act, 2008;
- The Business, Technical, Vocational Education and Training Act, 2008;
- The Universities And Other Tertiary Institutions (Amendment) Act 2006.
- The Agricultural Chemicals (Control) Act, 2006
- National Council for Children Act, Cap 60
- Water Act, Cap 152

- National Land Policy, 2013
- National Water Policy, 1999
- National Policy on Disability in Uganda, 2006
- Uganda Gender Policy, 2007
- National AIDS Policy (2004) and National Strategic Framework for HIV/AIDS activities in Uganda
- Environment Health Policy -2005;

Regulations

- The EIA Regulations, 1998
- National Environment (Standards for Discharge of Effluent into Water or on Land) Regulations, 1999
- National Environment (Waste Management) Regulations, 1999
- National Environment (Noise Standards and Control) Regulations, 2003
- The National Environment (Audit) Regulations 2006;

Institutional Framework

- National Environmental Management Authority (NEMA)
- Ministry of Education and Sports
- Ministry of Agriculture Animal Industry and Fisheries (MAAIF)
- Ministry of Water and Environment (MoWE)
- Ministry of Gender Labour and Social Development
- Department of Occupational Safety and Health (DOSH)
- Ministry Of Health
- The National Water and Sewerage Corporation (NWSC)
- Uganda Police
- Local Administration Structures

- Local Governments Act, Cap. 243
- The Occupational Safety and Health Act, 2006
- Employment Act, Cap 219
- Public Health Act, Cap 281
- Workers' Compensation Act 2000
- Historical Monuments Act, Cap 46;
- Penal Code Act, 1950/ Penal Code (Amendment) Act, 2007;

World Bank Environmental and Social Standards

- Environmental Assessment (EA) (OP/BP 4.01),
- Physical Cultural Resources (OP/BP 4.11),
- Involuntary Resettlement (OP/BP 4.12),

Multilateral agreements

- International Commitments on Gender Equality in Education
- The Convention on Biological Diversity (CBD)
- The United Nations Framework Convention on Climate Change (UNFCCC), 1992
- The Convention for the Safeguarding of the Intangible Cultural Heritage, 2003
- The Stockholm Convention
- The Strategic Approach to International Chemicals Management (SAICM)

E. Bio-physical and socio-economic baseline

This chapter describes the baseline conditions of both the project area and the surroundings in terms of the physical, biological and socio-economic characteristics.

These include:-

Kitgum Technical Institute

Bio-physical

- i) Flora; the site is composed of scattered tree species, savanna grassland and shrubs among others. Some of this Vegetation on site includes, *Hypanthemia*, *Penicum*, *brachania* and *Seteria* (dominate grass species) and *Acacia cambrelum* constitutes the dominant tree.
- ii) Fauna; several mammals were observed during the assessment and these were mainly domestic animals included *Canis lupus familiaris* (Dog), *FelisCatus* (Cat) and *Capra aegagrushircus* (goat).
- iii) Climate, the driest month is January. There is 9 mm of precipitation in January. In August, the precipitation reaches its peak, with an average of 171 mm.

Socio-economic

- i) Administrative units: The District has one county, nine rural Sub-counties, and one Town Council. The District constitutes of 51 parishes and 437 village councils. These are under the LC V Chairperson as the political head and Chief Administrative Officer (CAO) as the technical head. Kitgum Technical Institute has technical courses which are all overseen by the Principal of the Institute.
- i) Population: The population at the institute as of 2017, stood at 480 students with 380 being boys and 100 girls.
- ii) Energy: The Kitgum Technical Institute is provided with 3 phase connection from the UMEME medium voltage grid. This power is used to run the facilities of the institute (such as administration block, classrooms, and workshop areas) and lighting at night. However, charcoal and firewood are used for cooking.
- iii) Waste management: Waste management at the institute is still not satisfactory since the institute had a few collection bins, sorting is don't done and burning of waste was being undertaken, a practice not recommended.
- iv) Health centers: The institute has no medical center within the premises and therefore all students are referred to the medical center located in Kitgum.
- v) Education: The district has a total of 54 Nursery schools of which 1 is government aided, 133 primary schools with 99 of them being government aided, 26 secondary schools, 1 Teachers training College, 2 technical collages and 8 Vocational Institutes.

Kitgum District

Bio-physical Environment

- Vegetation: The vegetation in Kitgum is mainly of woody Savannah characterised by woody cover and grass layer. The dominant grasses are *Hypanthemia*, *Penicum*, *brachania* and *Seteria*. *Acacia cambrelum* constitutes the dominant tree. The District is drier in the northeast and the vegetation includes shrubs.

- Geology and soils. The soil type in Kitgum vary with localities but is generally well-drained sandy, Clay, Loam and sand clay. In some places the following soil exists: Foresails: These are strongly weathered and generally with low fertility. It covers much of the district; Gleysols: These are poorly drained soils, liable to water logging. They are found along Pager River. Generally, the soils all over the District are well drained, fertile and suitable for cultivation.
- Climate: Kitgum District has dry and rainy seasons. The district receives average annual rainfall of 1300mm. Rain starts in late March or early April and ends in November. Rainfall is bimodal with peaks in April and August. It is dry-hot and windy from December to mid-March. The average monthly maximum temperature is 270 c and average monthly minimum temperature is 170 c.

Socio – economic Environment

- Administrative Structures; The District has one county, nine rural Sub-counties, and one Town Council. The District constitutes of 51 parishes and 437 village councils. The District Council is the highest political authority in the district, with 22 members under the headship of the District Chairperson. It has a technical team headed by the Chief Administrative Officer, distributed in 9 directorates and 11 departments. Each of the departments has a head and under every directorate there are a number of Sections.
- Population density. Population density refers to the number of people per square kilometre. Kitgum district has an area of 4,042sq.km. Therefore the population density was 29 persons per sq.km of land in 2002. According to the 2014, National Housing Population Census, The population of Kitgum was estimated at 204,048 persons, with 99,258 being male and 104,790 being female, and there for the population density stood at about 50 persons per sq.km.
- Poverty: Poverty has many different dimensions, ranging from material well-being (basic needs of like nutrition, good health, shelter, education etc) to lack of human rights, citizenship or social networks. Economic factors such as low income, lack of assets, access to markets or public services can lead into poverty.
- Economic activities: The people of Kitgum grow a variety of food and cash crops. Over 90% of the farmers are engaged in crop production as their major activity and a small percentage in livestock rearing, Bee keeping and fishing farming. Most of these activities are done on a small scale on family holdings using family labour who use rudimentary hand tools such as hoes. Petty trading is also done in general merchandise locally manufactured and in imported goods. The major food crops grown include; SimSim, Up-land rice, Green Vegetables, Fruit trees (Citrus/Mangoes) Beans, Groundnuts, Sorghum, Maize,

Millet Cassava, Sweet Potatoes, Pigeon Peas and Sunflower. Cotton and Tobacco are the major traditional cash crops grown in Kitgum district.

- Health facilities: Kitgum district has 25 Health Units of different categories. Some of them are Government hospitals while others are owned by Non - Government Organizations. The distribution is fair, but some of them lack the basic equipment to offer reasonable services.
- Safe Water Coverage: This section will cover the percentage of people within a reasonable walking distance (1.5km for rural and 0.2km for urban) to an improved water source. A reliable water source is one capable of supplying its beneficiaries, a minimum of 20 litres per capita per day. Safe water coverage for the district is at 66.6 percent against the National level of 65 percent.
- HIV/AIDS Control (Prevalence, Control and Treatment): According to the health sector strategic plan (HSSP III), HIV/AIDS is one of the communicable diseases that accounts for over half of the total burden of disease as leading cause of ill health and mortality in Kitgum and Uganda as a whole.

F. Stakeholder engagement

Our public consultations were guided by Ugandan guidelines despite the lack of regulations for public consultation. The national guidelines for EIA in Uganda require that the public is given full opportunity for involvement and participation throughout the EIA process. People including individuals, or groups of local communities that may be directly affected by this proposed project were therefore, the focus for public involvement. The team identified various key stakeholders in relevant lead agencies and within the project area. Public consultations involved the National government institutions, Local Government of Kitgum District, Kitgum Technical Institute staff members and the community members around the institute. Various methods were used while consulting the stakeholders which included one-on-one engagements, group meetings, mass meetings and some of the common concerns raised by most of the stakeholders involved the following;

No.	Stakeholder category	Key concerns and views
1	National Agencies	
	OSH Department	<i>Labour and employment</i> • Priority to be given to community members • Workers should not be Subjected to non-conductive employment terms • Workers' Safety and welfare should be catered for. <i>Occupational Health and Safety</i>

- Contractor should always have a First Aid Kit on site, and workers should be trained to use them;
- Emergency Preparedness Plan; and a stand-by vehicle in case of serious accidents;
- Provision of adequate Personal Protective Gear after a risk assessment is carried out;
- Prepare a Safety and Health Policy; Here the contractor commits himself to ensuring safety on site;
- Fire-fighting equipment e.g. fire extinguisher and workers should be trained to use them.
- Working Hours should be clearly specified and communicated to all workers;

HIV/AIDS

- Strict prohibition of construction worker's engagement with the students at the institute. Heavy penalty should be put in place
- Continuous sensitization of workers and the community on issues pertaining HIV/AIDS

	Uganda Aids Commission	
2	Institute leadership	• Workers with drug abuse vices should be disqualified after proper warning • Engage the institute leadership at all levels of the project so that the project can move on smoothly • All workers should be restricted from accessing other institute premises apart from the construction sites • All construction sites should be horded off to prevent distraction, noise and dust impacts
3	Neighbouring community	• They also requested the project through institute that they extend some water pipes outside the institute so that they always don't have to come to the institute for water. • They further requested the project to provide employment opportunities to the community especially casual labourers other than recruiting all

kind of labourers from Kampala

- The community requested that if possible the project should support out-going students with start-up working equipment so that they can compete in the industry.
- While purchasing building materials, the community should be given first priority so that the community can benefit.

G. Impact analysis and mitigation

This section identifies the predicted impacts that could arise as a result of implementing the proposed project and proposes adequate mitigation measures, as described below:-

a. A summary of the Positive impacts expected include;

1. The project will source for construction material within Nyanza village, Pongdwongo Parish and Kitgum district as a whole.
2. Sprouting businesses such as temporary accommodation units or mini-restaurants for project workers;
3. Economic-investment hence increases in wealth of the town council.
4. The development will make the most economic use of the land
5. Provision of income to service providers that will be servicing the site with different products and services.
6. Provision of direct and indirect employment opportunities;
7. Diversification of the local economy and support of ancillary services such as engineering, mechanic and construction businesses; and

b. A summary of the identified environmental and social negative impacts and their mitigation are presented in Table below:

Table 1: Possible negative Impacts and corresponding Mitigation Measures.

Activity / impact	Mitigations
Impacts during mobilization and Construction Phases	
Injury to workers on site	• The contractor shall provide safety and healthy guidelines to guide all operations. • Establish an OSH policy on site • Appropriate PPE will be provided and used by all workers. • All workers will have identification and contracts as required by the employment act • Safety and health training will be provided to all workers prior to commencement of work. • Site clinic shall be opened up to address emergency cases,

	and presence of a Fully stocked First Aid Kit. Or collaborate with Warr HC III for complicated cases. • A site Environment Health and Safety Officer shall be present on site throughout the time of project. • Monthly health and safety audits conducts. • Provide appropriate signage for construction workers and visitors. • Safety belts will also be provided to workers working at height, above 1.5m
Effects of generated solid waste including debris, packaging	• Have at least four coded waste bins on site for collection of solid waste. • Ensure that hazardous waste e.g. oil contaminated cloths are stored separately from non-hazardous waste. However minimise on servicing of vehicles on site. • Reduce waste by encouraging re-use of wood waste either on site or at other sites or sell it off as firewood. Metal scraps should be sold to scraps collectors within Zombo. • Hire a licensed waste collection company to remove all waste from the construction site;
Risk of contaminated of soil and surface water.	• The generator and all construction equipment will be serviced regularly on/ off site. If serviced on-site precautions to prevent leakages/ spills or used oil from the generator. • Spill kits should be used during re-fuelling and servicing. • Petroleum products in storage specifically fuel for the generator should be stored under lock and key. • All flammable substances kept on site shall have a fire-extinguisher within the vicinity to manage all fire outbreaks.
Impacts from excavated soils	• A temporary retention wall will be constructed along the boundary to prevent massive erosion into the green area surrounding the proposed site. • The site will be hoarded off immediately after clearing of vegetation and excavations works have begun. Fence and soil barriers shall be erected.
Increased traffic load, dust generations	• Sensitization of the institute persons of the possible increment of vehicle load in the institute when ferrying in the required equipment and material • Sensitization of driver to maintain low driving speed when in the institute;

	Scheduling movement of these mobilized equipment at a preferred time as shall be advised by the institute management.
Influx of persons looking for jobs	- All job seekers shall be allowed into the institute on recruitment days only; - Recruitment days shall be scheduled in times that will not affect the institute operational programs. - No idlers will be allowed or tolerated in the institute. - Prior communication of the recruitment program shall be communicated to the institute management; - Sensitization of neighbouring communities on the possible increase in persons looking for jobs that will be coming from different parts of Uganda, so as to manage expectations
Interruption of institute activities	All activities to be conducted during the mobilization stage shall be communicated to the institute and their recommendations shall be adhered to.
Dust and noise generation	- The site will be hoarded off. - Generator will be housed to provide acoustic screening; - Sprinkling of water will be done on dusty surfaces to suppress dust emission; - Oiling and greasing of machinery will be done to reduce noise due to friction; - Sound-reduction equipment will be fitted to machinery and maintained properly; - Noisy construction works shall be restricted to day-time (7am-5pm), and as shall be recommended by the administration; - Construction vehicles will be restricted to a speed limit of 20km/hr within the institute;
Loss of vegetation	- Excavation works will be limited to the proposed sites, - Replanting of trees will be encouraged after constructed, along access routes to the proposed site and where shall be advised by the administration in reference to the contract requirements; - Topsoil from these site will be properly kept for restoration after the project.
Impacts to public health	- Construct temporary sanitary facilities for use by the construction team preferably waterborne toilets or consult the institute in case of possibilities of using the already existing facilities; - While sourcing material from community, the following

	should be observed:- - Adequate compensation / purchase of material sourced - Drive at recommended speed to limit on raising of dust; - Maintain good conduct to avoid project – community conflicts; - Sexual abuse, marriage-breakages and early pregnancies should be avoided; among others.
Traffic congestion and interference along community access road	• Deploy 2 full time flag persons (preferably a ladies), to manage both the construction traffic and the institute traffic; • Priority should be given to the Institute traffic; • Installation of speed humps at all access routes used by construction traffic; • Erect speed limiting signposts; • Sensitize drivers to observe the recommended speed while driving within the institute; • Safety awareness campaigns shall be conducted or both the construction workers and the institute personnel's;
Risk of fire	• Presence of fire escape gate and emergence assembly points. • A water sprinkler system to cover the whole ware house in which the equipment is installed and stores shall be designed. • Carbon dioxide and powder type fire extinguishers are best preferred and these should be placed at convenient locations. • Install fire detection systems in each structure at site.

RECOMMENDATIONS

The proposed projects to be implemented within Kitgum Technical College have been identified and these are believed to pave way to transforming the college into a Centre of Excellence. These projects have been phases as the curriculum bases and the non-curriculum based projects, however they will all be implemented under a Single based Contract under the proposed USDP financial ceiling.

Implementation of these projects under the USDP program funded by World bank and initiated by MoES, will also contribute to achieving the bigger Government goal of “Skilling Uganda” as required by the ” The Business, Technical and Vocational Education and Training (BTVET) strategic plan launched in 2012.

CHAPTER 1: INTRODUCTION AND BACKGROUND

1. Introduction

The Government of Uganda launched a Business Technical and Vocation Education and Training (BTVET) strategic plan 2012/13 to 2021/22 entitled "Skilling Uganda" in 2012. The Skilling Uganda strategy aims to transform the BTVET system from an educational sub-sector into a comprehensive system of skills development for employment, enhanced productivity and growth. The strategy emphasizes on a paradigm shift for skills development, which essentially aims at realigning the policy and institutional framework as well as investment in skills development to transform the current supply-driven system to demand driven, employable skills and competencies to the labour market and the growing Ugandan economy.

In line with this, the Government of the Republic of Uganda represented by the Ministry of Education and Sports has received financing from the World Bank (WB) in the form of a credit (hereinafter called "credit") towards the cost of Uganda Skills Development Project (USDP). Under this project, the feasibility studies, environmental and social safeguards assessment, detailed design, documentation and construction supervision of civil works for renovation and upgrading of institutions from the current state into Centres of Excellence (CoEs) and Vocational Training Institutes.

The Government of Uganda launched a Business Technical and Vocation Education and Training (BTVET) strategic plan 2012/13 to 2021/22 entitled "Skilling Uganda" in 2012. The Skilling Uganda strategy aims to transform the BTVET system from an educational sub-sector into a comprehensive system of skills development for employment, enhanced productivity and growth. The strategy emphasizes on a paradigm shift for skills development, which essentially aims at realigning the policy and institutional framework as well as investment in skills development to transform the current supply-driven system to demand driven, employable skills and competencies to the labour market and the growing Ugandan economy.

The Business, Technical and Vocational Education and Training (BTVET) in Uganda has suffered from weaknesses in five major areas. These include; relevance to economic growth, quality of skills provision, access and equity, organizational effectiveness and financial and internal efficiency. The system does not produce the appropriately skilled workforce that Uganda requires to increase income and employment and to compete internationally. The training institutions do not deliver training commensurate to the required standards and few students access this training.

To overcome the above challenges, in 2012, the Government of Uganda through Ministry of Education and Sports (MoES) launched a BTVET Strategic Plan 2012/13 to 2021/22 entitled "Skilling Uganda". This plan underscored a paradigm shift in skills development in the country. The plan emphasized creating employable skills and competencies relevant to the labour market rather than educational certificates as was before.

The Plan has five specific objectives to reach the development objective1:

- i) Raise the economic relevance of BTVET;
- ii) Increase the quality of skills provision;
- iii) Provide equitable access to skills development;
- iv) Achieve greater organizational and management effectiveness in BTVET; and
- v) Increase internal efficiency and resources available for BTVET.

For this plan to be implemented, Ministry of Education and Sports has received financing from the World Bank in the form of a credit (hereinafter called “credit”) towards the cost of Uganda Skills Development Project (USDP), which has been initiated as a way of addressing the requirements of BTVET Strategic Plan. For this project to be implemented, environmental and social safeguards assessment, detailed design among others has to be undertaken for all the institutes selected to be either the Centres of Excellence or the networking institutes.

The institutes selected to be part of this project where all packaged depending on the area of training they deliver and in this particular case UTC-Lira (the proposed Centre of Excellence) and her Networking Institutes (Kalong, Ora, and Kitgum technical colleges) were all selected and packaged under Lot 1.

Under this brief, the assessment was conducted on Kitgum Technical Institute whose facilities are to be upgraded by implementing a number of projects such as construction as a library among others, so as to improve on the services being delivered to the students and Ugandans at large.

Kitgum Technical Institute was established in 1950 by the Roman Catholics, as a Rural Trade School which later upgraded into a Junior Technical School in 1970, and later be a Technical Institute in 1986. The Technical Institute currently runs National Certificate Level programs under a regular (2 years) program and these include:-

- Motor Vehicle;
- Electrical Installation;
- Carpentry & Joinery;
- Welding and Fabrication;
- Block/Brick laying and Concreting Practice;
- Plumbing;
- Tailoring and Cutting Garments.

In order to address the required gap, a number of proposed projects have been proposed for implantation in Kitgum Technical Institute. For this project to be implemented successfully, it is required that there is at most compliance to the Environmental and Social Safeguards. This therefore begins with having this Project Brief prepared and sent to NEMA for approval.

1.1 Background of the project

The Business, Technical and Vocational Education and Training (BTVET) in Uganda has suffered from weaknesses in five major areas. These include; relevance to economic growth, quality of skills provision, access and equity, organizational effectiveness and financial and internal efficiency. The system does not produce the appropriately skilled workforce that Uganda requires to increase income and employment and to compete internationally. The training institutions do not deliver training commensurate to the required standards and few students access this training.

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The Plan has five specific objectives to reach the development objective¹:

1. Raise the economic relevance of BTVET
2. Increase the quality of skills provision
3. Provide equitable access to skills development
4. Achieve greater organizational and management effectiveness in BTVET
5. Increase internal efficiency and resources available for BTVET

The World Bank funded, Uganda Skills Development Project (USDP) is one of the options the Government of Uganda initiated to operationalize the BTVET strategic Plan. USDP is a five (5) year project, which was approved in April 2015 and became effective in October 2016. USDP targets enabling programmes to meet skills needs in key priority sectors of the economy i.e. Agriculture, Construction and Manufacturing, in line with Uganda's National Development Plan (NDP II) as well as Vision 2040.

1.2 Objectives of USDP

The overall goal is to enhance the capacity of institutions to deliver high-quality, demand driven training programs in the agriculture, construction and manufacturing sectors and create stronger linkages between vocational training and industry. The objectives comprise establishing Centers of Excellence (CoEs) at targeted sectors with a network of vocational institutions (with well-prepared students; well-trained faculty; high quality, relevant curricula; adequate facilities and equipment; teaching resources and assessment systems), an institutional framework that encompasses sector skill councils.

The specific objectives included the following:

- Improving the relevance of skills provision to improve productivity and enhance growth in the Uganda economy;

¹Ministry Of Education & Sports: SKILLING UGANDA, BTVET STRATEGIC PLAN 2012/3 to 2021/2

- Improving the quality of skills imparted;
- Increasing access to and equity within BTVET sector;
- Improving organizational and management effectiveness; and
- Improving financing and internal efficiency.

The project will have the following desired outcomes/performance indicators:

- Development of National Occupational Standards for relevant trades/occupations in the target sectors;
- Increased number of new intakes in the targeted training programs;
- Increased proportion of female intakes in targeted training programs;
- Increased proportion of entrants to the industry who completed targeted training courses and skills;
- Improved linkages between the skills training institutes and the industry and participation of employers in the skill training programs;
- Satisfaction with skills by trainees in supported firms disaggregated by economic sectors and size.

1.3 Purpose of the Environmental and Social assessment

Construction associated with rehabilitation works of this institute will involve earth-work movements, haulage trucks, massive clearing of vegetation, water abstraction to facilitate construction, borrowing construction material from surrounding environment. Most of these construction activities are associated with massive negative impacts such as annoyance noise interactions, contamination of both air and water quality, interruptions of the institutes programs among others, and if not planned for, and these will cause significant negative impacts.

These construction activities will further affect the neighbouring natural resources of which some are in prone sensitive areas, in form of seeking for construction material. The project is therefore likely to lead to significant environmental impacts that are both positive and negative in nature.

The purpose of the assessment is, therefore, to examine, analyse and assess the impacts (negative and positive) of the proposed project area with a view to ensuring that:

- i) The project will be environmentally sound and socially acceptable; and
- ii) The project will be in conformity with the provisions of the National Environment Act Cap. 153, 1995. Indeed, other relevant government policies, laws and regulations were also taken into account.
- iii) World Bank requires environmental assessment (EA) of projects proposed for Bank financing to help ensure that they are environmentally sound and sustainable, and thus to improve decision making. The Bank undertakes environmental screening of each proposed project to determine the appropriate extent and type of EA. The Bank classifies the proposed project into one of four categories, depending on the type, location, sensitivity, and

scale of the project and the nature and magnitude of its potential environmental impacts. **(Category B)**

1.4 Objectives of the project brief

- To establish the baseline environmental and social conditions in the project area relevant to the project;
- To obtain the views, concerns and suggestions of the relevant key stakeholders (including potentially affected persons) regarding the environmental and social impacts of the project;
- To identify the potential environmental and social impacts, and make recommendation for their mitigation or enhancement, and monitoring;
- To prepare an environmental and social management plan for the project, indicating potential impacts, sources, management options and monitoring indicators.

1.5 Structure of this report

This report is divided into the following sections as shown in the Table 2 below;

Table 2: Report structure:

Chapter 1	Introduction to the project stating purpose and scope including; background information on location, and structure of the report.
Chapter 2	Description of the proposed project location, components, preparation, construction and operations phase activities.
Chapter 3	Environmental and Social Methodology applied during this assessment.
Chapter 4	A review of policies, laws, regulations and standards in relation to the development of the proposed projects.
Chapter 5	Site baseline bio-physical and socio-economic set up of the proposed project site and the surrounding neighbourhood likely to be affected
Chapter 6	Public consultations and disclosure, mentioning stakeholder concerns and developing measures to address them.
Chapter 7	An analysis of alternatives, including a comparison of feasible alternatives to the proposed projects considered for implementation.
Chapter 8	Evaluation of the identified Environmental impacts and recommendation of appropriate mitigation measures for all significant negative environmental impacts predicted and enhancement of positive impacts.

Chapter 9 An Environmental and Social Management and Monitoring Plan for addressing negative impacts and assessing effectiveness of mitigation measures, scheduling monitoring frequency and assigning responsibility and grievance handling.

Chapter 10 Grievance Mechanism

CHAPTER 2: PROJECT DESCRIPTION

2. Introduction

Kitgum Technical Institute was established in 1950 by the Roman Catholics. The institute started as a Rural trade school in 1950 training people on specialization and it later progressed into a Junior Technical School in 1970, and became a Technical Institute in 1986.

2.1 Project Location

The Kitgum Technical Institute is currently located Nyanza village, Pager Division, Pongdwongo Parish, Kitgum district.

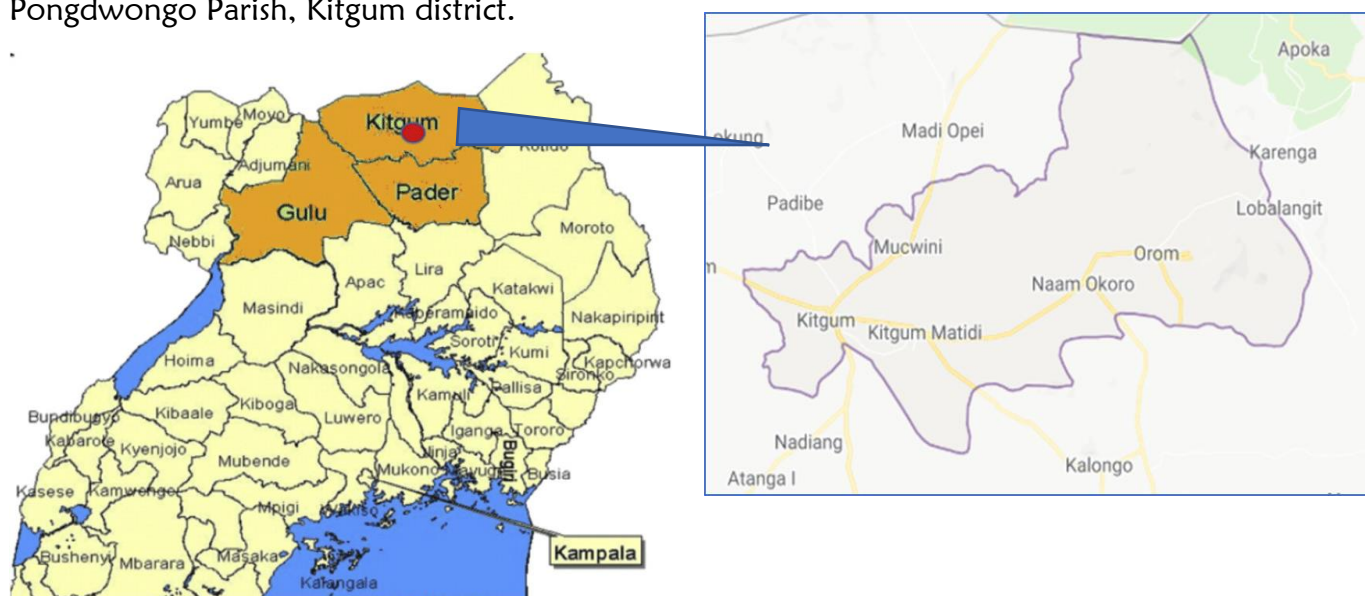


Figure 1: Map of Uganda showing Kitgum district where the project is located

The Kitgum Training Institution is situated on relatively gentle slope on 55.4 acres land which was initially owned by the church, and located along the Kitgum-Mucwini Road in Kitgum district at geographical coordinates (UTM) 36N 487835.45mE 365363.82mN. In this assessment however, the project area of influence considered included the sites within the institute outside the construction site and 500m radius from the boundary of the institute whose coordinates are provided in the table and illustrated in the corresponding Google aerial image below.

Table 3: Table showing the three corner boundaries of the institute

No.1	Label Name	Zone	Easting's	Northing's
1	B1	36N	4873757.57	365094.89
2	B2	36N	487973.32	365784.22

3	B3	36N	488064.73	365137.23
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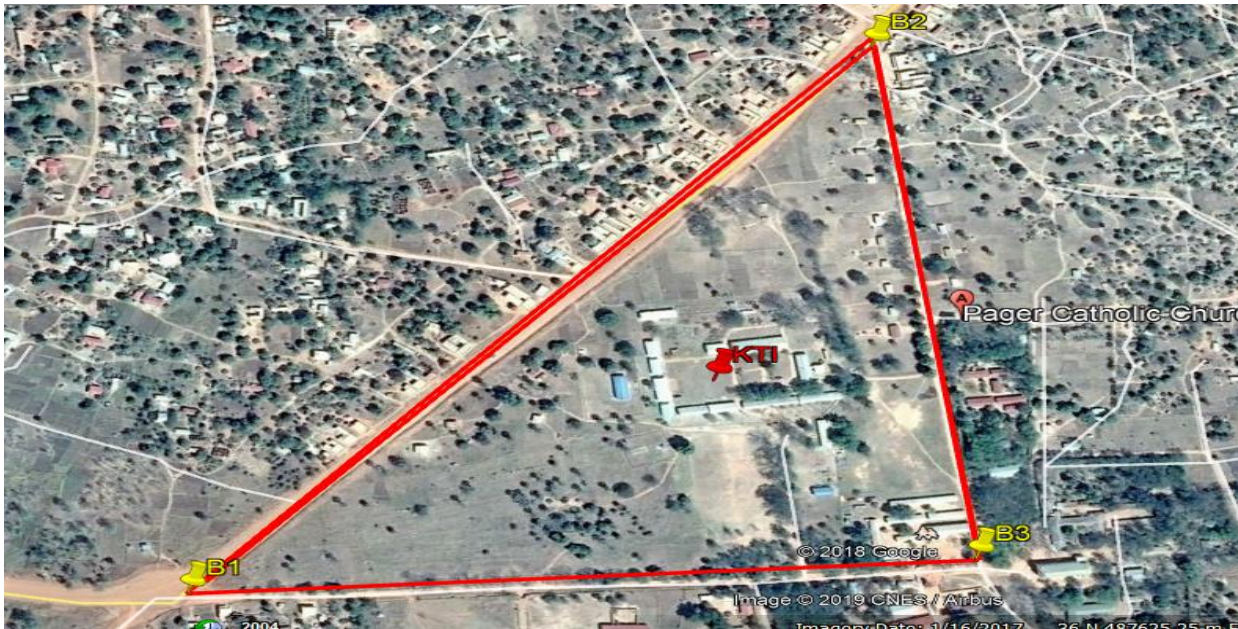


Figure 2: Map showing Kitgum Technical Institute

In order to justify why the proposed projects have been selected for implementation, it is important to understand the current prevailing conditions of the institute and her performance in service delivery especially in relation to the areas considered for upgrading or construction.

2.2 Current status of the institute

2.2.1 General site layout

The site is located in the outskirts of Kitgum town in a semi-rural area bounded by urban roads and private owned land. The institute is largely made up of open land with the existing developments located more to the center of the site as illustrated above but are however connected by paved walkways. The incumbent site arranged the facilities in a mixed venture with no defined zonings which is why currently, the dormitories are adjacent to a workshop and mixed with teaching facilities.

The site is arranged in such a way that workshops and classrooms are located at the center, the administration block and library to the front, boys dormitories next to the teaching and training facilities, girl's dormitory to the west and finally a fence made up of hedge next to the teaching facilities separating it away from the vacant agricultural land. The institute has two majorly entrances, from the existing urban neighboring roads and these entrances are located more to the South and East of the site.

2.2.2 Building Facilities

The institute has 22 major building blocks and these were assessed during the field survey. The findings of each building structure were clustered under 5 categories in the Engineering feasibility report however this assessment concentrated on those considered for rehabilitation or construction. The buildings investigated included:-

2.2.2.1 Library

The main Library is 169m² in size and located near to the entrance of the College. The building is in a fairly good condition since it has under gone a number of renovation and maintenance works, however the size of the library is too small for it to qualify as a main library. Due to the limited space, her infrastructure are very few thus unable to serve the growing students body. In summary the following were the limitation found with the Library, and thus unable to function as a Main Library.

- There is no enough space for stacking books and journals periodically;
- The reading room is not well-furnished;
- Very limited books;
- The shelves (steel + wood) need to be upgraded for the safety of the books and ease of references;
- The library is not computerized;
- No internet facilities to subscribe e-books and e-journals;
- Sub-standard quantity and quality of reading chairs, tables, display racks and magazine rack;
- Absence of carpet floor/ insulated floor finish for service counters and other sections of the room for controlling sound transmission;
- Absence of proper ventilation mechanisms and own toilet facilities;
- Fixing of notice boards, research cubicles for scholars/teachers, providing uninterrupted power supply systems (UPS, generator, etc.) along with due attention to overall building reconfiguration to include offices, storage, toilets and community Library also need consideration.



Figure 3: Main Library – Kitgum VTI

Due to the limited space available in the building, the Library has been considered for staff office and a new Library with minimum space equating to 500m² area should be constructed.

2.2.2.2 Training Facilities:

- **Workshop**

The Institution is comprised of 5 workshops, namely: Tailoring workshop, Electrical Installation workshop, Block/Brick Laying and Concreting Practice (BCP) Workshop, Plumbing Workshop, and Welding and fabrication workshop. The institute has no Motor Vehicle and Carpentry workshop although this has been one of the prime program offered by the institute. Students practice on open yard.

Tailoring Workshop:

The Tailoring workshop is 153 m² in size and though found in good condition, is too small to serve or accommodate various functions and at different levels such as preparation room, cutting and sewing, displaying room and separate classroom. Currently, all the above functions are confined to the limited space and as such some activities are forced outside the classroom premises.



Figure 4: Tailoring Workshop - Kitgum VTI

Electrical Installation Workshop

This workshop shares the same building with the tailoring workshop. The Electrical Installation Workshop is equivalent to 153 m² in size. This room serves as an installation workshop, class to the electrical installation students and store to a number of electrical equipment such as multi-meter, solar module, converter, wiring board, earth leakage circuit breaker, electric cables and wiring accessories. Building is in fair condition but the area of the workshop is too small for the above functions as well as available number of student's enrollment. Advised to include open yard workshop for the electrical installation so as to run 30 trainees simultaneously.



Figure 5: Electrical Installation Workshop -
Kitgum VTI

Brick/Block Laying and Concreting Practice (BCP) Workshop

This includes production of bricks using traditional kiln, brick laying with mortar and cement block production technology. A workshop confined in 104 m² area is found in good condition but too small to accommodate more than 15 trainees. Hence there exist an

open yard of 55 m² made of cast steel and timber columns supporting CIS roof in poor condition. Construction and renovation of existing buildings within the premises is also used as one of the training modality under student's real life projects. The capacity of this workshop need to enhance by expanding the open yard workshop to handle plumbing and electrical Installation trainees. The workshop has no major tools such as fixed and mobile mixers, block production machine but is comprised of tools like wheel barrows and trowels, hand hoes, spades, steel hand ram, plastering trowel etc.



Figure 6: BCP Workshop



Figure 7: BCP Workshop Yard

Plumbing Workshop

The plumbing workshop is only 105 m² area and shares the same building as the BCP workshop. The plumbing workshop was found in a fairly good condition, however too small in size to accommodate the different function and the current enrolled student. This workshop can only accommodate 15 students and currently consists of pipe wrenches, vice, pipe lifters, Hacksaws, Mallets, welding machine, PPR welding machine, bending table etc.

This workshop will therefore be expanded in order to accommodate the planned machinery and tools for cutting, bending, fixing and repairing of steel and UPVC pipes.



Figure 8: Plumbing Workshop

Welding and Fabrication Workshop

Welding and fabrication workshop shares the building with boys dormitories and occupies an area equivalent to 110m². The workshop was built in 2003 and is therefore still in a relatively good condition. This workshop is also too small and therefore also needs to be expanded and relocated away from the boys dormitories. The figure below shows the current workshop and her condition.



Figure 9: Welding and Fabrication Workshop

2.2.2.3 Laboratories

The institute has 2 computer laboratories located in two blocks that are located adjacent to the classroom buildings. The first building comprises of 50 computers and is connected to internet using Africel as a service provider. The other in the form of solid steel container has 10 computers without internet connection and is used by staff. The computers use solar energy installed on the roof of the steel container. The number of Computers available in

the laboratory are not enough for growing student's body currently enrolled onto computer programs as well as the need to use ICT as basic field to all specializations. A new computer lab with more space and computers is required and this shall be located in the teaching zone.



Figure 10: Computer Laboratory



Figure 11: Staff Computer Laboratory

2.2.2.4 Administration and Staff Offices

One of the shortcomings in the Kitgum VTI is the lack of adequate number of offices for the teaching and non-teaching staff within the premises. The administration building currently accommodates the main office to the Principal and Deputy Principal Offices, Secretary office, Training Materials office and store, and a common staff room. This administration block has a capacity of 30 staff only, including the common staff room.



Figure 12: Administration Block



Figure 13: Common Staff Office

Due to the current limited space in the existing administration block, it is imperative an additional staff room is constructed next to the current administration block.

2.2.2.5 Accommodations

- **Student's Hostel**

Kitgum Technical Institution (KTI) has 480 students enrolled on to regular programs and among these, 100 students are girls. All the female students and more than 50% of the male students are accommodated by the institute. The remaining 50% of the male students reside in the nearest town, and commute to the institute daily. KTI has one dormitory for the male students and this is neighboured by a workshop on the same block. Initially this whole block was used to accommodate the male student's however due to limited number of workshop rooms, one of the room for the male students was changed into a workshop training room. It is therefore imperative that better accommodation facilities are constructed such that the bulk of the student body are accommodated within the institute. Toilets for all dormitories are pit latrine requiring replacement by water borne toilets and bathrooms.

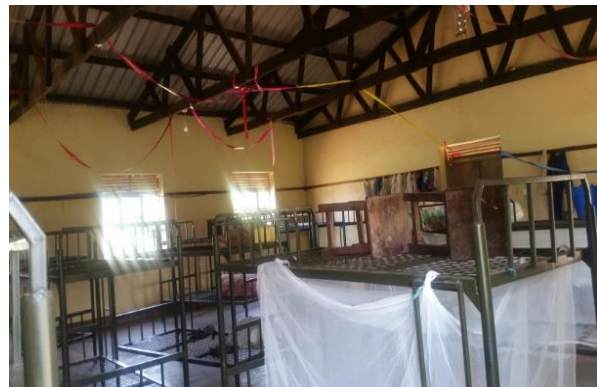


Figure 14: Girls Hostels



Figure 15: Boys Hostel

- **Staff Quarter**

There existed 11 staff houses and of these five units have been abandoned due to extreme deterioration and therefore inhabitable. Among the six currently being occupied by the teachers, only one building was found in a fair condition. Therefore, the current teachers

body are all accommodated outside the institute in the nearest town. It is therefore recommended that all the staff quarters be demolished and an apartment multi-rise building be constructed so as to accommodate both the teaching and the non-teaching staff.

- **Kitchen and Dining**

Kitchen and dining are located at the central area of the premises closer to the classrooms and boys dormitories. The Kitchen occupies an area of 84 m² and is associated with traditional cooking system that involves the use of firewood and charcoal. The Building is in very poor condition with major structural cracks both in foundation and superstructure. Since these will be very expensive to repair, it is advisable that the building is demolished and a new kitchen with better facilities is constructed.



Figure 16: Kitchen



Figure 17: Dining Hall

2.2.2.6 Ancillary Buildings

- **Toilet and Bathrooms**

All the sanitary facilities in Kitgum Technical Institute are composed of pit latrines and external bathrooms. These sanitary facilities are been strategically located depending on their need to serve the institute. Toilets are located within 4 district areas an bathrooms at two locations. This includes:

a. Administration Building

At this location, 2 external toilets were constructed to serve the administration building. Each stance is made up of 4 each made up of toilets and a urinal, however to comply with gender requirements, tow of the stances have been dedicated to women leaving the other 2 to the male population. Survey confirmed that these sanitary facilities were still in a fair condition to serve the purpose.



Figure 18: Pit latrines and bathroom

b. Girl's Dormitory Area:

At this location two bathrooms and two toilets blocks were constructed to serve the female students. The bathrooms however have no roof structure however the survey confirmed that these facilities were still in good condition to serve the student body.

c. Boy's Dormitory Area:

At this location, two bathrooms had been constructed to serve the male students. In addition to this, one block toilet with 12 stances of similar size had been constructed to serve the students. Survey confirmed that all these sanitary facilities were still in good usable condition.

d. Computer Laboratories:

The computer laboratory is of one block having a toilet made up of only 2 stances each dedicated to a different sex, and 2 Stance Urinals with enough space within each stance. The survey confirmed that these facilities were in a good condition

e. Staff quarter area:

The staff quarters are provided with external pit latrines and bathrooms, however survey confirmed that all these facilities were in a sorry state and therefore not fit for purpose.



Figure 19: Standalone pit latrine & Bathrooms

2.2.2.7 General Store

The Kitgum Technical Institute has no designated building for storage of KTI general materials needed by the student body or to facilitate teaching.

2.2.2.8 Medical Centre

The institute has no medical centre within the premises, and therefore all the sick students are referred to medical centre in town.

2.2.2.9 Multi-purpose Hall/ Examination Hall:

A main hall having an area of 350 m² and a capacity of handling about 300 persons is located adjacent to the kitchen. This is supposed to serve as dining hall but currently functioning as examination hall, gathering hall, entertainment hall, and big lecture hall.

2.2.2.10 Guard House

There exists one guard house in the whole institute and it is located at the main entry/exit having 6 m² area. The guard house was found in good condition but very tiny.

2.2.3 External Facilities

2.2.3.1 Interior Roads, Parking and Circulations.

The institute has one main entry gate however other minor gates are located at that workshop and the administration area. The access road is paved gravel material and as such the road is dusty. Vehicular circulation and parking within the premises are also gravel road and parking areas are natural ground, which become dusty during dry season and muddy in the wet season. However, sealing the surface of the roads with cobble stone or concrete paving tiles may be considered as part of students' real life project.

2.2.3.2 Perimeter Fencing

The Kitgum site is situated on 55 acres of land and 2.2 Km of perimeter length with no defined perimeter fence. The infrastructure zone and girl's dormitories are fenced with hedge fence leaving the other areas open and unsafe.

2.2.3.3 Ground Water Reservoir and water tanks

No main ground water reservoir and centralized water tanks in the premises. There exist 100 m³ steel tank on the ground but not connected to any of the water harvesting pipes. The institution uses water harvesting system but only for one workshop. Toilets and kitchen get water from bore hole water which yields low during the dry season.

2.2.3.4 Storm water Drainage

No storm water drainage system in the premises and therefore evident gullies were found since water runs off the surface by gravity, thus eroding the earth surface.

2.2.4 Utilities

2.2.4.1 Power Supply System

Main Grid Power Supply:

The Kitgum Technical Institute is provided with 3 phase connection from the UMEME medium voltage grid. A pole mounted transformer having low capacity is installed for supplying power to all the building utilities that include the workshop and laboratory power sockets and lighting to all the facilities including the community. The transformer power is too low to support further developments and need to be upgraded.

Backup Power - Generator:

Two generators are installed with a capacity of 6.4 KW and 8.0KW serving the community as backup power and connected to administration building, workshops and classrooms and computer laboratory.

Backup Power - Solar Panels:

The staff computer laboratory is connected to solar panel that provides power to computers and lightings.

2.2.4.2 Water Supply System

Currently Kitgum VTI is using a borehole without ground water reservoir and pumping system, which yields low during dry season.

2.2.4.3 Internet Facility - IT

Kitgum Training Institute has internet coverage. All computers connected to internet using Africel as a service provider. However the bandwidth provided is not adequate to support further connection computers and the Library.

2.3 Proposed redevelopments at the institute

The USDP project aims at improving the curricula and high quality of students channelled to the demand labour market but for Kitgum Technical institute to focus on training in craft and arts, crop and animal husbandry that are lower down the value chain; several infrastructures have to be upgraded to the required educational standards. For the institute to be upgraded so as to deliver the required service, a number of projects have been proposed and will be implemented following the proposed zoning showed below:-

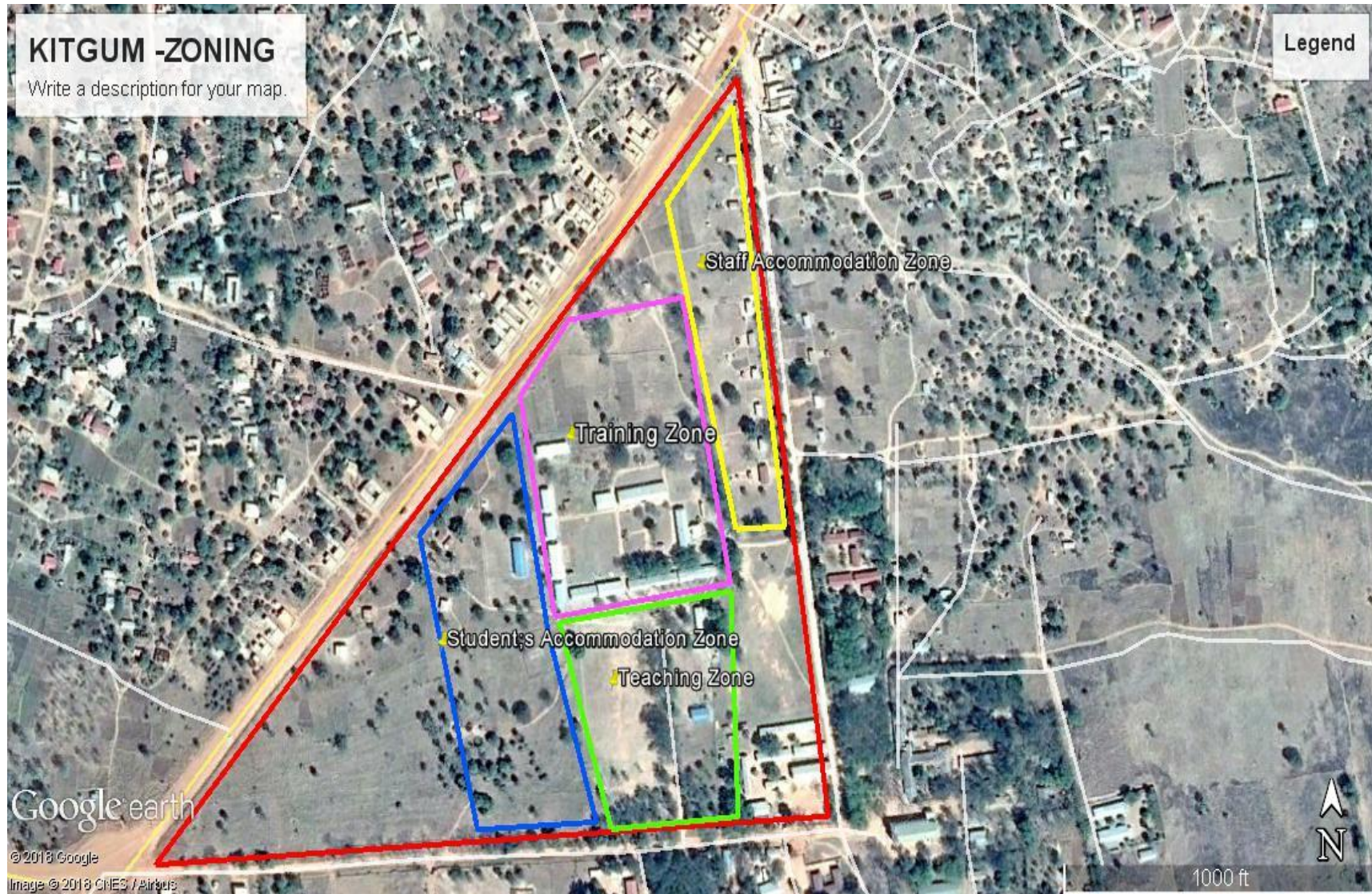
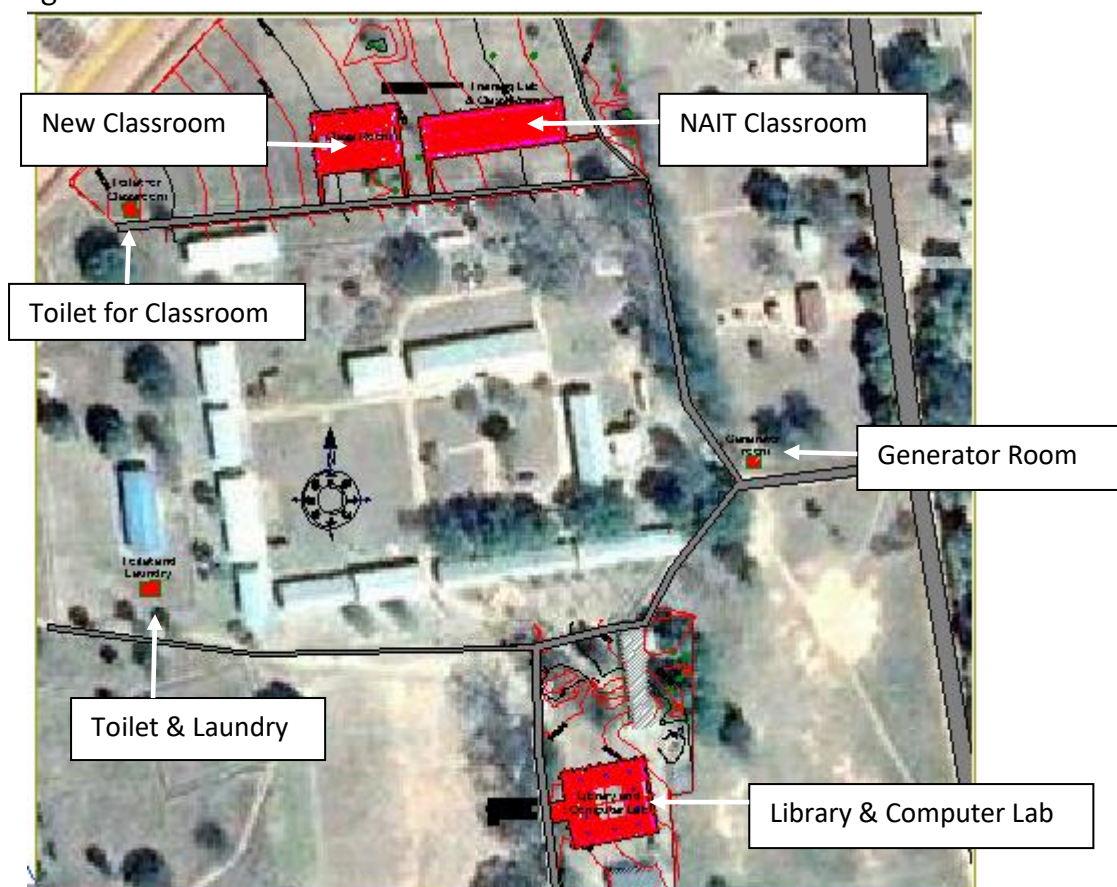


Figure 20: Google aerial view of the showing the proposed zoning of the institute versus the proposed projects.

2.3.1 Site integration of proposed facilities

A number of projects have been considered for implementation and therefore, they have been integrated within the proposed zoning of the institute as shown is the figure below.



Following the site integration above, below are the proposed facilities to be constructed within the boundary of the institute so as to improve on her performance on service delivery.

Table 4: Showing the proposed projects considered for KTI

Proposed Development	Narrative
Utility	No Connection of water supply to grid. Dependent on shallow well. Borehole water source to be explored, ground water reservoir and elevated water tanker. Piping system to be installed.
Teaching Facility	New Library
Training Facility	New building for computer lab with 60 computers capacity with full internet connection
	New Motor Vehicle Workshop;
	New Carpentry Workshop;
	Tailoring and Garments lab to expand;

	New Welding and Fabrication Workshop;
	BCP Workshop to expand with open yard shade; and
	New Plumbing Workshop
Student's Hostel	Additional student's dormitory for accommodating up to 250 students, which partly shall go for girl's dormitory.
Admin Building and Staff Offices	New administration buildings with staff office accommodating the entire staff both teaching and non-teaching staff.
	Existing pit latrines to change into water borne toilets. A stand-alone toilet for staff and guests shall be constructed.
Accommodations	Multi-purpose hall with a capacity of handling about 1000 personnel;
	Staff hostel in the form of apartments to accommodate about 80 teaching and non-teaching staff;
	A total of 5,760 m ² building area need to be constructed.
	Kitchen to expand and the existing main hall to serve as dining hall after providing the required furniture.
Ancillary Buildings	General store, archives, medical centre and generator house and guard house.
	Security fence and entry/exit gate to be constructed along the boundary of the institution.

2.3.2 Some of the Engineering Designs for the proposed development

Most of the proposed facilities to be constructed were selected by the USDP official, the Twinning Partners, the Technical officers of KTI as well as the design Engineers. Therefore below are the proposed designs of some of the facilities to be constructed and these are elaborated below:-

2.3.2.1 Library and Computer Lab

It is planned to develop a G+1 building of 500m² each floor of twinning concept connected with bridge. The central space will be used for enhancing natural ventilation and lightings to the rooms. The library will comprise a distinct computer lab of about 45 computers, self-reading room, periodicals, archive, toilet, reserved areas, and computer corner for e-booking with modern arrangement accommodating about 200 persons at a time.

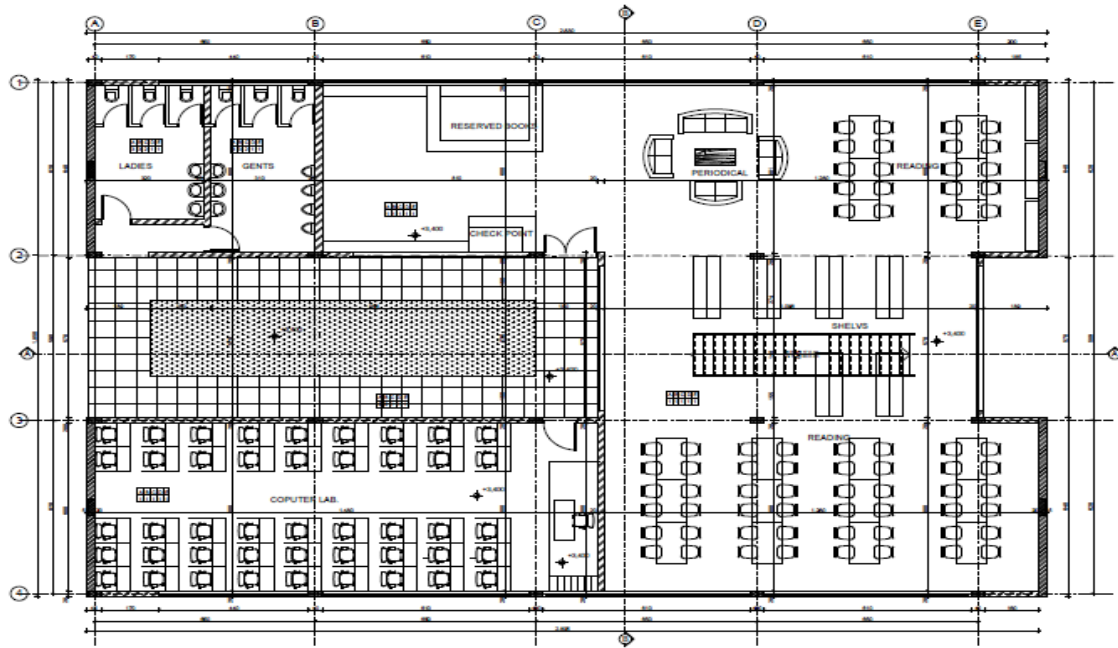


Figure 21: Ground Floor Library and Computer Lab

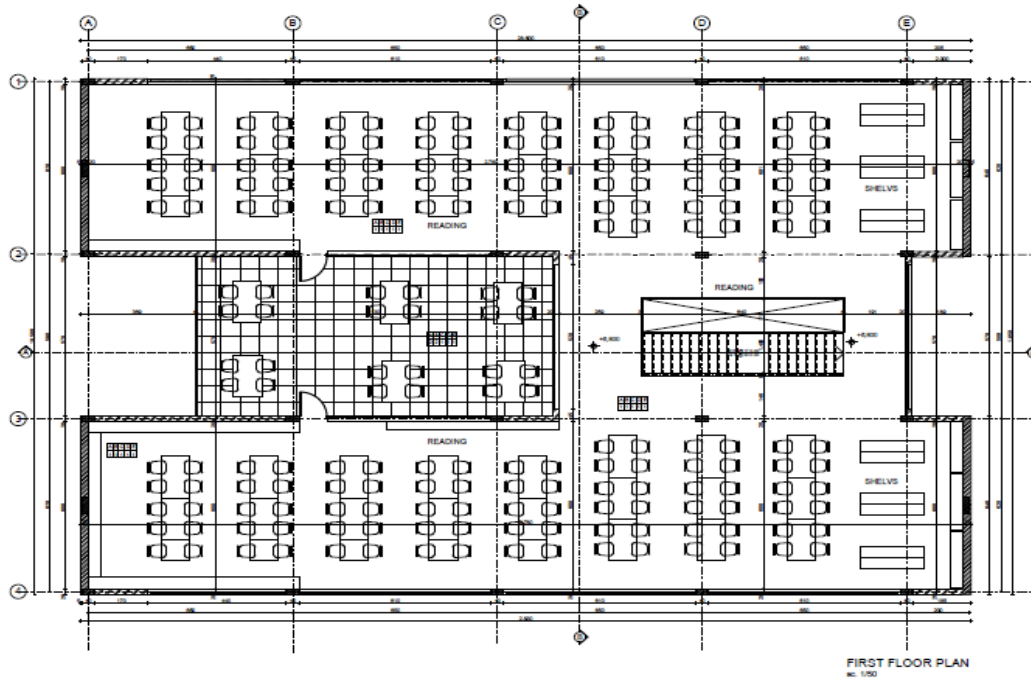


Figure 22: First Floor Library and Computer Laboratory



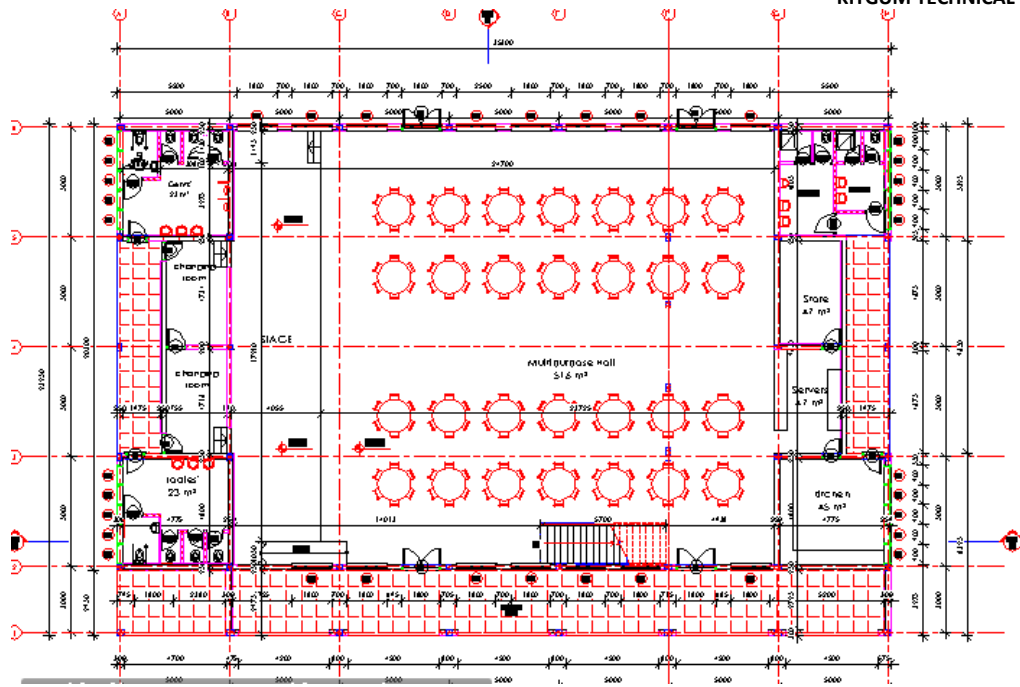
Figure 23: Proposed Artistic Impression for the Library

2.3.2.2 Mini-Auditorium Hall

The proposed Auditorium Hall will have an auditorium hall with mezzanine floor for serving conference hall, exhibitions and display for the stakeholders with a capacity of handling up to 400 Persons. It will also be used to serve the students cafeteria during day and evening and once in a while, it will be used for periodic meetings. The building will comprise of:

- Kitchen - 33 m²;
- Store - 59 m²;
- Mezzanine floor for VIP - 192 m²;
- Toilets for gents and ladies - 46 m²
- Circulation and corridors - 117 m²
- Assemble hall - 586 m²

RENOVATION AND UPGRADING OF INSTITUTIONAL BUILDINGS FOR LOT-1: LIRA
KITGUM TECHNICAL INSTITUTE – FINAL PB



Ground Floor



Figure 24: Artistic impression of the proposed auditorium hall

2.3.2.3 Generator

The proposed Generator house will comprise of a number of developments as illustrated in the figure below:

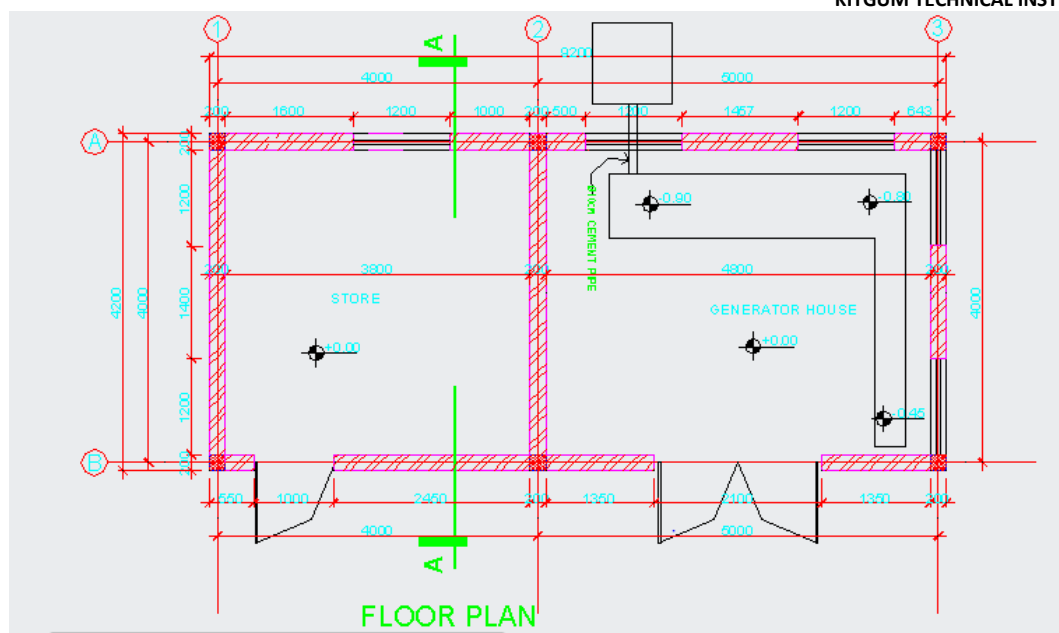


Figure 25: Floor plan of the Generator

2.4 Project Cost

Table 5: Showing the proposed cost per proposed facility

Project Priority	Project	Description	Estimated Cost (USD)	Remarks
1	New Training Lab	Construction of new block comprising of five rooms each about 80.0 m2. One room for admin office, one for classroom, one for computer lab, one for soil lab and one for storage.	\$260,000	The building to be done based on the Twinning Suggestion - Guidance to the Architect-
2	Power Upgrade			
2.1	Upgrade the existing transformer by 150 KVA	The existing transformer has low capacity and cannot support the prevailing infrastructure development. It shall be upgraded further by 150 KVA to support the workshops and the associated new developments	\$50,000	Kitgum is advised to keep this cost out of this scope and seek for further finance from government as part of basic infrastructure development.
2.2	Backup Generator	Supply and install 80KVA backup generator for the workshops. The actual capacity requirement will be determined after design.	\$30,000	

3	Internet Access	The national information technology authority of Uganda (NITA-U) has a plan to supply an optical fiber for all Colleges within the coming years. It should at list be of 20mbps and we would recommend that they design it in a more scalable way such that it can be upgraded in a short time possible if needed for future expansion. The incumbent infrastructure to provide internal connection to the fiber cable of NITA-U. The cost for internal installation is considered in the respective estimates.	\$50,000	Kitgum VTI shall apply to NITA-U for upgrading of internet at the College.
4	New Toilets, Bathroom and Laundry	Three New external flush toilets including bathroom and Laundry to student's hostel and old classroom area. Each shall have 60m2 area.	\$126,000	Two toilets with laundry and bath room to be located to student's dormitories and one for the classroom and staff office area.
5	Safety & Security			
5.1	External night lights	Solar power external lights to be fixed on the walls of existing hostels, old classrooms and workshops areas.	\$25,000	10 sets Solar power with 2 solar panels each 150WP, 2 batteries 200AH, 1 inverter of 150VA and charge controller
5.2	Fencing and Signage	Fencing and signage for specialized area such as lab and workshops	\$25,000	
6	Library & Computer Lab	A library and computer lab of about 1100 m ² size with archives of books, referencing, periodicals, self-reading room, group reading room, offices, toilets for about 250 Pax. Computer lab to comprise about 45 computers.	\$825,000	A basic facility to be given priority. The computer lab is for 45 students in one session. But Kitgum has to extend the computer lab in the future based n demands.
7	Classrooms	Six new classrooms each 90 m2 for the existing students with gross area of 540m2.	\$297,000	
Total Budget (Summary of Projects from Priority No.1 -6)			\$1,688,000	
Contingency (10%)			\$168,800	
GRAND TOTAL (USD)			\$1,856,800	

The total project cost is estimated at 1,856,800 (USD) which is One Million, Eight Hundred and Fifty Six Thousand, Eight Hundred US Dollars only.

2.5 Construction Activities

2.5.1 Mobilisation of Project Team and Re-sources to site

The contractor will notify the institution, gather and deploy all team members / work force to the proposed site, ready for the assignment. Furthermore, the contractor will ensure that necessary logistics and equipment like Vehicles, concrete mixers, water browser, water pumping, excavating equipment, survey equipment, warning signs and reflective vests, protective clothing (gum boots, overalls) printed inspection forms, drawings, site instruction books and many others are well in place for the team to commence works.

Contractors will be encouraged to use as much manual labour as possible except for those activities that will require the use of machines

2.5.2 Anticipated workforce

The construction of the facilities will employ over 50 workers. Measures shall be instituted to ensure that 60% of the workers are sourced from the neighbouring community as well as the students if permitted in order to contribute to their income, create a sense of ownership from the community and also transfer construction building knowledge to the students of the institution.

2.5.3 Demolitions

Most of the facilities at the institute are to be demolition such as the old staff houses, toilets among others, and new structures have been considered for re-building.

2.5.4 Site Clearing and Excavations

The site where the workshops, classroom, and Multi-purpose rooms are to be constructed is still intact and therefore will have to be cleared before construction works can be undertaken. This means that work on this site will start by clearing during preparation of the site for construction.

2.5.5 Compaction works

Compaction works will follow the excavations stage this will involve use of machinery e.g. compactors and graders and generators for energy supply. This stage of construction will be essential prior to constructing the foundation through creation of a stable working space. It will also be the major determining factor for the alignment of the yard and parking areas.

2.5.6 Materials Transportation

Site preparation and construction of the aforementioned facilities will require various types and amounts of material. Some of this material maybe sources from within the project area and the neighbouring community whereas others may need to be procured and transported to site from far distances.

2.5.7 Concrete and reinforcement works

These will include casting of C25 reinforced concrete for the foundation (Concreted slabs) and beams. Concrete blocks will also be used during wall construction. Most of the building materials for completion include cement, concrete blocks and slabs, sand, iron sheets, iron bars, timber trusses, glass and 150mm cast iron beams and

these can be obtained from the local market. 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 carry out concrete tests to ascertain its specified characteristic strength.

2.5.8 Fencing

- Fencing of the construction site shall be suitably secured to prohibit access of the construction site by students and teachers among others.
- Fencing shall be made of iron sheets and kept neat at all times. The Contractor shall be responsible for the maintenance of all fences.
- If fencing is removed temporarily for the execution of work, the Contractor shall reinstate it as soon as practicable. Until re-instatement, the contractor shall demarcate the working area by surrounding it with danger-tape marking.
- Breaches in the fencing must be repaired immediately.

2.1.1 Project Staff and Working Hours

It is estimated based on going projects within the college, this project will employ over 50 persons both local and international, where necessary. The site working hours will be in line with Uganda's employment legislation.

The employed staff shall be engaged in line with the World Bank Environmental and Social Standards with regards to Labour Conditions for workers, that requires that:-

- Child labour is prohibited. Therefore all workers should be above the age of 18 stipulated in the Children's Act and the Employment Act of Uganda;
- All workers must be provided with a clean, safe and healthy environment. In addition to this, all workers should be provided with adequate PPE;
- All workers should be given contracts clearly showing their remuneration, job description and working hours among others;
- The contractor will have a fully-fledged human resource body that will keep clear copies of all documentation about each worker including National Identification. This will ensure that no person below the recommended age of work shall be engaged during construction of the proposed projects.
- All workers shall be given and trained on all the requirements of the Code of Conduct (attached to this report under appendix 6) so as to maintain a good working relationship.
- The Contractor will be gender sensitive when recruiting workers on the project, and most of the non-strenuous manual jobs should be allocated to women such as secretariat work, supervision depending on their technical background, cleaning among others.
- In order to manage all the challenges the workforce experiences during project implementation, a Grievance Redress Mechanism (GRM) for the work-force shall be developed. This GRM shall comprise of the following:-

- Project Manager
- Representation of the different working groups (concrete works, electrical, carpentries, among others);
- The Contractors EHS team;
- The Consultant or EHS team for the consultant;
- The client

During project implementation, the GRM shall seat to resolve the concerns raised once a quorum of more than 3 representation are available

Other general requirements include:-

- All workers should be provided with company identification which makes it easy to differentiate the construction workers from the students;
- Drinking water, meals and resting hours should be observed by all employers
- Provision of First Aid services have to be present on site; among others.

2.1.2 External Works

During construction of this project, the anticipated External works will be in relation to material extraction sites, dumping sites, camp sites, stockpiling areas, access and landscaping of the constructed structures among others. This therefore relates to any works outside the building works to facilitate the project. These will include:-

- Borrow areas

Depending on the type of material required, the contractor may open up a number of borrow areas for different kinds of marram to facilitate construction of the building foundations among others. These material extraction sites will requires to undergo a detailed ESIA as stipulated under the 5th schedule of the National Environment Act. 2019.

- Quarry sites

Considering that the foundation of the proposed project may requires a considerable amount of hard core as well as construction of soak pits among others, Quarry sites may be opened up or material may be procured from already operating quarries. For adequate management of the anticipated impacts:-

- Newly opened up quarry sites should undergo a detailed ESIA and submitted to NEMA for approval;
- Existing material sites should provide evidence of approval from NEMA and updated Environmental Audits;
- Impacts related to haulage of material should be developed for each source of construction material.

- Camp Site

Construction of the proposed project will require a sizeable workforce comprising of expatriates and the locals as well as an enormous equipment base. Due to the anticipated large number of workers, and vast equipment and machinery to be used, the contractor will establish Worker's campsite and Equipment yard. Depending on the arrangement of the institute, this camp could be opened up within the institute or outside.

- Access and Landscaping works

Construction of these facilities will require access and a certain level of landscaping and beatification. Though not listed in the activities budgeted for, it can be assumed that the proposed facilities will require that access to the facilities are opened up.

Construction is associated with massive land movements, deposition of construction material among others. After construction of all the proposed building, landscaping will be required such that external drainage of run-off water is re-directed away from the newly constructed structures among others.

CHAPTER 3: ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT METHODOLOGY

3 Introduction

The EIA was carried out in accordance with the Ugandan EIA guidelines, 1997, which require that all the likely impacts associated with the implementation of the proposed projects are identified and thereafter adequate mitigation measures can be proposed that will eliminate or mitigate the likely impact.

A number of methods were applied including; literature review (review of design, reports and other relevant publications including legislation), field investigations (receptor identification, stakeholder consultations, biodiversity assessment) and other specialist studies, direct observations, as discussed in the sub-sections that follow.

3.1 Environmental Impact Assessment – Project Brief

Review of the Ministry of Education and Sports Environmental and Social Management Framework for Skills Development Project (SDP) November 2014, confirms that an intense technical screening was undertaken by each District and municipalities where the above projects are located to categorically Classify the projects according to the World Bank Classification of project, which would guide the subsequent assessment required for the proposed developments while transforming these colleges into centers of excellence. According to the Project Appraisal Document (PAD) of April 2015, the proposed project was classified under Category B, according to the World Bank Classification of projects².

Category B projects, have the potential to cause environmental impacts on human populations or environmentally important areas, including wetlands, forests, grasslands, and other natural habitats, however, are less adverse when compared to projects classified under Category A. These impacts are site-specific; few if any of them are irreversible; and in most cases mitigation measures can be designed more readily than for Category A projects. Here the assessment also involves examination of the project's potential negative and positive environmental impacts and recommends any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance. For such projects with relation to the Environmental Impact Assessment Regulation, S.I. No. 13/1998 can comprehensively be assessed at the *Project Brief* level.

The Environmental Impact Assessment Regulation, S.I. No. 13/1998 provides a comprehensive guide to conduct Environmental Impact studies which once completed are compiled into a *Project Brief* that is submitted to NEMA for approval.

3.2 ESIA study methodology

To accomplish the objectives of the ESIA Study, a number of methods were employed. These are discussed in the following sub - sections.

² International Development Association Project Appraisal Document, April 2015, (SDR71.1 to the Republic of Uganda for a Skills Development Project, April 2015).

3.2.1 Literature Review

Existing literature related to proposed project and its area was reviewed. The Guidelines for Environment Impact Assessment in Uganda as well as other existing national and international (World Bank) policies, guidelines, standards, and legislation were also referred to. A full list of all literature referred to is given under the reference chapter of the report. For all taxonomic groups to be surveyed literature review was conducted to compile all available secondary data. Land cover maps showing the proposed site were as well produced to guide the planning of field surveys

Therefore, literature review involved the review of existing literature such as: -

- Feasibility Engineering Design for Kitgum Technical Institute;
- District and Division/Sub-County Medium-Term Development Plans,
- Literature on the experiences from past and recent infrastructures projects,
- Guiding relevant policy, legal and institutional framework of Uganda;
- Guidelines for Environment Impact Assessment in Uganda and other existing legislation; as well as
- The World Bank Environmental and Social Safeguards Policies;

3.2.2 Stakeholder Consultations

Stakeholder consultations were carried out at throughout the assessment process. Consultations ensure that all stakeholder concerns are incorporated into project planning and implementation. This in line with the statutory consultation requirements under World Bank environmental and social safeguards policies, as well as the first schedule of the EIA Regulations for Uganda. Consultations were done at National, District and Local levels. Community sensitization will be an on-going activity throughout all project phases. The list of the stakeholders that were consulted during this assessment, along with a summary of the stakeholders' views and comments on the proposed project are presented in Chapter 6.

In the context of this project, stakeholder consultations were initiated with the following specific objectives:

- a) Generating a good understanding of the proposed project and her components, ensuring that the institute staff, students and the surrounding community identify with the Project right from the design stage;
- b) To assist the Developer and the Consultant understand local expectations throughout the project cycle;
- c) To understand and characterize the potential environmental, socio-economic and health impacts of the project;
- d) Develop effective mitigation measures and management plans;
- e) Optimize local knowledge and determine benefits that can be delivered through the project; and

- f) Collect relevant information from appropriate lead agencies.

3.2.3 Environmental Baseline and Biodiversity Surveys

Environmental baseline surveys were conducted within the institute and around it considering the direct and indirect impact zone. The surveys carried out also provided an understanding of prevailing socio-environmental situations. Indeed, the survey will also provide a basis for future monitoring of the environmental and social impacts of the project. For the baseline surveys, emphasis will be laid on the social-economic environment, flora, terrestrial fauna (birds and mammals), water quality, soils and hydrology.

3.2.3.1 Assessment of Cultural Heritage

Construction activities are likely to affect existing physical cultural resources on and under the ground surface. Review of the Project Appraisal document and the Environmental Management framework, 2014, state that Physical Cultural Resources OP/BP 4.11 will be triggered because project investments which involve civil-works and may potentially affect known and unknown physical cultural resources in the area. Among others this therefore required that the physical cultural resource study is undertaken prior to commencement of construction activities, in order to identify if there were any archaeological features on the surface. However, it is important to note the Kitgum Technical Institute, has undergone a number of modification and therefore, the likely hood of finding archaeological features on the surface of the ground are highly unlikely. The study intended to identifying the likely PCRs in and around the project area, and anticipating the likely impacts that shall be suffered during project implementation.

The assessment began with a baseline study to identify all archaeological, historical sites and other monuments in and around the project area. Desktop search for declared sites was also undertaken and consultations were held with the Department of Antiquities and Museums in Uganda to identify any cultural heritage sites within the project area.

3.2.3.2 Mammal Survey

A baseline mammal survey for the project area was undertaken with the main objective of assessing the impacts of the proposed project on the mammals that inhabit the potentially affected areas. The methodologies employed while assessing the birds and mammals at the proposed section of the project include;

- *Visual Encounter Surveys (VESs)*; These involved walking through sampling areas within the direct impact zone for an hour at every survey location systematically searching for surface-active species especially large and medium mammals. This method involved looking out for indirect signs of mammalian presence such as scat, foot prints and projects or roosts in case of bats. Visual encounter survey method is commonly used to determine the species richness

of an area, to compile a species list and to estimate relative abundances of species within an assemblage; and

- Consultation of the technical collage staffing and members of the different local neighboring communities about the presence of medium sized and large mammals in their respective areas. Consultation of the district leadership with common knowledge about the project area was also undertaken to determine the mammalian existence in this area.

3.2.3.3 Birds' Survey

The proposed sections of the project area were assessed for sensitive habitats for birds, and this was majorly due to the fact that to the institute has alot of trees and being near the lake which are known for accommodating a large bird species base, especially the fish eating bird species.

3.2.4 Impact Assessment Methodology

Prediction and evaluation of potential impacts (both positive and negative) of the project were undertaken using relevant methods and criteria determined by the scoping exercise. As with any development, was vital that decision-making about environmental aspects of the ESIA is based on a comprehensive analysis of possible impacts. Impacts at all stages of the Project development were considered including possible induced or cumulative effects. Our methodology ensured that cumulative effects are 'captured' within the impact assessment process, and ensured that the relative contribution of the Project can be ascertained in cases where significant adverse effects are likely.

Impact identification and assessment starts with scoping and continues through the remainder of the assessment Process. Interactions with the potential for significant effects will be subjected to a detailed impact assessment. The process comprises;

- **Impact prediction:** to determine what could potentially happen to resources or receptors as a consequence of the Project and its associated activities.
- **Impact evaluation:** to evaluate the significance of the predicted impacts by considering their magnitude and likelihood of occurrence, and the sensitivity, value and/or importance of the affected resource or receptor.
- **Mitigation and enhancement:** to identify appropriate and justified measures to mitigate negative impacts and enhance positive impacts.
- **Residual impact evaluation:** to evaluate the significance of impacts assuming effective implementation of mitigation and enhancement measures.

3.2.5 Evaluation of Impacts

This section assesses the level of potential negative impacts based on the following criteria:

- a) **Extent:** Evaluates the area of occurrence/influence by the impact on the subject environment; whether the impact will occur.

Impact evaluation on Extent

Evaluate	Immediate	Local	Wide	National or global
Area of occurrence	within 200m radius	within 1-5 km radius	District, affecting ecosystem or catchment	with trans boundary impacts

- b) **Persistence:** Evaluates the duration of impact on the subject environment, whether the impact will be

Impact evaluation considering persistence in the environment

Evaluate	Temporary	Short Term	Medium Term	Long Term	Permanent
Duration of impact	< 1 year	1 - 3 years	3-10 years	10years <	Eternal change

NB. Permanent (Impacts that occur during the development of the project and cause a permanent change in the affected receptor or resource that endures substantially beyond the project lifetime).

- c) **Magnitude:** The quantifiable effects of impacts, measured where possible, against the appropriate standard for each respective environmental component. This includes existing standards, guidelines or expert judgment.

Impact evaluation considering its magnitude

Evaluate	Quantifiable Effects Of Impacts
Low	Impact affects the environment in such a way that natural, cultural and social functions and processes are not affected
Medium	The affected environment is altered, but natural, cultural and social functions and processes continue, albeit in a modified way
High	The natural, cultural and social functions or processes are altered to the extent that it will temporarily or permanently cease

- d) **Probability:** Evaluates the likelihood of occurrence of predicted impact on the subject environment thus as shown in the table below

Impact evaluation considering likely probability of it happening

Evaluate	Low	Medium	High	Definite
Occurrence	<25%	25 -75%	>75%	100%

- e) **Status of impact:** The status of an impact is used to describe whether the impact will have a negative, positive or zero effect on the surrounding

environment. An impact may therefore be *negative*, *positive* (or referred to as a benefit) or *neutral*. It also states if the impact is direct or indirect.

- f) **Overall Impact Significance:** using a combination of the above criteria, the overall importance of the impact is assigned a rating of Major (Severe), Moderate, Minor, and Negligible as illustrated in Table 4-1 below. Determining significance of environmental impacts included determining the:
- Likelihood of the impact; and
 - Severity of the Impact.

3.2.6 Mitigation/Enhancements

Where potential negative impacts were predicted, practical and cost-effective mitigation or compensation options which minimize such effects to acceptable levels were identified. Similarly, where appropriate opportunities for enhancement exist, these were identified and recommended. Mitigation was considered from the outset of the assessment process, and required continued close communication between the design team. This coordinated approach ensured delivery of realistic and successful mitigation that can be achieved as an on-going process.

3.2.7 Environmental Management Plan (EMP)

Mitigation and management measures were clearly specified in Environmental and Social Management Plans (ESMPs) which identify specific measures for addressing impacts including who is to be involved and how these should be implemented and monitored as well as associated costs.

CHAPTER 4: POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

4 Introduction

This chapter discusses policy, legislation and institutional framework within which the EIA study will be conducted.

The construction of the mentioned facilities may have impacts on the environment from two perspectives: first, effects of construction itself and the resulting disturbance on the ecological and social systems; and secondly, after the structures have been put in place, their operation may positively or negatively impact the environment. These environmental and social effects must be managed within a legal framework. Uganda has various laws, policies and institutional set up governing the management of its natural environment as discussed below. Therefore, this assessment triggered a set of relevant and applicable regulations and policies. Specifically the following regulations and policies were considered appropriate for this assessment.

4.1 Policy Framework

4.1.1 Uganda's Vision 2040

This Vision Framework provides plans and strategies to operationalize the Ugandan vision which is “A transformed Ugandan society from a peasant to a modern and prosperous country within 30 years”. It aims at transforming Uganda from a predominantly peasant and low income country to a competitive upper middle income country with per capita income of about USD9, 500. Over this period, average real GDP growth rate will be over 8.2 per cent per annum translating into total GDP of about US \$580.5bn with a projected population of 61.3 million. This will match the level of development observed in upper middle income (UMI) countries such as Malaysia, Mauritius, Hungary and Chile. To attain this level of per capita income the country will exploit its enormous and novelty opportunities including; oil and gas, tourism, minerals, ICT business, abundant youthful labour force, strategic geographical location, fresh water resources, industries and agriculture. These opportunities will be harnessed through strengthening fundamentals including; physical infrastructure (transport, ICT and energy), Science, Technology, Engineering and Innovation (STEI); and globally competitive human resource.

It is important to note that development of this project is scaled right from the bigger goal of Uganda's vision of 2040. According to this vision, one of the strategic bottlenecks that have constrained Uganda's development is the continued accumulation of underdeveloped human resources. In abid to address this bottlenecks, Uganda Vision 2040 identified “Science and Technology parks in each regional city” and “Accelerate government reforms in the education system and the curriculum to obtain a globally competitive human resource with skills relevant to the development paradigm” as key core projects that needed to be implemented.

In response to this, Government of Uganda through Ministry of Education and Sports launched a BTVET Strategic Plan 2012/13 to 2021/22 entitled "Skilling Uganda". This plan underscored a paradigm shift in skills development in the country. The plan

emphasized creating employable skills and competencies relevant to the labour market rather than educational certificates as was before. The proposed project obtained funding from World Bank, and under this project, 4 regional technical institutes covering key priority sectors of the economy i.e.³ Agriculture, Construction and Manufacturing, in line with Uganda's National Development Plan (NDPII) as well as Vision 2040, were selected to be upgraded of which Kitgum Technical Institute is among.

Relevance *Key strategies of Vision 2040 related to the project include:*

- *(261 on pg. 92) All Government-supported tertiary education will be devoted to skills development according to the talents and aptitudes identified. Students will be accorded opportunities to excel in whichever skills area they are placed. These will range from sports and the arts, to technical and vocational to research and academic pursuit.⁴*
- *Fostering increased mobility of labour through creation of incentives for an increase in relevant training and skills re-orientation and provision of greater incentives for not only higher innovation at firm level but also increased factor productivity [Section 47].*
- *Developing human resources and skills through building Centers of Excellence in education including equipping training institutions and schools with all facilities and amenities such as science laboratories, agro-mechanic workshops, ICT laboratories among others [Section 69].*

4.1.2 The National Environment Management Policy, 1994

The goal of this policy is to promote sustainable economic and social development, mindful of the needs of future generations. The policy calls for integration of environmental concerns into development policies, plans and projects at national, district and local levels, using ESIA as one of the vital tools. This policy has recently been reviewed to consider all the inadequacies the previous policy had. The revised National Environmental Management Policy (NEMA, 2014) is the cornerstone of the country's commitment to social and economic development that is environmentally sustainable and which will bring the benefits of a better life to all. This policy provides an enabling framework for related policies in the environment arena and a roadmap for management of environment resources in Uganda. It is against this

³ The Republic of Uganda, Ministry of Education and Sports (2012) – Uganda Skills development Project. Retrieved from <http://www.education.go.ug/>

⁴ National Planning Authority (2012) - Uganda Vision, 2040, retrieved from <http://npa.ug/wp-content/themes/npatheme/documents/vision2040.pdf>

policy that the National Environment Act, Cap. 153 was developed. It is this Act that establishes the National Environment Management Authority (NEMA) as the overall authority responsible for overseeing, coordinating and supervising environmental management in Uganda. Section 3.8 of this policy recognizes that development activities and land use practices have impacts on the environment and therefore their assessment and evaluation is essential. The *main objective* of this policy is to provide a system of Environmental Impact Assessment (EIA) and environmental monitoring so that adverse environmental impacts can be foreseen, eliminated or mitigated.

Relevance This policy requires that for all development activities in line with the requirements of the national Environment Act, should undergo assessments and evaluation such that related negative impacts are addressed through the Environment Impact Assessment process. According to the Third schedule of NEA, any development that involves major changes in land use is subjected to an EIA.

4.1.3 Agriculture Sector Development Strategy and Investment Plan: 2010/11- 2014/15

The strategy recognises that success in agricultural development, as has been stated, requires the contribution of other support sectors including energy, transport, agricultural finance, agricultural training, natural resource use and management. Without action by these support sectors, agriculture is not likely to achieve its objectives. The strategy also

Calls for review and develop the curriculum of both farmer training institutes and agricultural colleges. These are in line with aims of the Skills Development Project.

4.1.4 Gender in Education Sector Policy, 2016

The Gender in Education Policy (GEP), 2009 was developed in line with the Education Sector Strategic Plan (ESSP 2007-2015) to guide gender mainstreaming in Education and Sports countrywide. It was guided by the National Gender Policy (2007), and it complemented other existing policy initiatives that address the barriers to girls' and women's education in Uganda.

This Second Gender in Education Policy links with all the other policies and programmes of the Ministry of Education and Sports as well as seeks to build on the progress registered by previous policies and programmes on promoting gender equality in education. The main purpose of this policy is to guide effective mainstreaming of gender throughout the Education and Sports Sector.

The specific Objectives of the Policy include;

- a) Enhance equal access and participation for girls and women, boys and men in the education and sports sector.
- b) Promote the provision of relevant knowledge and skills equally to males and females; *Target: Achieve gender parity pass rate by 2030.*

- c) Improve the amount of resources allocated for the delivery of gender equality and girls' participation in education, science, technology and sports. *Target: Increase funding for mainstreaming gender into the sector plans and programmes by 50% by 2030.*
- d) Promote an enabling, protective and gender responsive learning environment for all persons. *Targets: A learning environment that is gender responsive by 2030; Learning environment that is positive and supportive (safe and secure); reduced levels of violence against children in schools by 50% by 2030.*

The policy emphasizes that Education is fundamental human right, and therefore should be accorded to all persons without any discrimination arising from policies, practices and/or environment. This calls for creation of a healthy, protective and supportive environment for both male and female persons to realize their right to education.

Although there was increased enrolment of girls from 31% in 2008 to 42% in 2015, the gender gap in enrolment is still wide (*EMIS 2015*). Total enrolment in Year 3 for boys is 71.4% compared to 28.6% for girls which reflect high drop-out rates among girls in BTVET.

Majority of Instructors (73%) are males which disadvantages girls; by creating gaps of role models and counsellors and affects employment opportunities. There is therefore need for deliberate interventions to promote equal opportunities for boys and girls to BTVET. It is also important to mainstream gender in the implementation of Skilling Uganda – BTVET Strategic Plan 2012/3-2021/2.

The policy goes ahead to highlight the Sub-Sector Policy Objectives, Targets and Strategies for Business, Technical, Vocational Education and Training.

Policy objectives include;

- i. Promote gender equality in enrolment, retention and achievement in BTVET; increased opportunities especially for girls and women.
- ii. Produce empowered BTVET graduates especially females that are effective in their fields of work and can contribute to national development.

Policy Targets on BTVET include;

- i. Achieve gender parity at enrolment and completion by 2030.
- ii. Involved stakeholders in the development of skills training and meaningful linkages with employers and community needs.
- iii. Instituted national qualifications' framework to provide alternative paths for BTVET graduates, especially girls and women, to be able to progress within the education system.
- iv. Increased female participation in BTVET; especially in science based and technical skills areas.
- v. Gender responsive BTVET curriculum development and implementation.

Policy Strategies on BTVET include;

- i. Implement promotional activities to popularize BTVET among secondary schools to motivate learners especially females to enroll into BTVET institutions;
- ii. Implement affirmative action and infrastructure development for improved women's and girls' participation, retention and achievement in BTVET; including supporting BTVET institutions to design and implement a bridge programme to increase enrolment to science and technical courses especially for female students.
- iii. Build capacity of trainers and managers of BTVET institutions on the delivery of gender responsive BTVET programmes.
- iv. Institute programmes that develop women role models in Science and Technology Education (STE) in order to promote positive attitudes especially among girls and women;
- v. Collaborate with key stakeholders to create linkages that will promote gender responsive BTVET.
- vi. Ensure the learning environment is gender and disability responsive and promote safety and security in BTVET institutions including supporting the implementation of the National Strategic Plan on the Elimination of Violence against Children in Schools (2015-2020) and the National Strategy on Ending Child Marriage and Teenage Pregnancy and support reproductive health information and education.
- vii. Budget resources to provide gender and disability responsive infrastructure and facilities including provision of water and sanitation facilities.
- viii. Establish more technical and vocational institutes taking into account regional balance.
- ix. Motivate female tutors to join BTVET institutions and take up leadership positions.

Relevance This policy shall be essential in the success of the proposed project right from the initial planning stages, construction and operation stages.

4.1.5 The Second National Development Plan (NDPII) 2015/16-2019/20

This calls upon the education sector to promote equal access to education for all. It also states “there is need to consciously target and benefit both women and men...and to actively engage all sectors and Local Governments in mainstreaming gender into their plans, programmes and policies”.

Regarding Skills Development, the plan highlights that while some progress has been made towards skilling the Ugandan labour force, the economy still faces substantial skills gaps in key sectors of the economy. In regard to the informal sector, which from anecdotal evidence provides the biggest number of people at the lower skills level, not much progress has been registered in terms of standardization, quality and certification.

To address this therefore, SDG Goal 4 emphasizes the need to ensure inclusive and equitable quality education and promote life-long learning opportunities for all is also very relevant. In particular, by 2030; eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples, and children in vulnerable situations (Target 4.5).

4.1.6 Skilling Uganda BTVET STRATEGIC PLAN 2012/3 to 2021/2

The Strategic Plan is based on a comprehensive analysis of the BTVET sub-sector in terms of relevance, equity, quality, organizational effectiveness and finance/internal efficiency. The Strategic Plan is titled “Skilling Uganda”, which denotes a paradigm shift for skills development in Uganda where the BTVET system will be transformed from an educational sub-sector into a comprehensive system of skills development for employment, enhanced productivity and growth. The main purpose is to create employable skills and competencies relevant in the labour market instead of educational certificates.

The five specific objectives to reach the development objective include:

- a) Raise the economic relevance of BTVET
- b) Increase the quality of skills provision
- c) Provide equitable access to skills development
- d) Achieve greater organizational and management effectiveness in BTVET
- e) Increase internal efficiency and resources available for BTVET

This ten year plan for Business, Technical and Vocational Education and Training (BTVET) sets out the main reforms needed for upgrade the skills of the Ugandan labour force. The strategy builds on considerable progress in the reform of the BTVET system achieved during the last decade, which included the adoption of the BTVET Act in 2008 and the establishment of the Uganda Vocational Qualifications Framework (UVQF).

The plan also sets out individual strategies that are geared to address the most urgent challenges: linking BTVET and the business community, gearing occupational standards and curricula to labour market needs, adjusting training provision to market needs of their clientele, and broadening training supply in occupations essential for the country’s development – including agriculture, the informal sector and emerging technologies

Relevance The above is very relevant to the project in all stages in order to achieve the intended project objectives.

4.1.7 National Industrial Sector Strategic Plan 2010-2020

One of the strategic objectives of this Plan is to develop the institutional capacity of existing vocational and technical training institutions to design and provide tailored human resource development training programmes at the enterprise level. Another is

to review curriculum of existing vocation and technical training institutions to align with the industrial sector human resource capacity requirements.

Both of the above are in line with aims of this Skills development Project.

4.1.8 National Land Policy, 2013

The Policy calls for adoption of an open policy on information to the public and seek consent of communities and local governments concerning prospecting and mining of these resources;

- i. Allow to the extent possible, co-existence of individuals and communities owning land in areas where petroleum and minerals are discovered with extraction activity;
- ii. Protect the land rights and land resources of individuals and communities owning land in areas where mineral and petroleum deposits exist or are discovered;
- iii. Guarantee the right to the sharing of benefits by land owning communities and recognize the stake of cultural institutions over ancestral lands with minerals and petroleum deposits.

Relevance This policy will apply to building construction phase of the project since various earth materials such as stone aggregate and gravel will be need.

4.1.9 National Water Policy, 1999

The objective of the policy is to provide guidance on development and management of the water resources of Uganda in an integrated and sustainable manner, so as to secure and provide water of adequate quantity and quality for all social and economic needs, with full participation of all stakeholders and mindful of the needs of future generations. Water use during the construction and operational phases shall be governed by this policy. This policy provides guidance on development and management of the water resources of Uganda in an integrated and sustainable manner so as to secure and provide water of adequate quantity and quality for all social and economic needs with full participation of all stakeholders and mindful of the needs of future generations.

Relevance This policy will apply to Component 2 of SDP which entails civil works and building construction.

4.1.10 National Policy on Disability in Uganda, 2006

The policy recognized the fact that people with disabilities (PWD) received less education and skills training, which reduced their employment opportunities and probably results in secondary disabilities and sometimes early death.

Sec 1.4.11 on Accessibility identified that many buildings do not have facilities such as ramps for use by PWD which constrains access to education, health and sports facilities, places of employment, cultural sites and other physical infrastructure.

Relevance This policy is relevant to the project in two aspects;

Guiding on recruitment during the construction phase to ensure no discrimination in regards to job opportunities; and

Buildings to be constructed by this project should therefore consider access and use by PWD.

4.1.11 Uganda Gender Policy, 2007

The overall objective of the national gender policy (1997) is to mainstream gender in national development process to improve social, legal, political, economic and cultural conditions of citizens, especially of women. The policy defines structures and key target areas for ensuring that gender concerns are routinely addressed in identification, design, appraisal, implementation, monitoring and evaluation of national, sectoral and local government policies, plans and programs. The gender policy mandates Ministry of Gender Labour and Social Development to coordinate monitor and review the formulation of gender-responsive policies and their implementation within sectors. In light of its central role in national resource mobilization and allocation, Ministry of Finance Planning and Economic Development's role in operationalizing the policy was defined as: ensure that, inter alia: all national policies, programs and projects are gender-responsive and resources are allocated to programs and institutions that promote gender equity.

Relevance The policy requires that for adequate implementation of gender aspects, there is need to develop a Gender Management Plan and emphasizes equal access to education services and project implementation benefits

4.1.12 National AIDS Policy (2004) and National Strategic Framework for HIV/AIDS activities in Uganda

This provides overall policy framework for national HIV/AIDS response. The National Policy on HIV/AIDS recognizes special groups, which include migrant workers. The Policy recommends the need to identify strategies to address migrant workers in view of the challenges posed by mobility and vulnerability to HIV. This is in line with the Constitution of the Republic of Uganda, 1995 Article 39. This Article creates the right to a clean and healthy environment, implying that workplace safety and health (including prevention of HIV infection), is a basic right of every citizen. Under its General Objective XIV, the State is committed to fulfilling the fundamental rights of all Ugandans to, among others, social justice and economic development and shall, in particular, ensure that all developmental efforts are directed at ensuring the maximum social and cultural well-being of the people.

A number of workers will be expected to come to the project area during construction and these are likely to be exposed to an environment that encourages the spread of HIV /AIDS and other STDs. The strategies to fulfil the objective of this policy will need to be incorporated in project during the planning process.

The National AIDS Policy is aimed at managing the HIV/AIDS pandemic and provides guidance on how to approach the pandemic. Together with the National Strategic Framework for HIV/AIDS activities in Uganda, it provides overall guidance for activities geared towards preventing the spread of HIV/AIDS.

This will be achieved through:

- i) Increased coverage and utilization of HIV prevention services. Attainment of this goal and outcomes is also contingent on
- ii) Increased adoption of safer sexual behaviors and reduction in risk taking behaviors,
- iii) A strengthened and sustainable enabling environment that mitigates underlying factors that drive the HIV epidemic,
- iv) Strengthened leadership and coordination of HIV prevention programs, and
- v) Strengthened information systems for HIV prevention.

Role of Workers;

- Initiate dialogue on HIV/AIDS between employers and workers and to actively participate in the development and implementation of workplace prevention programmes i.e. awareness campaigns, dissemination of information and education, care and support.
- Participate in the development of workplace policies
- Participate in mainstreaming of HIV/AIDS into the workplace policies and programs⁵

Relevance *Social ills of construction are common in such projects. This policy is relevant as it will guide the contractor and the involved stakeholders to develop and implementation HIV policies.*

4.1.13 National Construction Industry Policy, 2010

Also called “Policy for Development and Strengthening the National Construction Industry”, this policy recognised in Sec 3.5 that while all education and training institutions associated with the construction industry provide education and training in the technical skills of design and construction techniques there is need to formally incorporate into the curriculum the delivery of ‘soft skills’ of communication, socio-economic issues, contract law, and entrepreneurship for business creation, and business management.

Relevance *Curriculum review proposed in this project presents opportunity to incorporate management and socio-environmental skills training at the institute.*

⁵ Uganda National Policy on HIV/AIDS and the World of Work - MP, Hon. SydaN.M.Bbumba

4.1.14 Environment Health Policy -2005

The Environmental Health Policy concentrates on the importance of environmental sanitation which includes: safe management of human waste and associated personal hygiene; the safe collection, storage, and use of drinking water; solid waste management; drainage; and protection against disease vectors (MOH 2005). Environmental health practices include: safe disposal of human waste, hand washing, adequate water quantity for personal hygiene and protecting water quality, all influence the morbidity and mortality of diarrheal diseases.

As per this study, the public health aspect has been given adequate attention in preparation of this ESIA, aspects included impact on water and possible contamination identified, traffic impacts and accidents, occupational health and safety issues at key points, measures proposed to ensure that workers and people are not affected during the works and operation, noise and dust issues around areas of concentrated business as well as key administrative units.

***Relevance** The policy will guide implementation of Public Health and hygiene intervention measures on the project.*

4.2 Legal Framework

The key laws applicable to the environmental and social management associated with the proposed up scaling of Kitgum Technical Institute include but not limited to the following:

4.2.1 Constitution of the Republic of Uganda

This provides for, among others;

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

The Constitution in its National Objectives and Directive Principles of State Policy according to; Objective XIII provides for the protection of natural resources. It provides that "the State shall protect important natural resources, including land, water, wetlands, minerals, oil, fauna and flora on behalf of the people of Uganda".

***Relevance** The constitution is the prime law upon which all environmental laws and guidelines are based. The right for everybody to a clean environment is proffered by Section 237 and by preparing this Environmental and Social Impact Assessment, complied into this Project brief; thus complying to the requirements of this regulation.*

4.2.2 National Environment Act, Cap 153

The National Environment Act, Cap. 153, establishes and defines functions and authority of the National Environment Management Authority as a body responsible for management, monitoring and supervision of all environmental conservation activities (Section 4). This act provides for various strategies and tools for environment management, which also includes the EIA. According to Section 19 and 20, of this act requires that all projects listed in the Thirds Schedule of this act should under-go an Environmental Impact Assessment, this is due to the fact that such projects are likely to have significant environmental impacts.

Section 48 provides powers to NEMA, the district environment committee and local environment committees to be responsible for monitoring implementation of local land-use plans, which shall be in conformity with the national land-use plan.

While undertaking construction works, it is anticipated that there will be generation of different kinds of pollutants to the environment. Section 24 – 32, clearly affirms that a multitude of environmental standards that prevent contamination of air, water and soil resources were to be developed and implemented by different projects. Section 56 prohibits discharge of hazardous substances, chemicals, oil, etc into the environment except in accordance with guidelines prescribed by NEMA. Section 106 outlines provisions to enable compliance with obligations of international conventions on the environment.

Section 20 (i) of NEA requires that projects likely to have significant environmental impacts should have an EIA conducted before their implementation.

Relevance	<i>According to Section 1 © “Major land use changes”, requires that projects likely to cause a major change to the land uses, such as the proposed development projects under USDP funding of Phase 1, including other related activities listed in Section 10 “electrical infrastructure” , of this Third Schedule require that an Environmental Impact Assessment is undertaken. With required to the requirement of this Act, this report has been compiled into a Project Brief as per Section 19 of this Act. This Act benchmarks the requirements of Environmental Impact Assessments (EIA) that governs all the projects to be implemented as long as they fall under the requirements of the Third Schedule.</i>
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4.2.3 Education Act, 2008

This Act provides to amend, consolidate and stream line the existing law relating to the development and regulation of education and training, to repeal the Education Act and to provide for other related matters.

Section 5 of Part III (*Provision of Education and Training*) sets out the Responsibilities of stakeholders in education and training, which among others include;

- a) Setting policy for all matters concerning education and training;

- b) Setting and maintaining the national goals and broad aims of education;
- c) Providing and controlling the national curriculum;
- d) Evaluating academic standards through continuous assessment and national examinations;
- e) Ensuring equitable distribution of education institutions;
- f) Regulating, establishing, and registering of Educational institutions;

In addition, subject to this Act, the District Councils' Standing Committee responsible for education are responsible for the over sight role of all educational services decentralized to a district, municipal, town council, division and sub county. This, the committee carries out through, among other ways, developing an education development plan for promoting educational services for which it is responsible.

Relevance	<i>This Act highlights the role of stakeholder engagement, especially the local education committees, in all projects concerning educational services. As such, during the EIA, consultations and engagements with such committees shall be continuously carried out to ensure the proposed project lines with their plan (if established) and that all their views and concerns are considered during project implementation for the benefit of the community.</i>
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4.2.4 The Business, Technical, Vocational Education and Training Act, 2008

This Act provides for the promotion and coordination of business, technical, vocational education and training; to provide for the principles governing BTVET; to establish the institutional framework for the promotion and coordination of BTVET; to establish the Uganda Vocational Qualifications Framework; to provide for the financing of BTVET and for other related matters.

The objective of BTVET is—

- a) To provide relevant knowledge, values and skills for purposes of academic progression and employment in the labour market;
- b) To provide access to BTVET to a larger number of persons
- c) To improve the quality of BTVET;
- d) To make BTVET affordable;
- e) To enhance the productivity capabilities of the individual for employment and self-employment;
- f) To monitor gaps between supply and demand for skills; and
- g) To facilitate sound and sustainable financing and funding mechanisms for business technical vocational education training.

Among others, BTVET is based on the principle of prompting an intergraded demand driven and competent based modular BTVET system where learners enter the system

at various points suited to their skills and needs, with their qualifications certified and recognized at different levels.

Relevance	<i>This Act is relevant and shall guide Project implementation since infrastructure development under USDP shall be directly linked to the skill demand in the current labour market.</i>
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4.2.5 The Universities And Other Tertiary Institutions (Amendment) Act 2006.

This Act provides for the establishment of the National Council for Higher Education, its functions and administration and streamlines the establishment, administration and standards of Universities and other *institutions of Higher Education* in Uganda and to provide for other related matters. The amendment made to the Act in 2006 provides for the establishment of institution that award degrees but are not universities; to empower the national council for Higher Education to accredit not only institutions of higher education, but also the academic and professional programmes of those institutions in consultation with professional Associations and Regulatory bodies.

Relevance	<i>This Act shall be relevant to the proposed project since it also aims to design a curriculum and provide skills based on the labour market demands, revisions of which shall have an impact on the awarding and certification module. The Act shall therefore guide such activities.</i>
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4.2.6 Children Act, Cap 59 / the Children (Amendment) Act, 2016

The objective of this Act is to reform and consolidate the law relating to children; to provide for the care, protection and maintenance of children; to provide for local authority support for children; to establish a family and children court; to make provision for children charged with offences and for other connected purposes. This Act was amended in 2016 to enhance the protection of children; to strengthen the provision for guardianship of children, to strength the conditions for inter country adoption; to prohibit corporal punishment; to provide for National Children Authority, repeal the National Council for Children Act, Cap 60 and to provide for other related matters.

Relevance	<i>In the second schedule, the Act prohibits child Labour; employment or engagement of any child in any activity that may be mentally, physically, socially or morally dangerous and harmful to his or her health, education or mental, physical or moral development. The proposed project will involve employment of especially the local workforce, during the construction phase. Therefore the contractor shall work hand in hand with the local authority to avoid child employment; deeming this Act relevant to the project</i> <i>Part II of the same schedule of this Act defines a child as a person below</i>
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	<i>the age of eighteen years. By virtue of the level of admission (starting from O' level), the institute admits students that are below the age of eighteen. It's therefore important that this Act is used as a tool during the designing and implementation stages of the project to ensure those programs, infrastructure and the instructions are tailored to suit the child. It is also imperative that child protection against molestation and harassment especially by the contractor's labour force.</i>
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4.2.7 National Council for Children Act, Cap 60

Chapter 60 of this Act defines the National Council for Children Acts main purpose i.e. to provide a structure and mechanism for the proper coordination, monitoring and evaluation of all policies and programmes relating to the survival, protection and development of children in Uganda basing on the Councils objectives (s. 3) including;

- To articulate the needs and problems of children to government and other stakeholders in the project area of the care and protection of children;
- To coordinate the provision of child-based activities in the project area to ensure integrated approaches and maximum use of resources, to avoid resource wastage;
- To assist local governments in the development of action plans for children as well as in developing monitoring systems for their implementation;
- To act as a monitoring agency of activities by different stakeholders relating to children including monitoring their changing needs and/or emerging priorities.

Relevance	<i>(FIDA)⁶ Also affirms that Uganda has an obligation to implement children's rights in all projects as communicated in the Convention on Child Rights (CRC 1990).</i>
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4.2.8 Water Act, Cap 152

The objective of the Act is to enable equitable and sustainable management, use, and protection of water resources of Uganda through supervision and coordination of public and private activities that may impact water quantity and quality.

Section 18 requires that before constructing or operation of any water works, a person should obtain a permit from Directorate of Water Resources Management (DWRM). Construction is herein defined to include alteration, improvement, maintenance and repair of water systems. The Act also aims to control pollution of water resources (Sections 28 and 31).

Relevance	<i>This Act shall be relevant to the project where the available water is insufficient to supply both the institute needs and the construction works, the contractor may need to abstract water from the neighbouring water sources. In this case, to regulate the amount of water abstracted for</i>
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⁶Collection Of Children LAWS Hand Book - FIDA

	<i>sustainable use of the source, the contractor will be mandate to work hand in hand with DWRM to acquire the necessary permits and adhere by the conditions therein.</i>
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4.2.9 Local Governments Act, Cap. 243

This Act provides for decentralized governance and devolution of central government functions, powers and services to local governments that have own political and administrative set-ups. Kitgum District local government has the powers to oversee implementation of all development activities in her district, such as the proposed construction of the facilities in Kitgum Technical Institute. During the construction of the proposed projects listed above, for the USDP funding, relevant offices at Kitgum District will be actively involved right from conceptualization to operation. These include:-⁷

- (i) District Councils' Standing Committee responsible for education which is responsible for over-seeing the role of all educational services decentralized in their areas.
- (ii) The District Educational Officer is responsible for coordinating and providing technical and professional guidance in the management of Education and Sports policies, plans and programmes in the District.
- (iii) The District Community Development Officer is responsible for managing and coordinating the implementation of policies, programmes, projects and laws of government and Local Council III for the general welfare and development of the population.
- (iv) The District Labour Officer is responsible for promoting the social welfare and safety of the workers in the district/Urban Council.
- (v) The District Environment Officer is responsible support environmental conservation programmes in the District.
- (vi) The District Engineer who is responsible for coordinating and managing all engineering and technical works in the Kitgum.

According to Section 9 of the Act, a local government is the highest political and administrative authority in its area of jurisdiction and shall exercise both legislative and executive powers in accordance with this Constitution. Therefore the above relevant local government units or members shall have direct stakeholder and institutional responsibility over the proposed project.

The Local Governments Act provides for a system of local governments which is based on the district. Under a district administration there are lower local governments and administrative units. This system provides for elected councils for which executive committees of each council is nominated by the chairman.

Functions of this committee include:

- Initiating and formulating policy for approval of council;

⁷ Ministry of Public Service (2011) job descriptions and specifications for jobs in Local Government

- Overseeing the implementation of the government and councils' policies, and monitor
- Coordinate activities of non-government organisations in the district; and
- Receiving and solving disputes forwarded to it from lower local governments.

Relevance	<i>This Act provides for a decentralized system of government in which certain services have been made the responsibility of the central government, while others have been made the responsibility of the local governments. With regards to construction of this project, a number of relevant offices at the local government level have been listed whose interaction will be critical during project implementation.</i> <i>Review of the Environmental and Social Management Framework of 2014 affirms that interaction of district leaders is critical considering that District Environmental Officers were involved in the screening phase of these projects.</i>
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4.2.10 The Occupational Safety and Health Act, 2006

This is a two way Act: It obliges employers to protect their workers and charges the employees to take responsibility of their safety while at work. The Act is concerned of not only the work area but also its immediate environment.

According to section 13 (1)a of the Occupational Safety and Health Act, it is the responsibility of an employer to take as far as 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.

Section 19 (2) further spells that it shall be the duty of an employer to ensure that Personal Protective Equipment provided under sub section (1) is used whenever it is required.

Section 41 further stipulates that such work place shall be issued with certificate of registration by the Commissioner after appropriate fees have been paid. The certificate has to be in a format prescribed in Schedule 4 of this act. Section 41 also indicates that the Commissioner shall require the occupier of the premise sets up Safety Committee where applicable with 6 months from the time of occupying registered workplace.

Relevance	<i>This Act is of relevance to this project especially during its implementation to guarantee the safety of all the workers that will be involved in the project, the students, teaching and non-teaching staff at the institute and including the surrounding community.</i>
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4.2.11 Employment Act, Cap 219

This was enacted to revise and consolidate the laws governing individual employment relationships, and to provide for other connected matters.

Employment Act, 2006 repeals Employment Act (Cap 219) enacted in 2000 and it is the principal legislation that seeks to harmonise relationships between employees and employers of the contracted company to upgrade the proposed facilities, protect workers interests and welfare and safeguard their occupational health and safety through:

- Prohibiting forced labour, discrimination and sexual harassment at workplaces (Part II; Part IV).
- Prohibiting employment of persons under the apparent age of eighteen years, otherwise than as provided in this Act. (Part VI)
- Providing for labour inspection by the relevant ministry (Part III).
- Stipulating rights and duties in employment (weekly rest, working hours, annual leave, maternity and paternity leaves, sick pay, etc. (Part VI).
- Continuity of employment (continuous service, seasonal employment, etc (Part VIII).

In addition, the Act, in section 6 of Part II also prohibits discrimination in employment and this includes any distinction, exclusion or preference made on the basis of race, sex, colour, religion, political opinion, National extraction or social origin, the HIV status or disability which has the effect of nullifying or impairing the treatment of a person in employment or occupation or of preventing an employee from obtaining any benefit under a contract of service.

Regarding sexual harassment at the work, the Act, in section 7 of the same part directs that if an employee is sexually harassed in any way described in subsection (1) of the Act, by the employer or employer's representative, the employee is entitled to lodge a complaint with a labour officer and the labour officer has the powers to make all of the orders he or she could have made if the complaint was a complaint about unjustified disciplinary penalty or unjustified dismissal.

It goes ahead to indicate that every employer who employs more than twenty five employees is required to have in place measures to prevent sexual harassment occurring at their work place.

Relevance	<i>This Act is therefore deemed very relevant to the project since it will employ a number of workers, both local and international. It's therefore important that provisions of this Act are closely considered in the recruitment, drafting contracts and in the general employment procedure.</i>
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4.2.12 Public Health Act, Cap 281

This Act aims to avoid pollution of environmental resources that support health and livelihoods of communities. The Act gives local authorities authority (Section 103) to prevent pollution of watercourses in interest of public good like the advance pollution effects from the proposed project.

In Section 56 of part IX; the Act sets out the Duty of local authorities to prevent or remedy danger to health arising from unsuitable dwellings; where it mandates them to take all lawful, necessary and reasonably practicable measures for preventing or causing to be prevented or remedied all conditions liable to be injurious or dangerous to health arising from the erection or occupation of unhealthy dwellings or premises, or the erection of dwellings or premises on unhealthy sites or on sites of insufficient extent, or from overcrowding, or from the construction, condition or manner of use of any premises, and take proceedings under the law or rules in force in its area against any person causing or responsible for the continuance of any such condition.

Relevance	<i>This Act and its regulations will therefore be relevant to the project both in the design and construction phases to ensure that the project is implemented in such a manner as to avoid pollution of environmental resources that support health and livelihoods of communities</i>
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4.2.13 Workers' Compensation Act 2000

The Act Provides for compensation of workers for injuries suffered and scheduled diseases incurred in the course of their employment.

The Act further spells out degrees of compensation depending on the levels of incapacitation, calculation of respective earnings, medical examination and treatment of workers, agreement as to compensation by the worker, power of court to submit question of law, determination of claims and decisions of the court concerning the treatment of medical reports as well as procedures relating to claims.

Section 9 of part II however emphasizes the need for notification of an accident in order for compensation to be payable under this Act. It states that “Compensation may not be payable under this Act unless notice of the accident has been given to the employer by or on behalf of the worker as soon as is reasonably practicable, and in any case within one month after the date when the accident occurred or within three months after the date the symptoms of the occupational disease became apparent; but no notice is required where it is shown that the employer was aware of the accident or disease at or about the time it occurred or at the time when the symptoms became evident, or for any reasonable cause”.

Regarding the role of the Labour officer, section 10 of this Act emphasizes the need to notify the Labour officer of the area of any accident occurring either by telephone, or any other reasonable means and urges that the report be followed immediately by a written report of the accident before the worker has voluntarily left the employment in which he or she was injured

In the second schedule, the Act goes ahead to spell out the percentages for permanent incapacities upon which compensation for accidents can be calculated.

Relevance	<i>This Act is applicable to this project to deal with issues likely to accrue</i>
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	<i>from accidents while at work, during the construction phase.</i>
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4.2.14 Historical Monuments Act, Cap 46

Assented to on 21st October, 1967 and came into force on 15th May 1968, this Act provides for the preservation and protection of historical monuments and objects of archaeological, paleontological, ethnographical and traditional interest. The historical monuments act, Cap 46 gives mandate to the Department of Museums and Monuments to collect document and preserve cultural relics that have values to the community, the nation and the international community.

Relevance	<i>Initial assessments of the institutes revealed no exitu features (no features above the earth surface) of cultural preservation importance. However, the Act is relevant to the project and relates more relevantly to “chance finds” that could be made during earthworks in the construction phase. These physical cultural resources could be encountered during civil excavation works, and therefore such features of cultural importance shall be reported to the Department of Museums and Monuments for advice and where necessary undergo a forensic assessment. This is commensurate to the Project Appraisal Document, which qualified this project to respond to the Physical Cultural Resources World Bank Operational Policy (OP/BP).</i>
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4.2.15 Penal Code Act, 1950/ Penal Code (Amendment) Act, 2007

The Penal Code Act, 1950 was amended in 2007 and only a few sections were replaced, amended and/or repealed. The following is relevant to this project: the principal Act was amended by substituting for section 129 a section for “Defilement of persons less than eighteen years of age. Section 129 (1) spells out the punishment for defilement; Any person who performs a sexual act with another person who is below the age of eighteen years, commits a felony known as defilement and is on conviction liable to life imprisonment. This is relevant since the project will fetch a lot of workers from different regions. These being institutions, this will pose a risk on the students but also to those in the neighbouring schools. It is therefore important that the contractor considers this section in developing and implementing the code of conduct.

In addition, Section 3 the 1950 Act ascertains that a person (contractor) is not criminally responsible in respect of an offence relating to property if the act done or omitted to be done by the person with respect to the property was done in the exercise of an honest claim of right and without intention to defraud. This basically applies in situations of the lease agreements between the contractor and the land owners for the proposed workers’ Camp site in cases of conflict.

Whereas section 4 (1), address Incitement to violence by contractor’s workers under the project.

Any person who, without lawful excuse, prints, publishes or to any assembly makes any statement indicating or implying that it would be incumbent or desirable to do any acts calculated to bring death or physical injury to any person or to any class or community of persons; or to do any acts calculated to lead to destruction or damage to any property, commits an offence and is liable to imprisonment for three years.

Relevance	<i>It's upon this Act that Code of Conduct guidelines intended to establish and clarify the standards for behaviour of the contractor's workers under this project can be developed.</i>
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4.3 Regulations

The following regulations are relevant to the project;

4.3.1 The EIA Regulations, 1998

The procedures and guidelines for conducting EIAs are stipulated in this regulation. The regulations require a detailed study to be conducted to determine the possible environmental impacts, and measures to mitigate such impacts. At the end of the study, the environmental assessment report is submitted to NEMA to take a decision as to whether to approve or reject the project. As per section 12, public participation is a requirement.

Relevance	<i>These Regulations serve to guide the ESIA process with active involvement of the relevant stakeholders and neighbouring community to Kitgum Technical Institute. This study was therefore undertaken in line with the provisions the Regulation</i>
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The contractor should develop an EMS, as a contractual obligation. It also requires that an Environmental Audit is undertaken after one year (per annum) during the construction phase.

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

Section 6 (2) provides for the maximum permissible limits for 54 regulated contaminants, which must not be exceeded before effluent is discharged into water or on land. The national discharge limits for selected contaminants are given in Table below. Through limits on over 54 parameters, these regulations control discharges in surface watercourses.

Table 6: National discharge standards for selected pollutants

Parameter	National discharge standards
BOD ₅ (mg/l)	50
Suspended solids (mg/l)	100
Faecal coliforms	10,000 counts/ 100ml
Chlorine residual (mg/l)	1 mg/l

Ph	6-8
Phenols ($\mu\text{g/l}$)	0.2 mg/l
Oil and grease (mg/l)	10 mg/l
Total Phosphorus (mg/l)	10 mg/l
Temperature	20-35°C

Source: *The National Environment (Standards for Discharge of Effluent into Water or on Land) Regulations, 1999.*

Relevance	<i>It is important that the contractor incorporates proper waste water management measures in daily works to avoid discharge of such into the neighbouring lowland to the north of the Institute. .</i>
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4.3.3 National Environment (Waste Management) Regulations, 1999

These regulations require that waste is disposed in a way that would not contaminate water, soil, and air or impact public health. Construction projects are characterized with a diversity of wastes ranging from hazardous wastes to simple domestic wastes. Some of these hazardous wastes include; oil filters, used oils, oil drums to mention but a few. Management of these hazardous wastes has been provided for in this law.

Relevance	<i>This is in relation to onsite storage, haulage and final disposal. According to the regulations, in cases of hazardous wastes generated on site such as engine oils from servicing equipment, haulage and disposal should be done by a NEMA licensed entity.</i>
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4.3.4 National Environment (Noise Standards and Control) Regulations, 2003

Part III Section 8 (1) requires machinery operators, to use the best practicable means to ensure that the emission of noise does not exceed the permissible noise levels. The regulations require that persons to be exposed to occupational noise exceeding 85 dBA for 8 hours should be provided with requisite ear protection.

Table 7: Regulatory noise limits (Uganda)

Facility	Noise limits dB (A) (Leq)	
	Day*	Night*
Construction sites	75	65
*Time frame: Day 6.00a.m -10.00 p.m; Night 10.00 p.m. - 6.00 a.m.		

Source: *The National Environment (Noise Standards and Control) Regulations, 2003.*

Relevance	<i>Construction of projects listed under phase 1, will generate a considerable amount of noise, mostly from the concrete mixers, movement of earth mould equipments such as excavators and the like. This impact will be felt most during operational periods of the Institute as compared to holiday times. The regulation therefore employs the Contractor to minimise the</i>
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	<i>noise levels to be generated and also ensure that the noise levels don not exceed the recommendable permissible levels.. This can be achieved by using a noise-meter at an agreed frequency to check the noise levels during the construction phase.</i>
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4.3.5 Draft National Air Quality Standards, 2006

Construction of the projects for Kitgum Technical institute such as the administration block, Library and toilets will be undertaken by deploying a considerable number of equipment that will range from excavators, trucks, vehicles, graders, and these are all powered by fossil fuels. Combustion of these fossil fuels emits pollutants such as CO_x, NO_x, SO_x, VOC and particulates. The draft national air quality standards provide the following regulatory limits for these emissions Table below.

Table 8: Regulatory air quality standards for selected pollutants

Pollutant	Average time for ambient air	Standard for ambient air
Carbon dioxide (CO ₂)	8 hr	9.0 ppm
Carbon monoxide (CO)	8 hr	9.0 ppm
Hydrocarbons	24 hr	5 mgm ⁻³
Nitrogen oxides (NO _x)	24 hr 1 year arithmetic mean	0.10 ppm
Smoke	Not to exceed 5 minutes in any one hour	Ringlemann scale No.2 or 40% observed at 6m or more
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°C and 1 atmosphere).

Relevance	<i>Construction of these projects listed under Chapter 2, will result into pollution of the ambient air quality, therefore this regulation is important since it provides the acceptable limits of all pollutants that need to be observed during project establishment.</i>
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4.3.6 The National Environment (Audit) Regulations 2006

Regulation 8 provides that the owner /operator of facility whose activities are likely to have a significant impact on the environment shall establish an environment management system. It is also normal practice and a recommendation of National Environment Management Authority approvals to conduct mandatory audits of projects /infrastructure between 12 and 36. Section 6 of this regulation outlines the

content of an audit report and Section 7 requires that after 14 days of completion of the Audit report

4.4 The Relevant Multilateral Environmental Agreements (Meas)/Convention to Which Uganda Is Party

Uganda is a signatory to a number of International Agreements which are relevant to supporting the National efforts in environmental management including the welfare of communities. They are relevant to the infrastructure development provided they support or are in consonance with the applicable Laws and Regulations in Uganda. The sections below describe some of these agreements/conventions.

4.4.1 International Commitments on Gender Equality in Education

Uganda is a signatory to a number of international commitments on education. Key among these includes the Convention on the Rights of the Child (CRC), the Convention on Elimination of all Forms of Discrimination against Women (CEDAW), Education for All (EFA) Goals, the Beijing Declaration and Platform for Action (PFA) and the Sustainable Development Goals (SDGs). The CRC in Article 28 places commitment on the State Parties to fulfill the right to education for all children. The CRC also highlights the principle of non-discrimination in Article 2, emphasizing quality and equity between males and females at all levels. The CEDAW, Article 1, prohibits all forms of discrimination against women and girls' including the right to education and in Article 2 commits governments to take appropriate action on the advancement of women including advancement through education. Education For All (EFA) Goals particularly goal5 aims at eliminating gender disparities in primary and secondary education and achieving gender equality in education. The SDGs particularly Goal 4 aims at ensuring inclusive and equitable quality education and promotes lifelong learning opportunities while Goal 5 aims at achieving gender equality and empower women and girls. These commitments provide strong grounds for the delivery of gender equality in education and sports.

4.4.2 The Convention on Biological Diversity (CBD)

The aim of the CBD is to effect international cooperation in the conservation of biological diversity and to promote the sustainable use of living natural resources worldwide. It also aims to bring about the sharing of the benefits arising from the utilization of natural resources. Parties to this convention are required to undertake EIA for projects likely to have significant adverse effects on biodiversity and develop national plans and programs for conservation and sustainable use of bio diversity.

4.4.3 UNESCO World Heritage Convention, 1972:

In the International arena, the legal regime regarding Cultural Heritage basically emanates from the UNESCO World Heritage Convention, 1972. The convention is concerned with the protection of the World Cultural and Natural Heritage. This convention gives the basis of recommendations developed by experts to conserve

Cultural Heritage. Uganda, the country within which this project is to be constructed, is a member of UNESCO and as such is bound by the recommendations made by the convention in the protection of Cultural Heritage. This regulation covers all exchange findings on the project.

4.4.4 The African Convention on the Conservation of Nature and Natural Resources, 1968

The contracting states to this Convention are required to undertake / to adopt measures to ensure conservation, utilization and development of soil, water, flora and fauna resources in accordance with scientific principles and with due regard to the best interest of the people. The States are also required to ensure that the conservation and management of natural resources are treated as an integral part of National and /or Regional Development Plans. In addition during the formulation of all development plans, full consideration is required to be given to ecological, as well as to economic and social factors.

4.4.5 The United Nations Framework Convention on Climate Change (UNFCCC), 1992

The United Nations Framework Convention on Climate Change (UNFCCC) addresses the threat of global climate change by urging Governments to reduce the sources of greenhouse gases. The ultimate objective of the Convention is to stabilize the greenhouse gases concentrations in the atmosphere at a level that would prevent dangerous interference with the climate system of the world. The Framework does not have legally binding measures to contain GHG emissions. The Kyoto Protocol is the one whose focus is to decrease carbon dioxide emissions. It establishes emission – related targets for G -77 Countries as listed in Annex 1 of the Convention. There are three instruments through which Annex 1 Parties (which are the Developed Countries) may indirectly reduce their greenhouse gas emissions which are:

- Emission Trading;
- Joint Implementation (JI); and
- The Clean Development Mechanism (CDM).

4.4.6 The Convention for the Safeguarding of the Intangible Cultural Heritage, 2003

The Convention calls on States that have ratified it to Safeguard Living Heritage on their own territories and in cooperation with others. It seeks to celebrate and safeguard the intangible heritage distinctive for particular communities. It affirms that the intangible heritage of all communities – whether they are large or small, dominant or non-dominant – deserve respect.

The Convention defines “intangible Cultural heritage” as the practices, representations, expressions, knowledge, skills as well as the instruments, objects, artifacts and cultural spaces associated therewith – that communities , groups and, in some cases, individuals recognize as part of their Cultural Heritage. This Intangible Cultural Heritage, transmitted from generation to generation, is constantly recreated

by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity.

The Project therefore will be required not to disrupt the Living Heritage but will be expected to safeguard it so that it can ensure that the heritage where it exists continues to be practiced and transmitted within the community or group concerned. Communities should be actively involved in safeguarding and managing their Living Heritage, since it is only they who can consolidate its present and ensure its future.

4.4.7 The Stockholm Convention

The Convention seeks to protect human health and the environment from persistent organic pollutants (POPs). Uganda acceded to the Convention on 20th July 2004. Among the pollutants, controlled under the Convention are unintentionally released persistent organic pollutants. The National Implementation Plan (NIP) developed under the Convention in December 2008, to eliminate and minimize the impacts of (twelve) 12 of the most harmful hazardous chemicals in the world, identifies over 70% of the unintentionally released POPs to be a result of uncontrolled open burning of waste. The Plan, therefore, recommends reduction of unintentionally released POPs through emission at source by promoting cleaner production methods and Best Available Techniques (BAT) and Best Environmental Practices (BEP). Management of waste under the project will have to be undertaken in line with this requirement by avoiding burning of waste, among others.

4.4.8 Basel Convention and Minamata Convention on Mercury

The objective of the Convention is to protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds and it sets out a range of measures to meet that objective. These include measures to control the supply and trade of mercury, including setting limitations on specific sources of mercury such as primary mining, and to control mercury-added products and manufacturing processes in which mercury or mercury compounds are used, as well as artisanal and small scale gold mining.

The text of the Convention includes separate articles on emissions and releases of mercury, with controls directed at reducing levels of mercury while allowing flexibility to accommodate national development plans. In addition, it contains measures on the environmentally sound interim storage of mercury and on mercury wastes, as well as contaminated sites. Provision is made in the text for financial and technical support to developing countries and countries with economies in transition, and a financial mechanism for the provision of adequate, predictable and timely financial resources is defined.

4.5 World Bank Environmental and Social Standards

4.5.1 OP 4.01 Environmental Assessment

The World Bank's environmental assessment (EA) policy and recommended processing are described in Operational Policy (OP)/Bank Procedure (BP) 4.01: Environmental Assessment (Table 11). Its purpose is to improve decision making, to ensure that all options under consideration are sound and sustainable, and that potentially affected people have been properly consulted. Environmental Assessment (EA) is one of the 10 environmental, social and legal Safeguard Policies of the World Bank. EA is used in the World Bank to identify, avoid,

and mitigate the potential negative environmental impacts associated with Bank lending operations. This policy is considered to be the umbrella policy for the Bank's environmental 'safeguard policies'.

Table 9: OP 4.01 Environmental Assessment

Objectives	Operational Principles
To help ensure the environmental and social soundness and sustainability of investment projects	a) Use a screening process for each proposed project, as early as possible, to determine the appropriate extent and type of Environmental Assessment (EA) so that appropriate studies are undertaken proportional to potential risks and to direct, and, as relevant, indirect, cumulative, and associated impacts. Use sectorial or regional environmental assessment when appropriate;
	b) Assess potential impacts of the proposed project on physical, biological, socio-economic and physical cultural resources, including trans-boundary and global concerns, and potential impacts on human health and safety.
	c) Assess the adequacy of the applicable legal and institutional framework, including applicable international environmental agreements, and confirm that they provide that the cooperating government does not finance project activities that would contravene such international obligations.
	d) Provide for assessment of feasible investment, technical, and siting alternatives, including the "no action" alternative, potential impacts, feasibility of mitigating these impacts, their capital and recurrent costs, their suitability under local conditions, and their institutional, training and monitoring requirements associated with them.
	e) Where applicable to the type of project being supported, normally apply the Pollution Prevention and Abatement Handbook (PPAH). Justify deviations when alternatives to measures set forth in the PPAH are selected.
	f) Prevent and, where not possible to prevent, at least minimize, or compensate for adverse project impacts and enhance positive impacts through environmental management and planning that includes the proposed mitigation measures, monitoring, institutional capacity development and training measures, an implementation schedule, and cost estimates.
	g) Involve stakeholders, including project-affected groups and local non-governmental organizations, as early as possible, in the preparation process and ensure that their views and concerns are made known to decision makers and taken into account. Continue consultations throughout project implementation as necessary to address EA-related issues that affect them.

	h) Use independent expertise in the preparation of EA where appropriate. Use independent advisory panels during preparation and implementation of projects that are highly risky or contentious or that involve serious and multi-dimensional environmental and/or social concerns.
	i) Provide measures to link the environmental assessment process and findings with studies of economic, financial, institutional, social and technical analyses of a proposed project.
	j) Provide for application of the principles in this Table to the project under investment and financial intermediary activities.
	k) Disclose draft EA in a timely manner, before appraisal formally begins, in an accessible place and in a form and language understandable to key stakeholders.

Relevance: The Project actuates this policy because although there is justification for the proposed project, there are also environmental impacts associated with the construction and operation. OP 4.01 requires an Environmental Assessment (EA) of projects proposed for WB financing to ensure that they are environmentally sound and sustainable, and thus to improve decision making. In this regard, a comprehensive Environmental and Social Impact Assessment has been undertaken by the Proponent to establish a detailed Environmental Management Plan that will provide guidelines for environmental stewardship of the construction and operational phases of the Project.

4.5.2 OP 4.11 - Physical Cultural Resources

Cultural resources are important as sources of valuable historical and scientific information, as assets for economic and social development, and as integral parts of a people's cultural identity and practices. The loss of such resources is irreversible, but fortunately, it is often avoidable. The objective of OP/BP 4.11 on Physical Cultural Resources is to avoid, or mitigate, adverse impacts on cultural resources from development projects that the World Bank finances.

Table 10: OP 4.11 Physical cultural resources

Objectives	Operational principles
To assist in preserving physical cultural resources and avoiding their destruction or damage. PCR includes resources of archaeological, paleontological, historical, architectural, and religious (including graveyards and burial sites), aesthetic, or other cultural significance.	a) Use an environmental assessment (EA) or equivalent process to identify PCR and prevent or minimize or compensate for adverse impacts and enhance positive impacts on PCR through site selection and design.
	b) As part of the EA, as appropriate, conduct field based surveys, using qualified specialists.
	c) Consult concerned government authorities, relevant non-governmental organizations, relevant experts and local people in documenting the presence and significance of PCR, assessing the nature and extent of potential impacts on these resources, and designing and implementing mitigation plans.

	d) For materials that may be discovered during project implementation, provide for the use of "chance find" procedures in the context of the PCR management plan or PCR component of the environmental management plan.
	e) Disclose draft mitigation plans as part of the EIA or equivalent process, in a timely manner, before appraisal formally begins, in an accessible place and in a form and language that are understandable to key stakeholders.

Relevance: The activities of the Project have the potential to trigger this policy in a sense that during the construction phase, chance findings may not be rule out especially during earth excavations.

4.5.3 OP 4.12 - Involuntary Resettlement

This policy is applicable in situations involving involuntary taking of land and involuntary restrictions of access to legally designated areas. The policy aims to avoid involuntary resettlement to the extent feasible, or to minimize and mitigate its adverse social and economic impacts. It promotes participation of displaced people in resettlement planning and implementation, and its key economic objective is to assist displaced persons in their efforts to improve or at least restore their incomes and standards of living after displacement. The policy prescribes compensation and other resettlement measures to achieve its objectives and requires that borrowers prepare adequate resettlement planning instruments prior to Bank appraisal of proposed projects.

Table 11: OP 4.12 Involuntary resettlement

Objectives	Operational Principles
To avoid or minimize involuntary resettlement and, where this is not feasible, to assist displaced persons in improving or at least restoring their livelihoods and standards of living in real terms relative to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.	1. Assess all viable alternative project designs to avoid, where feasible, or minimize involuntary resettlement.
	2. Through census and socio-economic surveys of the affected population, identify, assess, and address the potential economic and social impacts of the project that are caused by involuntary taking of land (e.g., relocation or loss of shelter, loss of assets or access to assets, loss of income sources or means of livelihood, whether or not the affected person must move to another location) or involuntary restriction of access to legally designated parks and protected areas.
	3. Identify and address impacts also if they result from other activities that are: a) directly and significantly related to the proposed project, b) necessary to achieve its objectives, and c) Carried out or planned to be carried out contemporaneously with the project.

	4. Consult project-affected persons, host communities and local nongovernmental organizations, as appropriate. Provide them opportunities to participate in the planning, implementation, and monitoring of the resettlement program, especially in the process of developing and implementing the procedures for determining eligibility for compensation benefits and development assistance (as documented in a resettlement plan), and for establishing appropriate and accessible grievance mechanisms. Pay particular attention to the needs of vulnerable groups among those displaced, especially those below the poverty line, the landless, the elderly, women and children, Indigenous Peoples, ethnic minorities, or other displaced persons who may not be protected through national land compensation legislation.
	5. Inform displaced persons of their rights, consult them on options, and provide them with technically and economically feasible resettlement alternatives and needed assistance, including: a) prompt compensation at full replacement cost for loss of assets attributable to the project; b) if there is relocation, assistance during relocation, and residential housing, or housing sites, or agricultural sites of equivalent productive potential, as required; c) transitional support and development assistance, such as land preparation, credit facilities, training or job opportunities as required, in addition to compensation measures; d) cash compensation for land when the impact of land acquisition on livelihoods is minor; and e) Provision of civic infrastructure and community services as required.
	6. Give preference to land-based resettlement strategies for displaced persons whose livelihoods are land-based.
	7. For those without formal legal rights to lands or claims to such land that could be recognized under the laws of the country, provide resettlement assistance in lieu of compensation for land to help improve or at least restore their livelihoods.
	8. Disclose draft resettlement plans, including documentation of the consultation process, in a timely manner, before appraisal formally begins, in an accessible place and in a form and language that are

	understandable to key stakeholders.
	9. Apply the principles described in the involuntary resettlement section of this Table, as applicable and relevant, to subprojects requiring land acquisition.
	10. Implement all relevant resettlement plans before project completion and provide resettlement entitlements before displacement or restriction of access. For projects involving restrictions of access, impose the restrictions in accordance with the timetable in the plan of actions
	11. Assess whether the objectives of the resettlement instrument have been achieved, upon completion of the project, taking a count of the baseline conditions and the results of resettlement monitoring.

Relevance: The activities of the Project may trigger this policy in cases where expansion beyond the existing institute boundaries is inevitable. However, from the current designs of the proposed drawings, this has not been detected.

4.6 Institutional Framework

4.6.1 National Environmental Management Authority (NEMA)

The National Environment 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 ESIA's through issuance of ESIA guidelines, regulations and registration of practitioners. It reviews and approves environmental impact statements (EIS) in consultation with any relevant lead agencies like for such a project.

Relevance	<i>NEMA works with District Environment Officers and local environment committees at local government levels who also undertake inspection, monitoring and enforce compliance on its behalf. In Government ministries, NEMA works with Environmental Liaison Units to ensure that they effectively incorporate environmental issues in their activities, policies and programs.</i>
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4.6.2 Ministry of Education and Sports

The Ministry is responsible for providing policy direction, national standards and coordination of all matters concerning national educational institutions. It is also responsible for putting in place policies and initiating laws that ensure sustainable management of all educational institutions in Uganda. The ministry in 2001 formed national council for higher education which is responsible for provision of guidance in the establishment of institutions of higher education and the provision of assurance that quality and relevant education is delivered, by the licensed institutions.

Relevance	<i>As the Ministry in charge of the USDP projects, implementation of the proposed project will directly be supervised by the Ministry and therefore compliance to all the requirements of this Ministry, especially the ones proposed while implementing this project must be adhered to.</i>
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4.6.3 Ministry of Agriculture Animal Industry and Fisheries (MAAIF)

The Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) is mandated to "formulate, review and implement national policies, plans, strategies, regulations and standards and enforce laws, regulations and standards along the value chain of crops, livestock and fisheries". The ministry is also responsible for the "enhancement of crop production and productivity, in a sustainable and environmentally safe manner, for improved food and nutrition security, employment, widened export base and improved incomes of the farmers.

The ministry is organized into the following departments.

- Agricultural Planning
- Animal Production & Marketing
- Entomology
- Crop Production & Marketing
- Crop Protection
- Farm Development
- Finance & Administration
- Fisheries Resources and Development
- Fisheries Regulation Control and Quality Assurance
- Aqua-culture Management and Development.
- Livestock Health & Entomology

This ministry will be fundamental in offering guidance in designing programs, equipment and facilities tailored to offer skills that are labour market based. This it will do through offering their input right from the design stages and monitoring during the construction phase.

4.6.4 Ministry of Water and Environment (MoWE)

Ministry of Water and Environment is responsible for ensuring sound environmental management that in turn ensures that there is sufficient water for domestic, agricultural and industrial uses. MoWE has the responsibility for setting national policies and standards, managing and regulating water resources and determining priorities for water development and management.

Its technical arm is the Directorate of Water Resources Management - DWRM which is the lead agency under MoWE responsible for water resources management in Uganda. Its key functions include;

- i. Provision of water resources related advisory services to the government, private sector and NGOs at the national and local levels;

- ii. Regulation of water resources through issuing water use abstraction ,
- iii. Wastewater discharge permits,
- iv. Wastewater discharge,
- v. Hydraulic works construction,
- vi. Borehole drilling and easement certificates;
- vii. Water resource monitoring and assessment and Integrated Water Resources Management (IWRM) activities.

Relevance	<i>The Directorate comprises three departments namely Department of Water Resources Monitoring and Assessments, Department of Water Resources Regulation and Department of Water Quality Management. Aspects of water quality will be part of this project.</i> <i>In areas where NW/SC is not available or is insufficient, water abstraction shall be undertaken after obtaining an Abstraction Permit from DWRM that is issued by the Director, in regards to Section 18 Division 3 of the Water Act.</i>
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4.6.5 Ministry of Gender Labour and Social Development

The Ministry's mandate is to empower communities to harness their potential through cultural growth, skills development and labour productivity for sustainable and gender responsive development. The Ministry is key in streamlining matters of gender, child protection and Occupational health and safety of the workers and the public in the project. During construction of this project, the key instrumental departments will be; Department of Occupational Health and Safety, Department of Gender and Equality, and Labour.

Relevance	<i>Construction of this project will employ a number of workers whose safety is critical and are over seen by the Department of Occupational Safety of Health. Regulation of workers will be overseen by the Labour department.</i> <i>The Department of Gender and Culture requires that employment of workers is gender sensitive and cultural norms of where the project is located are respected.</i>
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4.6.6 Department of Occupational Safety and Health (DOSH)

The Department will be mandated to ensure compliance to the Occupational Safety and Health Act, 2006 of Uganda. It also undertakes monitoring of construction places to ensure that they are first of all registered as workplaces and workers occupational health through ensuring adequate provision of Personnel Protective Equipment (PPEs) among others.

Relevance *One month before commencement of works, the Contractor must*

register all the proposed worksites as a workplace with this Department signed by the Commissioner. This department also has safety Inspectors that will inspect the construction site time and again to ensure safety in all aspects for workers. Thus the relevance of the above named institutional framework.

4.6.7 Ministry Of Health

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

Under decentralization law in Uganda, power, authority and resources are decentralized from the central government directly to the districts. Health services in Uganda are delivered within the framework of decentralization. The local governments are empowered to appoint and deploy public servants, including health workers, within the districts, through the District Service Committees. It has also established regional health facilities (which are Health Centers IV). The District Health Officers will be responsible for performing the planning, and supervision functions required of monitoring health services and products in their respective districts.

Relevance	<i>The health centres within Kitgum , especially Kabululu Health Center III and Kitgum health centre IV, shall be very instrumental in providing medical care to workers that shall sufferer accidents that cannot be treated by the First Aid Box present at site. These health facilities shall also provide information and services related to HIV/AIDS. This ministry is therefore relevant to this project</i>
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4.6.8 The National Water and Sewerage Corporation (NWSC)

NWSC is a parastatal that operates and provides water and sewerage services for 23 large urban centres across the Country. NWSC's activities are aimed at expanding service coverage, improving efficiency in service delivery and increasing labour as well as ensuring the quality of water supplied its customers.

Relevance	<i>This institution is relevant considering that the Institute is currently supplied by national waster which may also be the source of water to the proposed projects scheduled for implementation under the USDP first phase financing. This source of water will be required right from mobilization to operation.</i>
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4.6.9 Uganda Police

The Uganda Police under the Police Act, Cap 303, is mandated to keep law and order in Uganda. It is responsible to ensuring security of property and life in the country.

Enforcing law and order in the project area, Child protection, and crime control, among others.

<i>Relevance</i>	<i>Kitgum as a district has a police force that will be responsible for ensuring law and order. While undertaking construction of this project, it is very likely that there could be legal cases such as theft, accidental death of persons. It is recommended that in case of such eventualities, the matter is reported to the near-by Police station.</i>
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4.6.10 Local Administration Structures

The proposed project falls within jurisdiction of Kitgum District. A district is headed by a Chairman Local Council Five (LC5) who is the political head and Chief Administration Officer, the technical head of district administration. Technical District personnel directly involved with the project include Environmental Officer, District Planner, Community Development Officer, District Director of Health Services, roads Officer, District Water Officer and District Engineer.

<i>Relevance</i>	<i>The technical persons involved are very critical to operationalization of this project. For example, the District Physical Planner will one way or another be consulted before implementation the proposed projects within Kitgum Technical Institute. District Community development officer, is responsible for managing interactions of the project and the community;</i> <i>District Environment Officer, is there to ensure minimal interruption of the environment, waste management and conservation among others. This institutional framework is therefore very necessary to this project.</i>
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CHAPTER 5: ENVIRONMENTAL AND SOCIAL BASELINE CONDITIONS

5 Introduction

This chapter describes the project area and surroundings in terms of the physical, biological and socio-economic characteristics. In order to assess the conditions within the project area, information and characteristic factors concerning the proposed project area have to be investigated and stated for the success of the project.

5.1 Kitgum Technical Institute

5.1.1 Background

Kitgum Technical Institute started as a Rural Trade School in 1970 by Uganda Catholic Parent's Association Kitgum branch offering Carpentry and Joinery, brick laying and concrete practice courses. It became a junior technical school in 1973 and was then upgraded to a technical institute in 1983.

The Institute, whose mission is to produce competent technicians and engineers through quality skills training in transportation and highway engineering, drainage, bridges and road construction and related fields is authorized to offer regular and short-term courses of study and training in such field of occupations as the Minister may specify in the directives and instruments establishing the institution. The main training areas of the institute include;

- Automotive mechanics;
- Building construction and the built environment;
- Electrical installations electrical repair and electronics;
- Information and communication technology; and
- Tailoring, clothing foot ware and textiles;

In addition to the above, the institute also offers Non-formal training to community members in categories of school drop outs, those that have never been to school, among others. Non-formal students enrol in various ways, including;

- Selection by NGOs (Development partners) who identify the needy members in the community and help them enroll for this program;
- Government sponsorship; and
- Self sponsorship.

Regardless of the method, they all sit for interviews and undergo verification. Non-formal students train during holidays and the programs offered under this arrangement include the following;

- Carpentry and Joinery;
- Simple engines and motorcycle repair;
- Welding and fabrication;
- Hair dressing;
- Domestic electrical installations;
- Tailoring; and

- Brick laying, among others

5.1.2 Bio-physical Environment

5.1.2.1 Project location

The institute covering an area of about 22.4Km is located in the northern region of Uganda in Nyanza village, Pager Division, Pongdwongo Parish, Kitgum Municipality Kitgum District. Kitgum District is one of the districts in Northern Uganda named after its “chief town” of Kitgum where the district headquarters are located. It is bordered by South Sudan to the north, Kaabong District to the east, Kotido District to the south west, Agago District to the south, Pader District to the south west and Lamwo district to the North West.

5.1.2.2Vegetation

The vegetation in Kitgum is mainly of woody Savannah characterised by woody cover and grass layer. The dominant grasses are Hypanthernia, Penicum, brachania and Seteria. Acacia cambrelum constitutes the dominant tree. The District is drier in the northeast and the vegetation includes shrubs.



Figure 26: Google aerial view of Kitgum Technical Institute



Figure 27: Overview of the institute

5.1.3 Socio-economic Baseline

5.1.3.1 Energy

The main energy source used within the institute is the national electricity grid for the power in the class rooms and workshops; firewood is used for cooking and sometimes. The institute is provided with 3 phase connection from the UMEME medium voltage grid. In cases of load shedding, a 15 KVA capacity generator is installed serving only lightings to administration building, classrooms and accommodations.



Figure 28: Firewood being used for cooking

5.1.3.2 Building structures

The Institute has got a number of building structures that serve various purposes, most which are in fairly good conditions. This range from;

- Accommodation units;

- Workshops;
- Classrooms;
- Administration offices;
- Sanitary facilities; and
- Other auxiliary services.

5.1.3.2.1 Administration block;

This is on the left hand side as towards the gate and houses the Principal's office, Deputy Principal's office, Bursar's office, staff room and a store for training equipment.



Figure 29:Administration block



Figure 30: Staff room

5.1.3.3 Training facilities

5.1.3.3.1 Library

Rev. Fr. Isaac Augustine A'Daku Library was constructed in remembrance of the Rev. Fr who, during his time as the Chair person Board of Directors contributed a lot to the development of the institute, including fencing off of the institute using his personal money.

However, this library is not enough for the number of students at the institute and the book stock is still lacking. In addition, the reading furniture especially tables are as few as only six. This makes it hard for those that need to write while researching and lack tables.



Figure 31: Institute Library

5.1.3.3.2 Classrooms

The building for the classrooms were found in a generally fair condition, but need a maintenance program for renovation of the walls, roofing system, door and windows, ceilings, and storm water drainage system.



Figure 32: One of the classroom blocks



Figure 33: Non-formal students undergoing training in the hair dressing classroom

5.1.3.3 Workshops

The institute currently has a few workshops, including; tailoring, Building construction, motor vehicle mechanics, carpentry and joinery, welding.

However, most of the above are small compared to the student demand and the equipment therein are inadequate and/or faulty.



Figure 34: Tailoring workshop



Figure 35: Store for tailoring equipment



Figure 36: Building construction workshop

5.1.3.3.4 ICT Workshops

Most, if not all the departments and the courses offered at the institute require knowledge in ICT training. Kitgum Technical Institute has got two ICT labs; One for students, this was constructed and equipped by the administration and the second is basically used by the staff and this was provided by Ministry of Education and Sports. The latter is solar operated. Both labs are connected to wireless internet; however, availability and reliability still remains a challenge.

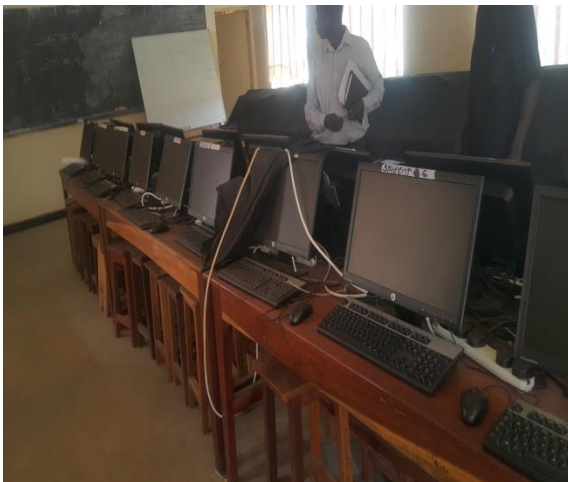


Figure 37: Student's computer lab

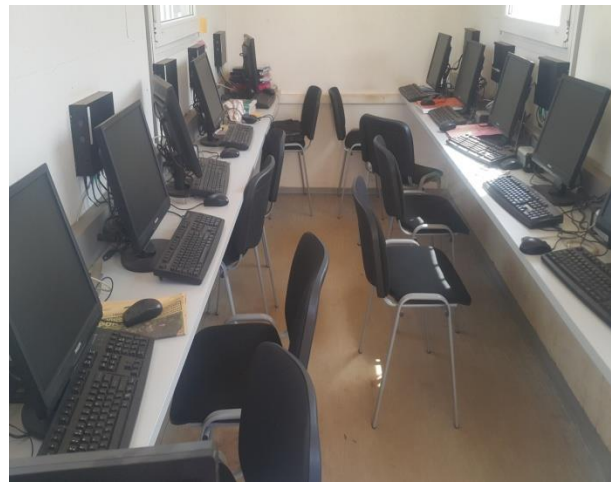


Figure 38: Staff computer lab

5.1.3.4 Water Supply System

The institute currently relies on rain water harvesting and a borehole for all its water supplies especially domestic purposes such as drinking, cooking, toilets and bathroom. A number of water tanks have been connected to roofs of buildings to collect water. The borehole is seasonal and dries up during the dry months.

Efforts are in place to install a tank and water supply systems by National Water and Sewerage Corporation to supply water to the school and the entire community.



Figure 39: Water tank for rain water harvesting



Figure 40: Borehole



Figure 41: NWSC service station under construction at the institute



Figure 42: Water tank to be installed by NWSC

5.1.3.5 Sanitary facilities

The institute has;

- 5 pit latrines and 2 bath rooms serving the boy's dormitories, staff and guests. However, 2 pit latrines are already full and planned to be demolished and remaining with only 3 pit latrines;
- 3 pit latrines and a bathroom serving for girl's dormitories and women staff;
- 9 staff quarters provided with separate pit latrines and bath rooms.

Important to note is that the above mentioned sanitary facilities are pit latrines.

In addition, Farm areas, laboratories, administration building and staff offices, classrooms, laboratory and the library have no sanitary facilities. A shortage of toilets and bathrooms was observed; the available facilities are not adequate to serve the current students and staff population.



Figure 43; Admin Sanitary facilities



Figure 44: New sanitary facilities



Figure 45: Facilities at the boys' dormitories



Figure 46: Old sanitary facilities



Figure 47: Septic tank under construction by Building Construction students

5.1.3.6 Waste management

As earlier mentioned the institute runs various daily activities according to the courses offered; among these include mechanics, carpentry and welding, and tailoring. These, in addition to the student accommodation units, yield various types and quantities of

waste which should be well managed according to the existing regulations⁸. Field investigations revealed that waste management at the institute is still not satisfactory. A few waste collection bins were seen in the tailoring and hair dressing workshops, however, sorting was not being carried out and a number of such generated waste were being burnt within the school premises, a practice that is not efficient. In addition, outside the mechanics workshop just where motorcycles are parked on the verandah, oils were seen to have leaked on the floor. Such used oils are classified as hazardous wastes according to the National Environment (Waste Management) Regulations⁹, and should therefore be handled and disposed off in an environmentally friendly manner.

⁸ The National Environment (Waste Management) Regulations, S.I. No 52/1999, The Public Health Act Cap 281.

⁹ Third Schedule (Regulation 2) *List of Hazardous Characteristics*



Figure 48: One of the few containers outside workshops



Figure 49: Oil spills outside the mechanics workshop



Figure 50: Waste dumping pit



Figure 51: Burning of especially leaves outside classrooms and workshops

5.1.3.7 Recreation

Educational system should create a positive and supportive environment, evokes Students' interest in recreational activities. It is obvious that a type of education that satisfies only intellectual needs is not sufficient. Therefore, it is important to foster positive attitudes towards exercise early in youth, which would allow young people to preserve the healthy habit of exercise throughout their whole life

In this regard, Kitgum technical institute has got one foot ball pitch for purposes of recreation of students



Figure 52: Foot-ball pitch

5.2 Environmental and Social Baseline of Kitgum District

Kitgum is one of the districts in the Northern region of Uganda. It is bordered by Gulu district in the Northwest, Lamwo in the North, Agago District in the South East, Pader District in the South, Republic of Southern Sudan in the Northeast and Kotido District in the East. It lies between latitudes 2° North and 4° N and longitudes 32° East and 34° East, with an average altitude of 1,100metres above sea level. Kitgum District headquarters are situated centrally in the District Kitgum district has a total area of about 4,042 Sq. Kilometres of which land area is 4,039 sq. km. The Map below shows the districts neighbouring Kitgum District.



5.2.1 Bio - Physical

5.2.1.1 Vegetation

The vegetation in Kitgum is mainly of woody Savannah characterised by woody cover and grass layer. The dominant grasses are *Hypanthernia*, *Penicum*, *brachania* and *Seteria*. *Acacia cambrelum* constitutes the dominant tree. The District is drier in the northeast and the vegetation includes shrubs.

5.2.1.2 Soil

The soil type in Kitgum vary with localities but is generally well-drained sandy, Clay, Loam and sand clay. In some places the following soil exists: Foresails: These are strongly weathered and generally with low fertility. It covers much of the district, Gleysols: These are poorly drained soils, liable to water logging. They are found along Pager River

5.2.1.3 Climate

Kitgum District has dry and rainy seasons. The district receives average annual rainfall of 1300mm. Rain starts in late March or early April and ends in November. Rainfall is bimodal with peaks in April and August. It is dry-hot and windy from December to mid-March. The average monthly maximum temperature is 270 c and average monthly minimum temperature is 170 c.

5.2.2 Socio - Economic Activity

5.2.2.1 Source of livelihood

Like many districts in Uganda, Kitgum district is predominantly engaged in small scale agriculture, animal husbandry and produce buying. Bee Keeping and scanty fishing is also carried out. Fish farming is also carried out by some few farmers. The people grow a variety of food and cash crops. Over 90% of the farmers are engaged in crop production as their major activity and a small percentage in livestock rearing, Bee keeping and fishing farming on small family holdings using family labour and rudimentary hand tools such as hoes as common input and output is mostly for home consumption. Petty trading is also done in general merchandise locally manufactured and in imported goods. The major food crops grown include; SimSim, UpLand rice, Green Vegetables, Fruit trees (Citrus/Mangoes) Beans, Groundnuts, Sorghum, Maize, Millet Cassava, Sweet Potatoes, Pigeon Peas and Sunflower. Cotton and Tobacco are the major traditional cash crops. The industrial sector of the district is still in its infancy and it is mainly characterized by agro processing industries mainly for milling of grains (maize, Sorghum, millet, rice) and cassava. There is a cotton ginnery in Kitgum Town. The district tourist potential is still virgin. Potential areas for tourism attraction include Mountain ranges / Hill and Cultural Sites in the Sub Counties of Orom, Namokora, Omiya Anyima, Lagoro and Mucwini

5.2.2.2 Administrative Structure

The District has one county, nine rural Sub-counties, and one Town Council. The District constitutes of 51 parishes and 437 village councils. The District Council is the highest political authority in the district, with 22 members under the headship of the District Chairperson. It has a technical team headed by the Chief Administrative Officer, distributed in 9 directorates and 11 departments. Each of the departments has a head and under every directorate there are a number of Sections.

5.2.2.3 Population

According to the National Housing Population Census of 2014, the total number of persons are estimated at 204,048 persons with 104,790 (female) and 99,258 (male). The map below shoes the distribution of population distribution per sub-county. As such, Kitgum Technical Institute is located in the sub-county with the highest population.

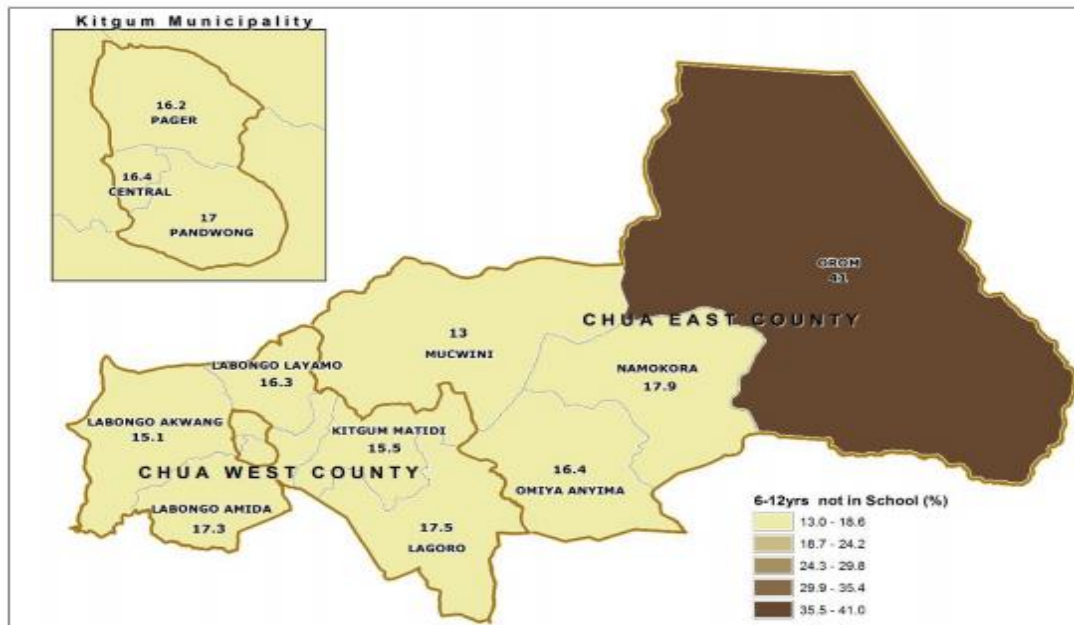


Figure 53: Map showing population distribution in Kitgum district.

5.2.2.4 Literacy Rates

Kitgum has over 172 schools and these are distributed as follows:-

No	Type of Schools	Numbersz
1	Nursery School	30
2	Primary School	116
3	Btvvet Schools	2
4	Teachers Collage schools	2
5	Special Needs School	1

Due to a high number of schools in Kitgum, it has greatly improved on the literacy levels within Kitgum.

Literacy is defined as one's ability to read with understanding and to write meaningfully in any language. The 2002 population census measured literacy for all persons aged 10 years and above. In addition, the adult literacy rates are computed for those aged 18 years and above. During the 2002 Population and Housing Census, the literacy rates for Kitgum district were at 77.4 percent for males, 45.4 percent for females and 61.1 percent overall. The literacy rate for Uganda was 69.6 percent.

5.2.2.5 Fertility Rate

Fertility indicators measure the frequency of child birth in a given population. Such measures can tell how fast the population of a given country or region would

increase. The fertility rate for Kitgum district is 6.3 (2013) compared to 6.2 (UDHS 2011) at National level.

5.2.2.6 Health Infrastructure

This section classifies the distribution of health facilities within the district. Kitgum district has 25 Health Units of different categories. Some of them are Government hospitals while others are owned by Non -Government Organizations. The distribution is fair, but some of them lack the basic equipment to offer reasonable services. Many rural units require rehabilitation and equipping. Besides diseases, poor nutrition has contributed to worrying situation. Because of the cross cutting nature of health issues, there is need for an integrated approach to health. There are various NGOs both Local and International that are involved in AIDS prevention and control in the district. Such activities include blood screening and counselling, medical treatment, home care, pastoral education, health education, AIDS research and orphan support.

5.2.2.7 Safe Water Coverage

This section will cover the percentage of people within a reasonable walking distance (1.5km for rural and 0.2km for urban) to an improved water source. A reliable water source is one capable of supplying its beneficiaries, a minimum of 20 litres per capita per day. Safe water coverage for the district is at 66.6 percent against the National level of 65 percent. Proportion of population with sustainable access to an improved water source in rural area: 66.5percent while for urban setting range between 80-90%.

5.2.2.8 AIDS Control

(Prevalence, Control and Treatment) According to the health sector strategic plan (HSSP III), HIV/AIDS is one of the communicable diseases that accounts for over half of the total burden of disease as leading cause of ill health and mortality in Uganda. The overall objective of the communicable diseases cluster is to reduce the prevalence and incidence of communicable diseases by atleast 50 percent as per the MDGs and NDP target.

CHAPTER 6: STAKEHOLDER ENGAGEMENT

6 Introduction

A “stakeholder” can be defined as: “Any individual, group, or institution with a vested interest in the natural resources of the project area and/or who potentially will be affected by project activities and have something to gain or lose if conditions change or stay the same¹⁰.“

Stakeholders are all those who need to be considered in achieving project goals and whose participation and support are crucial to its success. Stakeholder analysis identifies all primary and secondary stakeholders who have a vested interest in the project. Stakeholder analysis is a process of systematically gathering and analyzing qualitative information to determine whose interests should be taken into account when developing and implementing a project.

Under sub-regulation (1) of regulation (12) of the Environmental Impact Assessment regulations for Uganda (1998) and best international practice, the project developer is required to undertake public consultations during the EIA process. Stakeholders were engaged during the process to create awareness about the project and obtain their perceived positive and negative, social and environmental impacts and inputs into project alternatives as well as mitigation measures.

6.1 Objectives of stakeholder engagement

The objective of the consultations included to:-

- i. Explain the project and create awareness;
- ii. Identify relevant policies and laws;
- iii. Obtain baseline environmental and social conditions in the proposed project area based on local knowledge;
- iv. Obtain their perceived economic, social and environmental benefits so that they can be enhanced during project implementation and operation;
- v. Obtain the perceived potential negative environmental and social impacts so that they can be mitigated;
- vi. Enlist stakeholder participation in positive change associated with the proposed facilities;
- vii. Provide equal opportunity to stakeholders and the general public members to get involved in project planning;
- viii. Obtain feedback on addressing environmental and social concerns of the project;
- ix. Contribute to the evaluation of project alternatives; and
- x. Build trust with the stakeholders.

To achieve the above objectives, our public consultations were guided by Ugandan guidelines despite the lack of regulations for public consultation. The national

¹⁰ 1Golder. B, Gawler. M, 2005: Cross-Cutting Tool: Stakeholder Analysis, WWF (USA).

guidelines for EIA in Uganda require that the public is given full opportunity for involvement and participation throughout the EIA process. People including individuals, or groups of local communities that may be directly affected by this proposed project were therefore, the focus for public involvement as detailed below;

Following the criteria set above, the team identified various key stakeholders in relevant lead agencies and within the project area. The table below shows the identified relevant stakeholders to this project.

Table 12: Stakeholders involved

CATEGORY	STAKEHOLDER	PURPOSE OF CONSULTATION
Government – National	Ministry of Education, Science, Technology and Sports	• Ascertain whether there are existing guidelines in regards to implementation of the proposed project • Identify laws and policies specific to each body relevant to the project • Involvement of the bodies in project implementation and monitoring
	Occupational Health & Safety Department in Ministry of Gender, Labour & Social Development	
	Uganda Aids Commission	
	National Environment Management Authority (NEMA)	
	Ministry of Gender, Labour & Social Development – Department of occupational Health and Safety	
Government – Local	District Technical and Political Team Municipal and Town Councils	• Collect all relevant information about the trends, practices and norms in the project area within which the project will operate • Discuss potential impacts and devise ways of mitigating them
Institutions	Board of Directors Administration Teaching and Non-teaching staff Students	
Community	Neighbours to the institutes	• Find out community expectation of the proposed project • Encourage community participation and involvement in project implementation • Seek community based views on mitigation of the anticipated impacts • Create a sense of ownership/project acceptability

Public consultation was critical in assisting the team to understand the local conditions and highlighting the socio-economic and environmental concerns/impacts and feasible mitigation measures. Different modes of consultations were carried out and these include among others;

- Community meetings
- One on one meetings
- Telephone conversations

6.2 Public Participation Methods

The institution and the entire public participated actively through organised meetings and in some urgent cases, personal or one on one meetings were held. These methods included:-¹¹

a. One-on-one Engagement

Stakeholders were engaged individually, both formally and informally. In formal engagements, one on one discussion were used for information sharing. Informal procedures are flexible and sometimes include ad-hoc conversations that can allow you to gather additional information from stakeholders.

These one on one engagements were used in consulting individual local government officials like the District environment officer and when attending to affected person that approached team members.

b. Small Group Discussions

These were used to engage individuals or a very small group (two or three individuals), and were convened in situations where one on one engagement were not adequate. They involved 3 to 4 individuals brought together to either make a decision forward, or to resolve a much bigger situation.

This public participation strategy was used in engaging representatives from the following groups of stakeholders;

- The Institute administration, and
- The District representatives.

Table 13: National Agencies Consulted

National Agencies		Officer/s	Designation	Date	
Uganda Commission	AIDS	Oola Eugene	Head Planning	18 th August 2018	
		Sarah Khanakwa Quintu Rwotoyera Charles Otai	Head Mobilization OGA M&E		
Ministry Of Gender, Labour And Social Development		Maggie Kyomukama	MGLSD. Asst Comm GWA	4 th August, 2018	

¹¹ IESO, Denmark, November 29,2012, Stakeholder Engagement Process

,Department Of Gender and Department of Occupational Health and Safety			
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c. Focus/working Group Engagements (FGE)

These were used during consultation involving (4 to 12 members) group of stakeholders facilitated by a skilled moderator. It is designed to obtain information about preferences and opinions in a relaxed, non-threatening environment. The topic is introduced and, in the ensuing discussion, group members influence each other by responding to ideas and comments. The moderator may use some predetermined questions as prompts to encourage discussion or to return the conversation to the intended focus of the discussion. These were used in engaging staff members and community leaders.

d. Mass Meetings

These are used in engaging large numbers of people to discuss a common issue and get views or suggestions that are representative of a large population of people. During the assessments, were held when engaging the communities around the institute that may in one way or another be affected or could affect the planned construction works.

6.3 Consultation Findings

Consultations were undertaken with a number of stakeholders and the concerns raised for consideration are presented below for each group of stakeholders consulted.

Table 14: Views of some of the stakeholders consulted

No.	Stakeholder category	Key concerns and views
1	National Agencies	<i>Labour and employment</i> ▪ Priority to be given to community members ▪ Workers should not be Subjected to non-conductive employment terms ▪ Workers' Safety and welfare should be catered for. <i>HIV/AIDS</i> ▪ Strict prohibition of construction worker's engagement with the students at the institute. Heavy penalty should be put in place ▪ Continuous sensitization of workers and the community on issues pertaining HIV/AIDS

Physical Cultural Resources

- In case of any chance finds during construction especially excavation, engage Department of Museums and antiques
- The contractor should not cause Damage of living culture

Occupational Health and Safety

- Contractor should always have a First Aid Kit on site, and workers should be trained to use them;
- Emergency Preparedness Plan; and a stand-by vehicle in case of serious accidents;
- Demarcate the construction sites using reflector tape on excavations;
- Provision of adequate Personal Protective Gear after a risk assessment is carried out;
- Prepare a Safety and Health Policy; Here the contractor commits himself to ensuring safety on site
- Proper waste management especially hazardous waste on the construction site;
- Fire-fighting equipment e.g. fire extinguisher and workers should be trained to use them.
- Working Hours should be clearly specified and communicated to all workers

2 District leadership

- Engage the community members at all levels of the project;
- Support the community through purchase of the of construction material; Emergency Preparedness Plan; and a stand-by vehicle in case of serious accidents;
- The project should also support the community through trainings o school drop outs
- The project should also support the community through value addition to Kitgum s' products like the fishing business
- The community should be sensitized about HIV/AIDS as well as the workers and students
- PWDs should be catered on all the buildings to be constructed at the institute.

- | | | |
|---|------------------------|--|
| 3 | Institute leadership | <ul style="list-style-type: none"> ▪ As Kitgum Technical Institute, we humbly welcome the project ▪ We request the project to support us with a strong fence so as to keep the school property very well ▪ Workers with drug abuse vices should be disqualified after proper warning ▪ Engage the institute leadership at all levels of the project so that the project can move on smoothly ▪ All workers should be restricted from accessing other institute premises apart from the construction sites ▪ All construction sites should be cordoned off to prevent distraction, noise and dust impacts |
| 4 | Neighbouring community | <ul style="list-style-type: none"> ▪ Support the neighbouring community by purchasing construction material from them and providing them with employment opportunities. ▪ Provide free HIV/AIDS counselling and testing services for the workers and community; ▪ The contractor should sensitize the workers on social behaviours especially family break ups and early pregnancies that normally happens on various projects ▪ Sprinkling of water on dusty haulage routes outside the institute to suppress dust; ▪ The project should provide the community with some trainings especially in agriculture |

Detailed records of National agencies stakeholder consultations are presented in Appendix 1

6.4 Reporting

In addition to documenting the public consultation process, outcomes and addressing comments received, it was important to report results of these activities to stakeholders. It is expected that during review of the ESIA by NEMA, copies of the report including results of public consultation will be availed the public and stakeholders at publicized locations.

The meetings were aimed at obtaining stakeholder comments and views on what should be included in this assessment report. This section of the report presents the objectives, process and the outcomes of the stakeholder involvement undertaken. Consultation with key stakeholders is a continuous process that will be carried out

throughout the EIA period. During the study, stakeholder analysis exercise was undertaken to identify Interested and Affected Parties (I&APs) to the project.

6.5 Aspects to consider during project implementation

6.5.1 Gender Mainstreaming and Responsibility to other vulnerable groups

Gender mainstreaming within all operations of the contractor during construction activities will be undertaken. The purpose of the mainstreaming process will be to address injustice and imbalances suffered by women, children, the elderly and the sick in road development projects. The actions of this plan will seek to guarantee fair and equitable access to employment opportunities by women and other vulnerable groups, improve access and safety to homes and social facilities for vulnerable people in the course of construction works.

The following measures will be pursued:

- Design a gender policy
- Ensure “positive discrimination” in job allocation to road construction workers whereby women will be given tasks they do best, based on their capabilities.
- Workplace environment including tools and fixtures will be gender-friendly.
- Construction labour will be inducted on sexual harassments
- Separate water borne toilets for men and women to be constructed for all quarry workers, a similar arrangement will be made for work sites.
- Children below 18 years will not be recruited, where age cannot be ascertained, a Letter from LCs shall be requested.

6.5.2 Managing Community Relations

This project is intended to benefit the immediate neighbouring communities. Construction operations will be designed in such a way so as to benefit positively people in these communities. The project will work towards a harmonious relationship with all groups of people in the communities. The following actions will be actively followed to enhance social relations with all groups within the communities.

- Employ local Labour through secondment from Local Council Leaders
- The construction contractor will undertake community sensitization forums in communities surrounding the institutes.
- An information office will be commissioned within the project office and field posts established at the institute.
- Regular interface with Local community Leaders will be maintained spearheaded by the Environmental Management Team;
- A complaints register will be maintained at all site offices.
- Regular radio talk shows and bulletins will be made to inform communities on current operations.

6.6 Stakeholder Participation Plan during project implementation

During project implementation activities, it is imperative that different key stakeholders continue actively participating in the project. These Multi-Stakeholder Engagement Plans are important due to the following reasons:-¹²

- Produce solutions to the complex situations;
- Keep the public aware of the ongoing construction activities; and
- Collect possible complaints from the affected persons and produce possible solutions.

All the stakeholders that participated at the consultation stage shall be maintained during both construction and operation such that continuous monitoring among other reasons is achieved.

6.6.1 Public Participation Plan

The institution and the entire public will participate actively through organised meetings and in some urgent cases, personal or one on one meetings will be held. These methods of engagement will be held depending on the concern At hand that requires to be addressed. -¹³

e. One-on-one Engagement

Stakeholders will be engaged individually, either formally or informally. In formal engagements, a one on one discussion will be used for information sharing and consultation where emergencies or incidents have occurred as works proceed. Informal procedures are flexible and sometimes include ad-hoc conversations that can allow you to gather additional information from stakeholders.

These one on one engagements will be done in situations of consulting individual local government officials like the District environment officer or when attending to an affected person. This forum will work hand in hand with the Grievance Committees that shall be set up.

f. Small Group Discussions

Generally used to engage individuals or a very small group (two or three individuals), shall be convened in situations where one on one engagement will not be adequate. It will involve 3 to 4 individuals brought together to either make a decision forward, or to resolve a much bigger situation.

This public participation strategy could include representatives from different groups brought together to resolve a situation such as a representative from:-

- The Institute administration,
- The District representatives
- The Contractor;
- USDP

g. Focus/working Group Engagements (FGE)

FGE are planned discussion in small (4 to 12 members) group of stakeholders facilitated by a skilled moderator. It is designed to obtain information about preferences and opinions in a relaxed, non-threatening environment. The topic is

¹² UNDP, November 2006, Multi – Stakeholder Engagement Processes, A UNDP Capacity Development Resources.

¹³ IESO, Denmark, November 29,2012, Stakeholder Engagement Process

introduced and, in the ensuing discussion, group members influence each other by responding to ideas and comments. The moderator may use some predetermined questions as prompts to encourage discussion or to return the conversation to the intended focus of the discussion.

These Focused engagements can also be instituted by the members from government bodies (in this case USDP). They bring together diverse members of the public who are given information relevant to the issue under question. The session can include small and large group priority-setting exercises based on actual examples of technologies under consideration for assessment by local and national bodies.

h. Conferences / Workshops

Meetings or conferences will be held in cases where discussion of a topic or topics is to be passed on, especially where participants form both an audience and make presentations. These will be conducted especially during sensitization or awareness creation campaigns. Topics that shall be conducted will include: Safety, HIV/AIDS awareness, Gender, Sexual Harassment, environmental protection.

6.7 Other aspects to be considered during the Operational Phase

In addition to gender mainstreaming and managing community relations, other concerns that will continue to require stakeholder engagements include: Monitoring and maintenance of the green field and the landscaping undertaken;

- Waste management strategies to ensure the institute is kept clean;
- Maintenance of all the drainage channels
- HIV/AIDS sensitization and awareness creation;
- Required improvement on the teaching facilities curriculum among others; and
- Continuous collaboration of the neighborhood/ neighboring community.

CHAPTER 7: CONSIDERATION OF ALTERNATIVES

7 Introduction

According to World Bank group, alternative analysis in Environmental Assessments process informs on the viability of the project with regards to environmental friendly and socially acceptable project options and therefore it is one of the most important contributions EA can make to improving decision-making.¹⁴ 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.¹⁵

Therefore, in this assessment, analysis of alternatives has concentrated on the two major options which include proposed project implementation or the do nothing scenario.

It is important to note that development of this project is scaled right from the bigger goal of Uganda's vision of 2040. According to this vision, one of the strategic bottlenecks that has constrained Uganda's development is the continued accumulation of *under-developed human resources*. *In abid to address this bottlenecks*, Uganda Vision 2040 identified “ Science and Technology parks in each regional city” and “Accelerate government reforms in the education system and the curriculum to obtain a globally competitive human resource with skills relevant to the development paradigm” as key core projects that needed to be implemented.

In response to this, Government of Uganda through Ministry of Education and Sports, launched a BTJET Strategic Plan 2012/13 to 2021/22 entitled "Skilling Uganda". This plan underscored a paradigm shift in skills development in the country. The plan emphasized creating employable skills and competencies relevant to the labour market rather than educational certificates as was before. The proposed project obtained funding from World Bank, and under this project, 4 regional technical institutes covering key priority sectors of the economy i.e.¹⁶ Construction and Manufacturing, in line with Uganda's National Development Plan (NDPII) as well as Vision 2040, were selected to be upgraded in to Centres of Excellence and their networking institutes upgraded as well. *Kitgum Technical College* is one of the three networking institutes under Lira Technical College.

7.1 Proposed Project – Action Option

Considering the brief introduction above, justifies that if the project is implemented then the planned benefits that would arise from its implementation would be realised. Its implementation would cause some adverse impacts on the environment, however, with adequate mitigation measures, these impacts would be minimised, as discussed in the

¹⁴ Environment Department – (December 1996) The World Bank Environmental Assessment Source Book, Analysis of Alternatives in Environmental Assessment retrieved from <http://siteresources.worldbank.org/INTSAFEPOL/1142947-1116495579739/20507390/Update17AnalysisOfAlternativesInEADecember1996.pdf>

¹⁵ National Planning Authority (2012) - Uganda Vision, 2040, retrieved from <http://npa.ug/wp-content/themes/npatheme/documents/vision2040.pdf>

¹⁶ The Republic of Uganda, Ministry of Education and Sports (2012) – Uganda Skills development Project. Retrieved from <http://www.education.go.ug/>

chapters eight below. However, most of the benefits accrued from implementing the above named project will include:-

- Gearing to achieve the Governments major goal of A Transformed Ugandan Society from a Peasant to a Modern and Prosperous Country within 30 years;
- Kitgum Network Institute with a focus on the manufacturing sector;
- Promotion of labour market/industry driven programming;
- Creation of a learner centered institution;
- Basic Infrastructure supporting other upcoming developments;
- Implementation strategy: development without significant impact on the normal training learning operations of the College;
- Budgetary Ceilings and fund availability;

7.2The “No- Project” Option

Analysis of the "no project option" as an alternative is an important component of the EIA. It provides an environmental baseline against which impacts of the proposed action can be compared. “No Project” simply implies not doing anything at all, and leaving the conditions as is “maintaining the status Quo”. Leaving the situation as is, therefore means that the intended goal of achieving the vision Uganda 20140, and justifications for skilling Uganda together with the required financing from the World Bank will not be required. This option therefore, impedes the Government of Uganda goal, which prioritised this project for implementation in the first place.

This option also does not address the objectives of the proposed program which is a key recommendation for project alternatives analysis by the World Bank. However, the only benefits derived from this option is the maintained ecological balance of the various ecosystems and no social interruption of the colleges activities and the neighbouring activities since there is no / minimal interference.

7.3Comparative Analysis / Multi Criteria Analysis

In order to appreciate the benefits accrued in implementing the proposed redevelopments in Kitgum Technical Institute, it is important to undertake an MCA of the two outstanding options of:-

- Proposed Project Alternative;
- Do nothing scenario;

It is also important to note that the major objective of upgrading Kitgum Technical Institute, Centre of Excellence is to be met with the variables considered for each alternative. The two options were analysed against each other using the Multi Criteria Analysis, and considering the variable used each impact was scored against each environmental and social component to be affected or which option had a higher possibilities of benefits accrued to them. The significance ratings of the potential environmental and social impacts of the project were assigned values. For each option, the significance rating values used in scoring the negative impacts were summed up, and

the total scores obtained as shown under. On a scale of 1 to 3, for impact likelihood, severity, and duration in the environment, the variable is scored and then the total is provided.

Table 15: Ranking and Rating scores used during impact analysis of variables

A. Probability of Impact		
Improbable	< 40% chance of occurring.	3
Possible	40% 90% chance of occurring.	2
Definite	> 90% chance of occurring.	1
B. Intensity– the magnitude or size of the impact		
Low	Site-specific and wider natural and/or social functions and processes are negligibly altered.	3
Medium	Site-specific and wider natural and/or social functions and processes continue albeit in a modified way.	2
High	Site-specific and wider natural and/or social functions or processes are severely altered.	1
C. Duration– the time frame for which the impact will be experienced		
Short-term	For the duration of project activities/up to 2 years	3
Medium-term	2 to 15 years	2
Long-term	More than 15 years	1

The scoring per options where therefore considered as follows:-

Table 16: Total score and rating

Combined Score (A+B+C)	8 – 9	7	6	5	3 – 4
Consequence Rating	Very low/Negligible	Low/Minor	Medium/minor-moderate	High	Very high/Major

A comparison of the total score gives the likely choices regarding the preferred options. The worst-case scores 1 while the better (no impact) case scores 3.

Table 17: MCA for the proposed options

No/S	Variables	Do Nothing	Project Implementation
1	Environmental disturbance (Noise, dust)	7	5
2	Increased Enrolment	3	9
3	Improve on service delivery (use of modified technology)	3	8
4	Social disruption of community	8	5
5	Cost of Implementation	8	4
6	Return on Investment	3	9

Grand Total	32	40
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7.4 Discussion

From the assessment presented above, it is clear that implementing the proposed projects are associated with a number of benefits and among them is achieving the greater intended goal for which this project was developed. It is important to note that renovation of the college without implementing the proposed projects will improve the services of the college to a smaller scale but will not meet the major objective of this project, which is skilling Uganda by 2040. Therefore, the analysis described below concentrated on either implementing the proposed projects that meets the intended objective of the program, or “The No Projects Scenario”.

Environmentally:- Upgrading of this Institute is associated with a number of environmental impacts resulting from massive excavation works, site clearing, among others both on site and material sources and implementation of adequate mitigation measures among which will be restoration activities will reduce the impact of this upgrade to almost none.

The “Do Nothing Scenario” much as it appears not to have any impacts on the environment, it is associated with continuous impact on the environment while undertaking maintenance works in the long run, which eventually is very costly to even implement mitigation measures. It is therefore recommended that upgrading works of the college into a centre of excellence be undertaken.

Socially:- upgrading works will greatly destabilise the student body within the institution and affect the community from where the materials will be sought. Therefore implementation of mitigation measures elaborated in Chapter 8 below should minimise or nullify these impacts. Much as the “Do Nothing scenario” does not present that above negative impacts, it also will not provide the benefits associated with the social benefits accrued from the upgrade.

Economically:- Upgrading works are highly economically intensive right from project conceptualization to implementation and operation. However this cost is undertaken once for a bigger objective, as compared to the Do nothing scenario which is associated with minimal and continuous maintenance costs. These costs eventually grow to even more that shall be spent on the proposed projects in the longer run, however the associated upgrade benefits will still not be met.

Hence making upgrading of the college economically viable.

7.5 Conclusion

Whereas the “Project” Option calls for project implementation which will affect the environmental and social set-ups, with adequate mitigation measures, this option can be implemented successfully and thus achieving the bigger goal of Uganda’s development as prescribed by the Vision of Uganda 2040. The “No Project” option rather does not

address the intended goal of Government of Uganda which is “Skilling Uganda” and therefore is found to be unfeasible for consideration.

CHAPTER 8: ENVIRONMENTAL IMPACT ANALYSIS AND MITIGATION

8 Introduction

Following desk studies, site investigations and views obtained through public consultations, the potential significant environmental and social impacts of the proposed USDP project were identified.

The establishment of the proposed USDP project will have minimal impacts on the surrounding environment. The positive impacts that were identified should be enhanced as the negative ones should be mitigated or eliminated to achieve a successful project.

This section identifies the predicted impacts that could arise as a result of implementing the proposed project. Mitigation measures to minimize or eliminate the negative impacts are discussed as well as means of enhancing positive impacts and benefits to the affected community. The potential significant environmental and social impacts of the proposed project are presented below and their level of significance evaluated.

8.1 Construction-Phase Impacts

Positive Impacts

8.1.1 Income to material/ equipment suppliers and contractors

Development of the project will entail works requiring materials such as gravel, bricks, timber, steel reinforcement and cement. This is a positive but short-term and reversible impact.

Enhancement measure: Earth materials that will be needed for construction include, murrum, aggregate (stones and sand). Conscious or unwitting purchase of these materials from unlicensed operations indirectly promotes environmental degradation at production sites and can cause medium- to long-term negative impacts. It should therefore be a contractual obligation for contractors to procure construction materials from quarries legitimate traders known to the local leaders by Kitgum District Local Government.

8.1.2 Employment

Construction will avail skilled and unskilled job opportunities. This would be a positive but short-term and reversible impact, lasting only during the construction period.

Enhancement measure: Wherever feasible, local people should be considered for job opportunities commensurate with their level of skills. Adequate occupational health and safety standards should be provided to ensure the work environment is conducive.

Negative Impacts

8.1.3 Disruption of the institutions' activities

The institute always has classes running on a daily basis from Monday to Friday. Besides being a safety risk, noise and dust from construction activities and equipment might temporarily disrupt students studying. If due caution is not taken by drivers, haulage trucks and construction equipment, the project may pose accident risks to the students, staff members and service providers at the institute.

Impact before mitigation: High

Mitigation strategies

- i) Wherever this risk exists, the contractor should screen off these facilities to avoid accidents;
- ii) The contractor should engage the local authority to sensitize pupils/students about risks associated with construction and necessary precautions they need to undertake.
- iii) All construction sites should be cordoned off to restrict access to unauthorized people

Impact after mitigation: Minor

8.1.4 Waste generation (improper construction waste management)

Solid waste will be generated at the site during site preparation and construction phases. The waste may consist of timber or metal cuttings, excavated materials, paper/cement bags, empty paint and solvent containers, broken glass among others. Some of the waste materials such as paints, cement, adhesives and cleaning solvents contain hazardous substances, while some of the waste materials including metal cuttings and plastic containers are not biodegradable and can have long-term and cumulative effects on the environment. It impacts on the environment through blockage of drainage systems and negative impacts on human health. Other wastes which will be generated by non-construction activities because of the presence of the workers at the site include food debris, contaminated water from washing, cleaning equipment, construction tools and vehicles.

Inappropriate disposal of construction waste or spoil could have medium or long-term environmental and public health impact. Extent of this impact will be local to areas where waste is dumped or their immediate neighborhoods.

Impact before mitigation: Moderate.

Mitigation strategies:

- i) The wastes will be properly segregated and separated to encourage recycling of some useful waste materials, that is, some excavated stone materials can be used as backfills.

- ii) Hazardous waste will not be mixed with other solid waste generated and should be managed by way of incineration or land-filling.
- iii) Waste will be picked off the site at least once in 24 hours and when temporarily kept on site it will be covered to minimize nuisance odour and vermin.
- iv) The contractor and Institute administration will work together with the Municipal Council to facilitate proper waste handling and disposal from the site. All wastes must be taken to the approved dumpsites.
- v) Hazardous wastes such as paints, cement, adhesives will be managed through a third party contractor certified by NEMA. The contractor and institute administration will work together to facilitate sound waste handling and disposal from the site.

Impact after mitigation: Minor

8.1.5 Storage of construction materials

During the construction period, there will be a need to stockpile and store assorted materials at or near the construction site so as to ensure easy and uninterrupted access to supplies. This will lead to the following potential impact. Spill and wash away of materials could pollute land and drainage. Additionally, material losses are a financial loss to the contractor.

Impact before mitigation: Moderate

Mitigation strategies

- i) Contractor should protect material stockpiles from storm water erosion (for example, by excavating a cut-off ditch around stockpiles to keep away storm water).
- ii) Stockpiled materials should be covered with fabric or other materials.
- iii) Contractor should avoid stockpiling material near the municipal drainage or on slopes.

Impact after mitigation: Minor

8.1.6 Child labour

Construction of the proposed projects listed under chapter 2, will employ a multitude of people, both technical and non-technical. These employees have different ranges of age and among these are workers under the age of 18. Due to the need of employment and opportunity to earn a living young boys under the age of 18 get involved in casual work that exposes them to a number of hazards and accidental risks.

Child labour is for starters against the law because it would expose the children that are still vulnerable to hazardous and accidental risks that would in some instances result into death. Child labour will also lead to family breaks, and high school drop outs. Child

labour would be long-term (prevailing the period of construction) if not controlled. Likelihood of this impact occurrence is high as they look for employment. Impact significance is therefore *very major*.

Impact before mitigation: Moderate

Mitigation:

- Adequate sensitization for the community targeting, the parents, children, schools and community associations not to allow their children to participate in road construction works due to the hazards and risky environments associated with them; and
- Contractor will keep record of the age numbers for all their employees so as to avoid employing those below the age of 18;
- With regards to the college students looking out for extra income or technical exposure, their involvement in construction will be done in close consultation with the college administration and all these students will possess written approval.

Impact after mitigation: Minor

8.1.7 Generation of noise

Noise will be one of the most undesirable consequences of the construction phase. Relatively high noise levels are expected in the area during construction phase. Considerable levels of noise and vibrations will mainly result from use of heavy equipment including bulldozers and dump trucks during site preparation and construction activities. Though the level of discomfort caused by noise is subjective, the most commonly reported impacts of increased noise levels are interference in the learning process and disturbance in sleep or during resting time, disturbance or discomfort resulting from construction noise cannot be ruled out given that the proposed project will be located within the heart of the institute

Impact before mitigation: High

Mitigation strategies:

- (i) Contractor will be careful when selecting equipment to avoid use of old or damaged machinery with high level of noise emissions that would have a negative impact in the environment.
- (ii) Contractor will ensure that equipment is properly serviced and efficient.
- (iii) Contractors will cordon off construction site with noise absorbing materials, for example, plywood rather than iron sheets.
- (iv) Construction workers will be aware of the sensitive nature of workplaces they are operating in and advised to limit verbal noise or other forms of noise. For

example, metallic objects or tools can be passed on to a colleague rather than dropping or throwing them with loud bangs.

- (v) The contractor shall ensure that noise levels emanating from machinery, vehicles and noisy construction activities are kept at a minimum for the safety, health and protection of people in the nearby buildings.
- (vi) Noise and vibration will be minimized at the project site and surrounding areas through sensitization of construction truck drivers to switch off vehicle engines while offloading materials.
- (vii) All generators and heavy duty equipment will be insulated or placed in enclosures to minimize

Impact after mitigation: Minor

8.1.8 Traffic and associated emissions

Traffic-borne emissions include dust and exhaust fumes. Dust emissions will arise from construction activities, earthworks and construction traffic. The trucks used to transport various building materials from their sources to the project site generate emissions of SO₂, CO₂, CO, NO_x and particulates. The impacts of such emissions can be greater in at the construction site and through communities construction vehicles will travel.

The institute is located close to the highway of with high traffic thus the impact intensity will be low. This is in addition to the intermittent and short term nature of activities. However, the sensitivity on the receptors will be high since there could be asthmatic construction workers, students and other personnel on campus in the vicinity of the proposed project site resulting in moderate impact significance.

Impact before mitigation: Moderate

Mitigation strategies:

- (i) Construction activities will be carried out during the day.
- (ii) Travel speeds of construction vehicles especially through business centers will be controlled;
- (iii) Trucks shall be covered during haulage of construction materials;
- (iv) Wherever dust suppression is necessary, water will be sprayed over dusty areas;
- (v) Construction equipment will be maintained in good operating condition to reduce exhaust emissions;
- (vi) All equipment leaving the site, clean up their tires in case they are dirty; and

- (vii) Construction work should be undertaken by an experienced and duly registered contractor with a verifiable sense of environmental awareness and responsibility.
- (viii) Workers will be provided with PPE and the use of PPE shall be enforced.
- (ix) The project area will be cordoned off to minimize dust migration to nearby facilities by wind.

Impact after mitigation: Minor

8.1.9 Child labour

Construction activities at the institute will employ a multitude of people, both experts and the non-expert teams ranging from foreign to local employees. These employees have different ranges of age and among these are workers under the age of 18. Due to the need of employment and opportunity to earn a living young boys under the age of 18 get involved in casual work that exposes them to a number of hazards and accidental risks which at times leads to death. Child labour can also lead to increased school dropouts

Impact before mitigation: Moderate

Mitigation strategies

- i) Adequate sensitization for the community targeting, the parents, children, schools and community associations not to allow their children to participate in construction works due to the hazards and risky environments associated with them; and
- ii) Contractor will keep record of the age numbers for all their employees so as to avoid employing those below the age of 18;

Impact after mitigation: Minor

8.1.10 Aesthetic View

Construction activities will require material, equipment and cordons at the sites. Since the institute will remain open for learning activities, presence of these activities and materials thereof will cause temporary visual blight at the construction site. Presence of construction activities will alter visual impressions accustomed to.

Duration of visual impact will be short-term only lasting through the construction phase. The impact intensity will be medium considering the fair state of all existing facilities; therefore sensitivity on receptors will be medium, hence moderate impact significance

Impact before mitigation: High

Mitigation strategy:

- i) The contractor shall ensure minimal footprint of construction activities;

- ii) Construction site should be condoned;
- iii) He should limit activities to the designated site boundaries

Impact after mitigation: Moderate

8.1.11 Occupational health safety (OHS) Risks for Contractors

Construction activities have potential to pose occupational risks some of which could be life-threatening, for example, fatal falls if workers do not use safety latches when working at heights. Working with high voltage and hot works (welding) pose a risk of electrocution. In addition, falling debris could injure workers if personal protective equipment (PPE) are not provided or properly used. Back injury could occur if workers lift heavy objects using inappropriate body posture. Other potential hazards might be: inadequate lighting during the night working hours or limited level of visibility during rainstorms creating difficulty for staff driving heavy equipment, driving equipment with improper brake system, lack of concentration while working and exposure to hazardous wastes such as paints, cement, adhesives and cleaning solvents. Duration of the impact will be short-term occurring only during the construction phase. Extent of the impact will be local or national depending on origin of construction workers.

Uganda and WBG Guidelines require that workers exposed to a noise level greater than 85 dB(A) for a duration of more than 8 hours per day wear hearing protection. Related OHS safeguards are comprised in (Uganda's) Occupational Safety & Health Act (2006) and Employment Act, 2006.

Impact before mitigation: High

Mitigation strategies:

- i) Orient all construction workers on safe work practices and guidelines and ensure that they adhere to them.
- ii) Training will be conducted on how to prevent and manage incidences. This will involve proper handling of electricity, water etc. and sensitization on various modes of escape, conduct and responsibility during such incidences. All workers will fully be aware and mentally prepared for potential emergency.
- iii) Regular drills shall constantly follow on various possible incidences. This will test the response of the involved stakeholders. Such drills will keep them alert and they will become more responsive to in the case of incidences.
- iv) Use signage to warn staff and/ or visitors that are not involved in construction activities of dangerous places.
- v) Strict instructions shall be given for drivers of heavy equipment.

- vi) Supervision of works shall be done regularly to ensure that safety conditions are met while any deviation from safety regulations is immediately reclaimed following the best practices regarding safety at work equipment.
- vii) Communication will be ensured in between workers and drivers of heavy equipment.
- viii) Develop evacuation procedures to handle emergency situations.
- ix) Provide adequate OHS protective gear to construction workers. The guide below shall be useful:

Hearing (Over 80 Decibels for 8 hours a day requires hearing protection)

- Ear Muffs: One size fits all, comfortable, less ear infection risk
- Ear Plugs: Small, lightweight, can get dirty and cause infection

Face/Eye (Working with any chemical or using any mechanical equipment)

- Face Shield: Protect face from splashing and particles
- Safety Glasses: Protection from solids (cutting, sanding, grinding)
- Safety Goggles: Protects eyes from splashing

Hand (Use correct gloves for the job)

- Chemical Gloves: (Nitrile, Latex, PVC)
- Gloves for other use: special gloves for cutting, burning, abrasions/ blisters

Body

- Overalls: Can protect against dust, vapors and splashes

Foot Protection

- If electrical hazard present ensure boots offer protection
- Safety Toe/Steel Toe Boots: Always worn when potential for falling hazards exists
- Water/Chemical Resistant Boots: Use in a spill situation
- Non-slip boots for working on wet/slippery floors.

Impact after mitigation: Minor

8.1.12 Gender and Labour Impacts

Gender equity in Uganda seeks to strengthen women's participation and benefit from construction projects and the associated auxiliary facilities that come along. This is especially significant considering that this construction project employs a number of technical and non-technical staff (rural poor people, including women). This construction project will boost a number of economic activities that were observed all around the area; these include: selling foodstuff and consumer good in kiosks or roadside markets. A number of times, women are denied such opportunity to work in construction projects

due to their presumed inability to handle a number of manual labour, which is incoherent with the government's major program of gender mainstreaming.

Construction workers in a number of projects have been said to work with no consideration of their wellbeing. The contractor focuses more on the delivery of the projects and leaves the workers with no say on the kind of working environment provided the contractor. Some of the negative impacts observed on construction projects affecting workers include:

- Working for longer hours and on weekends than agreed with no extra pay;
- Unjustifiable salary / fee deductions to workers pay for work done;
- Uncontrolled dismissal of workers with no justifiable reason;
- Working hours with no break / resting time to allow workers access meals and drinking water;
- Providing inadequate / worn-out PPE to workers, yet they are exposed to hazardous construction works;

All the above impacts affect human right of both the female sex and well-being of workers negatively and are there for considered to be very large if not mitigation measures are instituted.

Impact before mitigation: Moderate

Impact mitigation

Gender related

- There will be opportunity for women to sell meals and drinks to construction workers, which is a common positive impact for construction projects in Uganda.
- There will be opportunity for employing women, a positive impact, although the number of women hired may be less than that of men for the reason that contractors consider women less suited for strenuous menial labour. However, a gender-responsive approach would be to hire women in roles they are best suited to handle.
- Married women may benefit less from construction employment because their spouses may dictate whether they work or not. This choice being solely a responsibility of an unmarried woman means that single women might benefit the project more than their married counterparts.
- Spread of HIV/AIDS and teenage pregnancy are also reportedly common around construction projects, which will be highly possible considering the project is within the college with high concentration of teenage students;
- Rape cases are high in construction establishments

HIV/AIDS Related

- Carry out sensitization of the locally employed staff in order to create awareness on HIV/ AIDS and minimise rape cases. The sensitization will build a knowledge base on proper sexual behaviour.
- Provide condoms and an HIV/AIDS poster to workers in privately convenient places such as toilets/latrines in camp.
- Put in place worker place committees to oversee implementation of HIV/AIDS control activities.

- Provide counseling support and work based positive culture to post-test workers
- Draw up an action plan to guide implementation of HIV/AIDS activities.
- Establish, equip and recruit competent staff for health unit.

Provisions for good working environment for Contractors Employees/ Workers

In reference to the World Bank Environmental and Social Standard 2, concerned with Labour Conditions, the following have to be considered so as to comply with this Standard, as well as the Employment Act of Uganda.

- All workers on site should have signed contracts with clear job descriptions, salary denominations and deductible statutory amounts like NSSF depending on the amounts
- All workers should have identifications so as to distinguish them from the student body;
- Workers should be provided with food and drinking water especially on hot days within the camp set-up so as to minimize their movements within the college
- Workers should have workers council that meets regularly to resolve work related challenges;
- Establish complaints register which will be reviewed by the contractor administration and resolutions provided;
- Workers should be provided with clean water for drinking and meals;
- Working hours should be observed, therefore, additional working hours should be paid for as overtime;
- Construction labour will be inducted on sexual harassments.
- Dismissal from work or salary deductions should have justifiable reasons and warnings given to the workers as required by the Employment Act.

Impact after mitigation: Minor

8.1.13 Accidents

The construction works are to take place within an institute with learning processes and human movements ongoing. With an increase in number of heavy vehicles during transportation of construction materials and equipment, there will be an increase in risk of traffic-related accidents or injuries. Traffic accidents would be a significant social impact notwithstanding the safety risks created by the falling debris from construction activities.

Hoardings and scaffoldings may cause accidents detrimental to human life if they collapsed.

Impact before mitigation: High

Mitigation strategies:

- i) Contractor shall use safety measures to prevent accidents such as provision of safety belts for workers working at a distance of 2 meters above.
- ii) Project will require contractors to regularly maintain vehicles to minimize potentially serious accidents such as those caused by brake failure commonly associated with loaded construction trucks.

- iii) The site shall be fenced and signs put in place with security personnel to stop unauthorized people from accessing the site.
- iv) For falling debris, and hoarding/scaffoldings; clear warning signs will be placed around the construction premise, install interceptors and net traps to divert falling debris, and emphasize (provide) person protective gears to persons in the area.
- v) Warning signs will be provided to warn of falling debris.
- vi) Protective gear shall be provided to workers on site.

Impact after mitigation: Minor

8.1.14 Pressure on existing resources

During the construction stage, demand for basic amenities such as water and electricity may put pressure on the existing infrastructure. The existing infrastructure includes the national grid for electricity supply and the National water for the water supply.

Impact before mitigation: High

Mitigation strategies:

The contractor should provide separate storage for water to use at the construction. Instead of connecting to the hospital water supply system, the contractor should opt to use water bowsers for supply.

Impact after mitigation: Moderate

8.1.15 Social misdemeanour by construction workers

While most workers may originate from the local community where they have families, there might be others from distant places and working away from their families. With some disposable income to spend, this might induce illicit sexual relationships with the female students, with attendant risk for spread of HIV/AIDS. Irresponsible sexual relationships in and outside the institute can break families, increase the frequency of female students drop out and heighten risk of contracting HIV/AIDS. Illicit sexual relationships can be short-term but have long-term and irreversible

Impact before mitigation: Moderate

Mitigation strategies:

- i) As a contractual obligation, contractors shall be required to have an HIV/AIDS policy and a framework (responsible staff, action plan, etc.) to implement during project execution.
- ii) All construction workers shall be orientated and sensitized about responsible sexual behavior during and after project activities.

Impact after mitigation: Minor

8.2 Operation Phase

Positive Impacts

8.2.1 Improved agricultural and technical skills to minimize unemployment

The project will positively impact the education sector of Uganda and the East African region through transforming the BTVET system from an educational sub-sector into a comprehensive system of skills development for employment, enhanced productivity and growth. Enhancement measures: Appropriate staffing with technical personnel adequately trained in use of newly installed equipment.

8.2.2 Employment opportunities

Operation of the USDP project will create additional long-term technical and non-technical job opportunities for professionals, and those are not professionals etc.

Enhancement measure: Wherever feasible, local qualified people will be considered for job opportunities. Adequate occupational health and safety standards should be provided to ensure the work environment is conducive.

Negative Impacts

Negative impacts during operation of the USDP project may arise from:

- i) Improper waste management (including laboratory/medical waste and wastewater discharges);
- ii) Safety and occupational risk to health workers
- iii) Risk of fire outbreak

8.2.3 Security threats

Construction and operation works are associated with security threats such as theft. Other possible threats is bullying from the security guards hired to provide security services to the students. These security threats such as theft can lead to loss of materials like the seats, laboratory equipment.

Impact before mitigation: Moderate

Mitigation Strategies

- i) Hiring of security guards from a registered company so that will have records of each guard, to protect the infrastructure and equipment.
- ii) Conducting adequate and frequent sensitization of both the security guards and the local community against insecurity activities such as theft, killing, among others.

Impact after mitigation: Minor

8.2.4 Risk of fire outbreak

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

Duration of the impact would be long-term lasting entire life of USDP project operation phase, local in spatial extent affecting onsite facilities, students, institute workers and neighboring communities with possibly irreversible and the likelihood of the impact occurring and its intensity are low if “facility design” is adopted. However, sensitivity on the receptors will be medium, thereby giving moderate impact significance

Impact before mitigation: High

Mitigation strategies:

- i) Fire extinguishers to be provided at strategic locations within the institution and ensure that all fire-fighting equipments are regularly maintained and serviced.
- ii) Key healthcare staff shall have training in fire control through regular firefighting drills.
- iii) Fire emergency telephone numbers shall be displayed in communal areas.
- iv) Automatic fire alarm system for the entire laboratory will be installed and water hose reels installed in the laboratory.
- v) Fire hazard signs such as ‘No Smoking’ signs will be provided. Directions to exit in case of any fire incidence and emergency contact numbers shall be provided. The contact/emergency numbers shall be displayed within the laboratory.

Impact after mitigation: Minor

8.2.5 Improper management of waste

Hazardous waste and other solid wastes in the form of polythene wastes, waste paper, kitchen waste, human waste and waste oil from the mechanic workshop will be generated. The above waste if not properly managed well can lead to health problems. Likelihood of the impact occurring is high given that the institute is currently not managing their waste fairly well. It is a long-term impact, local and cumulative in nature hence the intensity of the impact will also be high. However, sensitivity of receptors due to improper waste management is high, thereby giving major impact significance

Impacts before mitigation: Moderate

Mitigations:

- i) The institute administration should place dustbins and waste collection centers around the institute for easy collection.

- ii) The students should be sensitized on the proper waste management practices.
- iii) The hazardous waste should be kept in a well labeled separate container and should be handled only by companies that are registered

Impacts after mitigation: Minor

CHAPTER 9: ENVIRONMENT AND SOCIAL MANAGEMENT AND MONITORING PLAN

9 Introduction

This environmental-socio management plan, ESMP for proposed construction works and operation of the USDP project, identifies potential environmental and social aspects that should be monitored. It identifies parties responsible for monitoring actions, associated costs, indicators and training or capacity building needs and reporting. Various aspects of the ESMP are detailed in sections below

9.1 Institutional Arrangements

a) Institutional structure and responsibilities

Institutional responsibility of implementing what this project brief and the ESMP covers will rest with the supervising consultant on behalf of MoES. The supervising consultant will ensure that the contractor complies the ESMP. Other roles will be:

- Monitoring implementation of mitigation actions by contractors
- Coordinating training and capacity building where planned
- Periodically report about implementation of the ESMP

The supervising consultant will be required to have an environmentalist on his team. The specific action plans for the contractor will include a Waste Management Plan, Labour Force Management Plan including a Code of Conduct for Workers, Occupational Health and Safety Management Plan, Emergency Response and Preparedness Plan.

9.2 Implementation of the ESMP

9.2.1 Responsible parties

Key players in the implementation of this ESMP include the Project Coordination Unit at MoES, to hire the Contractor and the Supervising Consultant. Others not directly involved (in contract Obligations) have been discussed in Chapter 4 under the Institutional Framework, including NEMA, and MoLG among others.

9.2.2 Capacity building for ESMP implementation

All staff involved in ESMP implementation will be required to undergo training to be familiar with Implementation requirements of the USDP project and particularly the ESMP for this project. This training will be organized by MoES in liaison with the Project Coordination Unit.

9.2.3 Training and Awareness raising for workers

All the contractor's workers will undergo induction in environmental, social, health and safety prior to start of construction works, and periodically during the project implementation phase. Attendance to project briefing and tool box talks will also be an opportunity to learn USDP project requirements.

9.2.4 Communication

A Public Consultation and Disclosure Plan, and Grievance Management Mechanism are means through which the contractor will maintain a formal procedure for communication with the project affected students, teachers and the community.

9.3 Documentation

The contractor will have a staff responsible for documentation, including management plans, associated procedures, and checklists, forms and reports, through a formal procedure. The document control procedure will describe the processes that the project will employ for official communication of document deliverables, as well as document tracking.

9.3.1 Checking and Corrective Action

Checking includes inspections, monitoring and audits to confirm proper implementation of ESMP as well as effectiveness of mitigation measures. Corrective actions include response to out-of control situations, non-compliances, and non-conformances. Actions also include those intended to improve performance. The identification, reporting and rectification of non-compliances will be encouraged at inductions and tool box meetings.

9.4 Reporting

Reporting on environmental performance will be undertaken as per Ugandan National Environmental laws. This ESMP provides for regular reporting to stakeholders throughout the project. The contractor will keep relevant regulatory authorities and other stakeholders informed of the project the performance with respect to Social-economic matters by way of written status reports and meetings. The following will be reported to NEMA and lead agencies on a quarterly basis:

- Significant modifications to the project ESMP
- Results of implementation of mitigation measures proposed in the ESMP and environmental monitoring;
- Environmental pollution incidents that required corrective action;
- Grievance handling;
- Safety incidents or accidents;
- Progress on project construction

An environmental audit will be undertaken by an Independent Consultant midway during construction works and on completion of works or prior to handover of the project to the MoES, to review progress and compliance with environmental and social requirements for the project.

9.5 Monitoring

Key monitoring requirements have been identified through the ESIA process to monitor the environmental and social performance of the project.

The overall objectives of monitoring are to:

- Ensure regulatory requirements are met;

- Verify predictions made in the ESIA by obtaining real time measurements, including noise and vibrations, water and air quality;
- Verify that mitigation measures are effective; and
- Provide early warning of potential unplanned for or unmitigated impacts.

9.5.1 Monitoring Approach

Monitoring will be carried out by the relevant lead agencies. The following four types of inspections and monitoring will be employed:

- Inspections planned and conducted on a regular basis to ensure that mitigation measures and commitments are properly maintained and implemented, and that specific management procedures are being followed (e.g. practices on temporary construction waste storage and transport).
- Receptor monitoring undertaken to verify predictions made in the ESIA and to confirm that the activities at the site are not resulting in unacceptable impacts on receptor systems, neighboring communities or infrastructure (e.g. monitoring air quality, water quality, noise and vibration emissions, and grievances from project affected communities).
- Compliance monitoring involving periodic sampling or continuous recording of specific environmental quality indicators to ensure compliance with project standards or regulatory requirements.
- Auditing to assess compliance of the project activities with both regulatory and site management system requirements.

Who monitors and how: Monitoring will be undertaken by MoES (PCU) and Environmental Officers who represent NEMA at local administrative. Monitoring by NEMA in this case can be considered “third party monitoring” but this is its regulatory mandate according to Sections 6 and 7 of the National Environment Act (Cap 135).

Another government agency that may undertake “third party monitoring” is the Occupational Health & Safety Department in Ministry of Gender, Labour & Social Development (MGLSD). This unit has authority to inspect any facility for compliance with national requirements on safety in workplaces. The project shall make no funding to MGLSD since this is provided for in its annual budget.

Monitoring will be done through site inspection, review of grievances logged by stakeholders and ad hoc discussions with potentially affected persons (construction workers, residents near the institute, students and teaching and non-teaching staff). At each monitoring, a discussion with a leader or heads of the affected group could provide insight into views and grievances PAPs have about the project.

Frequency: Monitoring will be undertaken monthly over the given period of construction period.

Audits: Audits will be necessary both during construction and project operation. While construction audits will aim to verify compliance to impact mitigation

requirements, post-construction audits are a regulatory requirement within 12 months and not more than 36 months after completion of construction, according to national EIA Regulations, 1998 Section 31(2).

Construction- and post-construction phase auditing should culminate in reports that MoES shall share NEMA or other interested stakeholders. Note that while MoES is under no obligation to disclose construction phase audits, annual post-construction audits must be submitted to NEMA as a regulatory requirement as per Section 31(2) of National EIA Regulations, 1998.

9.5.2 Penalties for non-conformance with ESMP requirements

The USDP team, supervising consultant and the administration of the institute will ensure enforcement of compliance of the contractor with the Environmental requirements. The ESMP will be updated upon issuance of the NEMA certificate of approval, permits and licenses from lead agencies. Non-compliance to the ESMP shall attract penalties, including non-approval of payment Certificates. ESMP shall be incorporated in the Contract so that it is a contractual obligations and failure by the Contractor to comply with it shall attract penalties as shall be detailed out in the Contract and in accordance with the laws of Uganda.

Table 18: Environmental and Social Management and Monitoring plan for Kitgum Technical institute

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Estimate costs	Capacity Building Requirements
Demolition of existing structures	Provide workers with personal protective equipment (PPE) The demolition exercise will be limited to day time only All personnel working on the project will be trained prior to commencing the demolition Comply with the National Environment (Noise Standards and Control) Regulations,2003	Compliance with the demolition standards and no complaints from the neighbouring residents and Institutions	Complaints from the students, staff and neighbours Daily air quality and noise measurements	Daily during the demolition process	The institutes administration Contractor NEMA and the District Environment Officers	1000	Daily health and safety training for the demolition team
	Noise and Air pollution All active demolition areas will be watered at least twice a day to	Minimum noise and dust levels.	Air quality of the area along the project	Daily during the demolition process	Institute Contractor		Training on how to use silenced demolition

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Estimate costs	Capacity Building Requirements
	reduce dust. Careful screening to contain and arrest demolition related dust will be adopted Use of equipment designed with noise control elements will be adopted where necessary. Trucks used during demolition exercise on site shall be routed away from noise sensitive areas in the neighbourhood, where feasible. Idling time for pick-up trucks and other small equipment will be minimized to limited time. Use of very noisy		area. Noise levels in the area Complaints from students, staff and neighbours		NEMA and District Environment Officers		equipment and proper conduct of the construction team.

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Estimate costs	Capacity Building Requirements
	equipment will be limited to daytime only.						
Construction waste	Debris and related wastes All debris/wastes to be collected regularly to control air pollution and injury. All persons involved in refuse collection shall be in full protective gear. All trucks hauling demolition debris/wastes shall be covered. Exposed demolition debris of e.g. dust and sand, will be enclosed, covered, and watered daily before transported to disposal site.	Proper management of demolition waste	Presence of demolition waste in the project area. Complaints from students, staff and neighbours	Daily during the demolition process	The institutes Contractor NEMA and the District Environment Officers	Included in the BOQs	Training of workers on the temporary storage of demolition waste on site before it is picked for disposal.

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Estimate costs	Capacity Building Requirements
Gender and Labour impacts	Women should also be given opportunities while recruiting Workers should also be entitled to favourable working conditions	Gender equality at the workplace	Discrimination at the workplace	During construction stage	Contractor	1000	Sensitization of all workers about gender mainstreaming
Occupational Health and Safety Impacts	Health and safety of workers All workers will be sensitized before the exercise begins, on how to control accidents related to the demolition exercise A comprehensive contingency plan will be prepared before demolition begins, on accident response. Adherence to safety procedures will be enforced at all stages of	Minimum or no occupational accidents during the process	Accidents records	Daily during the demolition process	The institutes Contractor NEMA and the District Environment Officers	1000	Toolbox talks for OSHA Safety and Health

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Estimate costs	Capacity Building Requirements
	the exercise All workers, pursuant to labour laws, shall be accordingly insured against accidents. All workers will be provided and instructed to wear protective attire during demolition, including helmets.						
De-vegetation resulting from site clearance and excavation	Ensure proper demarcation and delineation of the project area to be affected by construction works. Preserve, to the extent possible, all trees located within the area Incorporate a green design in to the final design of the project.	Conservation of the present vegetation	Loss of vegetation	Weekly	The institutes Contractor NEMA and the District Environment Officers	1000	non

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Estimate costs	Capacity Building Requirements
Child labour	Adequate sensitization for the community targeting, the parents, children, schools and community associations Contractor will keep record of the age numbers for all their employees	Employment of adults		Throughout the construction stage	Contractor	1000	
Soil erosion	Ensure management of excavation activities Observe Efficiency of erosion control measures Control activities especially during rainy seasons Compact loose soils to minimise wind erosion Control earthworks	Conservation of top soil at the site	Presence of sand, silt, loose soils in the project area during rainy seasons Complaints from students, staff and neighbours	Daily; Once a month during project lifetime	The institutes Contractor	To be considered in the design report / BOQs	Non

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Estimate costs	Capacity Building Requirements
Air pollution	Dust suppression with water-sprays during the construction phase on dusty areas All personnel working on the project will be trained prior to starting construction on methods for minimizing air quality impacts during construction. Drivers of construction equipment including bulldozers, earth-movers etc will be under strict instructions to minimize unnecessary trips. Careful screening of construction site to contain and arrest construction-related dust. Exposed stockpiles of	Minimal air pollution in the area	Air quality measurements Complaints from the students and neighbours	Daily during the construction	The institutes administration Contractor NEMA and the District Environment Officers	1000	

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Estimate costs	Capacity Building Requirements
	e.g. sand, will be enclosed, covered, and watered daily. Ensure construction machinery and equipment are well maintained to reduce exhaust gas emission						
Noise pollution	Use of Suppressors on noisy equipment or noise shields for instance corrugated iron sheet structures Sensitize drivers of construction machinery on effects of noise Maintain plant equipment to suppress frictional noise Construction activities to be restricted to daytime i.e. 8am to 5pm	Minimal noise generated at the site	Noise measurements at the site Complaints from the neighbours	Random	The institutes administration Contractor The District Environment Officers Workers	2000	

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Estimate costs	Capacity Building Requirements
	Workers in the vicinity or involved in high-level noise to wear respective safety & protective gear.						
Traffic and Road safety Impacts	Enforce speed limits for construction vehicles especially along the construction material haulage roads as well as access roads within the institutes. Ferry building materials during of off-peak hours Employ traffic marshals to control traffic in and out of site Employ well trained	Minimal or no traffic interruptions within the institutes	Complaints from the students, staff and neighbours	Daily	The institutes administration Contractor The District Environment Officers Workers and drivers	8000	

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Estimate costs	Capacity Building Requirements
	and experienced drivers						
Oil Spillage and pollution	Proper storage, handling and disposal of new oil and used oil and related wastes Maintain construction equipment to avoid leaks	Minimal or no oil spills around the site	Oil spills around the site and along the project haulage routes	Daily	Contractor's Workers	Included in the BOQ	

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Estimate costs	Capacity Building Requirements
Storm water management and drainage impacts	Proper installation of drainage structures/facility Install cascades to break the impact of water flowing in the drains Ensure efficiency of drainage structures through proper design and maintenance Provide gratings to the drainage channels	Proper drainage of the area during the rainy seasons	Flooding around the site	During construction and on completion of the structures	Contractor	1500	
Health and safety of workers	All workers will be sensitized before construction begins, on how to control accidents related to construction. A comprehensive contingency plan will be prepared before construction begins, on	No occupational accidents at the site	Occupational accidents records		Contractor (Health and Safety officer on site) Institute administration	2000	

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Estimate costs	Capacity Building Requirements
	accident response. Keep record of the public emergency service telephone numbers including: Police, Fire brigade, Ambulance Accordingly, adherence to safety procedures will be enforced. Provide first aid kits at strategic places in the site All workers to wear protective gear during construction e.g. helmets. Construction work will be limited to daytime only						

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Estimate costs	Capacity Building Requirements
Fire outbreak	Install firefighting equipment on site. Sensitize the workers on fire risks i.e. conduct regular fire drills Maintain firefighting machinery regularly Provide emergency numbers at strategic points on site	Fire prevention during the construction phase Appropriate and quick response to fire out breaks	Presence of firefighting equipment and mechanisms		Contractor (Health and Safety officer on site) Institute administration inspectors	Included in BOQs	
Solid and liquid waste	Ensure proper solid waste disposal and collection facilities Ensure effective wastewater management Sensitize workers on the 5 R's of waste management i.e. reduction, recycling, reuse, repurpose and refuse Wastes will be collected	Proper Solid and liquid waste management	Sanitation on site		Contractor (Health and Safety officer on site) Institute administration	1000	

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Estimate costs	Capacity Building Requirements
	by a licensed operator to avoid illegal final dumping at unauthorized sites. A temporary sanitary facility will be provided on site to be used by construction workers						
Increased water demand	Management of water usage. Avoid unnecessary wastage Where possible separate eater sources should be provided for use in the construction works	Reduction on water wastage at the site	Water supply meter readings and records		Contractor Institute administration		

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Estimate costs	Capacity Building Requirements
Security	Provide security guards and facilities during construction period. The construction sites should be completely hoarded off and the gate should always be controlled by the security personnel	Security on site	Theft records		Contractor		
Creation of Employment Opportunities.	Ensure prompt payments as well as adequate wages commensurate with level of skills of construction workers. All construction workers employed at the site including locals and outsiders should be given an induction course on proper work ethics and responsible	Local people benefit from the employment opportunities	Number of local people employed	Throughout the construction period	Contractor and Institute administration		None

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Estimate costs	Capacity Building Requirements
	social behaviour All workers should be given contracts						
Income to construction material suppliers	Earth materials must be obtained from officially licensed and approved sources. Suppliers should be paid promptly.	Preventing environmental degradation	No complaints	Throughout the construction period	Contractor and Institute administration	Included in the BOQs	None

Operation Phase

The necessary activities, mitigation measures and responsibilities pertaining to prevention, minimization and monitoring of significant negative impacts and maximization of positive impacts associated with the operational phase of the project are outlined in the table below.

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Costs	Capacity Building Requirements
Waste Generation	Ensure that wastes generated are efficiently managed through recycling, reuse and proper disposal procedures Use of an integrated solid waste management system i.e. 5 R's of waste management A private solid waste handler to be contracted to handle solid waste	No litter	Availability of waste collection facilities.	Operation	Estates manager	1000	Proper waste management practices including general good housekeeping practices

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Costs	Capacity Building Requirements
Occupational Hazards	Keep record of the public emergency service telephone numbers including: Police, Fire brigade, Ambulance Document an emergency response procedure Train students and instructors on emergency response e.g. through fire drills and first aid training Engage a caretaker to ensure maintenance of a clean environment	Safe working environment	Record of injuries and complaints	Operation	Estates manager and the administration	2000	Random fire drills

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Costs	Capacity Building Requirements
Insecurity	Engage services of security guards Install CCTV cameras	Safe studying and training environment	Theft records	Operation	Estate manager and Head of security	Included in BOQs	None
Fire Risk	A fire emergency management plan should be developed and easily accessed by all students and staff. Fire escape routes should be provided in all structures and clearly marked with lit signals.	Safe environment	Presence of fire-fighting equipment. Records of fire out breaks	Operation phase	Estate manager	Included in BOQs	Emergency fire drills at the work place
Increased energy demand	Switch off electrical appliances when not in use. Use energy conserving bulbs e.g. LED bulbs for general lighting.	Conservation of energy	Energy bills		Estate manager	1000	Non

Impact	Mitigation/Enhancement Measure	Desired Outcome	Indicator (s)	Timing	Responsibility	Costs	Capacity Building Requirements
	Make use of alternative source of energy such as solar power, which is renewable.						

CHAPTER 10: GRIEVANCE REDRESS MECHANISM

10 Introduction

This section describes avenues for affected persons to lodge a complaint or express a grievance against the project, its staff or contractors during project implementation. It also describes the procedures, roles and responsibilities for addressing grievances and resolving disputes. Every aggrieved person shall be able to trigger this mechanism to quickly resolve their complaints.

The objectives of the grievance process are:

- i) Ensure that appropriate and mutually acceptable corrective actions are identified and implemented to address complaints;
- ii) Verify that complaints are satisfied with outcomes of corrective actions;
- iii) Avoid the need to resort to judicial proceedings.

The grievance mechanism at each facility will be fed from three main sources:

- Students, teaching and non-teaching staff, Kitgum Technical Institute staff administration, Parents.
- Supervising engineer, clerk of works or contractor.
- Monitoring team who will forward issues/concerns identified in the field.

Steps of the grievance process are described below.

10.1 Key objectives of the grievance process are:

- a) Provide affected people with avenues for making a complaint or resolving any dispute that may arise during project implementation;
- b) Ensure that appropriate and acceptable corrective actions are identified and implemented to address complaints;
- c) Verify that complainants are satisfied with outcomes of corrective actions;
- d) Avoid the need to resort to judicial (legal court) proceedings, unless all non-judicial avenues fail.

10.2 Major Role of the Grievance Committee

The major role of the **Grievance Committee** is to receive ethical complaints and arbitration requests to determine, if taken as true on their face, a hearing is to be warranted so as to either provide fair resolutions or forward to higher levels of administration, with a constant and continuous open communication flow. At the time of the project,

10.2.1 Role of the Grievance Mechanism

- Establish a procedure for receiving, recording/documenting, and addressing complaints that is easily accessible, culturally appropriate, and understandable to affected communities.
- Inform the affected communities about the mechanism during the community engagement process.
- Consider when and how to seek solutions to complaints in a collaborative manner with the involvement of the affected community.
- Scale the grievance mechanism to the potential risks and adverse impacts of the project.
- Address concerns promptly, using an understandable and transparent process that is readily accessible to all segments of the affected communities—and at no cost and without retribution.
- Ensure full participation of both genders and vulnerable groups.
- Take into consideration customary and traditional methods of dispute resolution when designing the system.
- Assign consistent, experienced, and qualified personnel within the client organization with responsibility for receiving and responding to grievances.
- Establish a redress mechanism so those who feel their grievances have not been adequately addressed have recourse to an external body for reconsideration of their case.
- Document grievances received and responses provided and report back to the community periodically.
- Provide periodic reports on issues that the grievance mechanism has identified as of concern to those communities.

10.3 Community engagement

The grievance Committee will constantly undertake community engagement during project implementation period. Community engagement is a core strategy to know what community problems are before a grievance arises.

10.4 Feedback mechanism

During resolution of a logged complain, weekly feedback shall be provided but the aggrieved party or group of persons on how the complaint is being resolved and at what level of resolution it has attained. This will be done with an aim of managing their anxiety. Upon resolution of the concern raised, immediate communication shall be made to the complaint.

For every complaint raised shall ensure that is either resolved within 2 weeks or forwarded to next level / third party in a period of a months' time.

10.5 Process of grievance management'

Right from the logging of the grievance, a step by step process shall be followed in order to resolve the complaint raised. The logged complain will follow the process shown in the chart below:-



Steps of the grievance process are described below.

Step 1: Receipt of complaint

A verbal or in written complaint from a complainant will be received by the Clerk of Works and recorded in a complaints log s(he) keeps on site. The log will indicate

grievances, date lodged, action taken to address complaint or reasons the grievance was not acted on; information provided to complainant and date the grievance was closed. Grievances should be lodged at any time, either directly to the Clerk of Works' office or through the leaders or heads. The process for lodging a complaint is outlined below:

- Clerk of Works receives complaint(s) from complainant and records it in log (in English).
- Clerk of Works reads the recorded complaint translating it into local language for the complainant to confirm correct detail of complaint has been documented.
- Complainant signs the log to confirm grievance was accurately recorded

Step 2: Determination of corrective action

If in his/her view, a grievance can be solved at this stage, the Clerk of Works will determine a corrective action in consultation with the aggrieved person. Remedial action(s) and timeframe within which they must be accomplished has been described and the party responsible for implementing them will be recorded in the complaint log.

Grievances will be resolved and status reported back to complainants within 5 days. If more time is required this will be communicated clearly and in advance to the aggrieved person. For cases that are not resolved within the stipulated time, detailed investigations will be undertaken and results discussed not more than 1 month from lodging a grievance.

Step 3: Meeting with the complainant

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

Step 4: Implementation of corrective action

Agreed corrective action will be undertaken by the project or its contractor within the agreed timeframe. The date of the completed action will be recorded in the log against the complainant's grievance.

Step 5: Verification of corrective action

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

Step 6: Action by MoES and project contractors

If the Clerk of Works cannot solve the grievance, he will refer it to MoES (and contractor) through the Supervising Engineer. It is believed all possible grievances can be solved at this level.

Step 7: Seek Legal Arbitration

In cases where there the complainant remains dissatisfied, the Complainant can seek for legal resolution or arbitration, so that a decision is made.

Note: It is however important to note that any complainant has a right to seek for legal arbitration and this can be done without influence from the GMC, if the complaint is not comfortable at resolving the possible grievance with the GMC.

However during project implementation, continuous awareness shall be undertaken so as to create a conducive platform for all complainants to log their complaint with the GMC team.

Conclusion

The proposed project has potential to significantly improve quality of skills and productivity of the students to meet the current market demand. The proposed civil works and redesigning/redevelopment of the curricula is very essential to achieving sustainable skill development and the reduction of unemployment among the youth. The survey carried out shows that there few female students enrolling for vocational and technical education in the entire regions of Uganda this is mainly attributed to public perception that emphasizes boy child for vocational and technical work.

The students must be encouraged from primary schools to attend the vocational and technical institution because it is “Hands on” unlike the other format of education that creates supply of employees but without adequate and necessary skills to the market demand.

Therefore, for the USDP to be successful, all stakeholders should be involved from the inception stage throughout the life span of the project and potential environmental impacts analyzed in this Project Brief should be adequately mitigated.

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ANNEXES

ANNEX 1 Record of Stakeholder Consultations

MEETING 1: Department of Health and Safety; Ministry of Gender Labour and Social Development

Subject	Consultations With Department Of Health And Safety; Ministry Of Gender, Labour And Social Development										
Location:	Plot 2, Simbamanyo House, George St– D/OSH's Office.										
Present	Consultant team 1. Sibo Gloria Muhwezi – Environmentalist 2. Mr. Kizito Paul – Environmental Engineer 3. Miss Diana Alinaitwe - Environmental Health and Safety 4. Miss. Martha Lynn Rwaboona- Sociologist										
	D/OSH <table> <thead> <tr> <th>NO</th><th>NAME</th><th>DESIGNATION</th><th>CONTACT</th></tr> </thead> <tbody> <tr> <td>1.</td><td>Ms. Eve Katushabe</td><td>Principal Inspector</td><td>Health 0779651582</td></tr> </tbody> </table>			NO	NAME	DESIGNATION	CONTACT	1.	Ms. Eve Katushabe	Principal Inspector	Health 0779651582
NO	NAME	DESIGNATION	CONTACT								
1.	Ms. Eve Katushabe	Principal Inspector	Health 0779651582								

Issues raised	recommendation on gender mainstreaming during project implementation;
- Vulnerable, Women and children consideration - Engaging the relevant offices at the District level - Sensitization of workers and the community on sexual harassment, discrimination at work, violence at work etc	- The contractor should ensure equal payment for work of equal value for both women and men - Clearly well exposed and readable sign posts depicting the nuisance of harassing women at work like; sexual harassment forms, women discrimination and many others. These should clear pass out the message of not harassing women at work. - The contractor should work in hand with the district CDO in handling community cases like those of women and children. - The contractor under the guidance of the CDO and the DLO should diverse a way to engage also the disabled members in the community. Like the lame can be given jobs like store record keeping that's if they have the qualifications. - The contractor should also abide by the labour laws of Uganda specifically those concerning women in order to be

RENOVATION AND UPGRADING OF INSTITUTIONAL BUILDINGS FOR LOT-1: LIRA
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	advised on how to handle maternity leaves, pregnant ladies and absence of sick ladies and also be advised on employment of children - The contract should include a clause for provision of vulnerable women employees e.g. breast feeding mothers - Health and safety of both the women and children should be a priority.
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KEY INFORMANT GUIDE

SOCIAL IMPACT ASSESSMENT

CONSULTATION FORM

ATTENDANCE MINISTRY OF Gender, Labor & Social Development.

No.	Name	Organisation and Title	Telephone No.	Email Address	Signature
Client	MINISTRY of Gender, Labor & Social Development				
	Maggie M Kyomukama	MGLSD Asst. Commissioner Gender & Women Affairs	0712516778	maggiekyomukama@gmail.com	Maggie Kyomukama
	EVA KATUSABE	MGLSD PRINCIPAL SAFETY INSPECTOR	0779 651582	lynms2@yahoo.com	[Signature]
Consulting Team	GESCH CONSULT LTD				
1	Ricabones Martha Lynn	Environmentalist	0702-000328	marthalyms3@gmail.com	[Signature]
2	ALINATHIG DIAMAH	SOCIOLOGIST	0777725651	alinathig@gmail.com	[Signature]

CONSULTATION AREAS

MEETING 2: Uganda Aids Commission

Subject	CONSULTATIONS WITH UAC			
Location:	UAC Offices – Ntinda Kampala.			
Present	Consultant team 1. Sibo Gloria Muhwezi –Environmentalist 2. Mr.Paul Kizito Anderson –Environment and Natural Resources officer 3. Miss Diana Alinaitwe - Environmentalist 4. Miss Martha Lynn Rwaboona –Sociologist			
	UAC			
	NO	NAME	DESIGNATION	CONTACT
	1	Dr Zepher Karyabakoba	Director policy research and programming	0772681785
	2	Dr Byamukama Daniel	Head prevention	0773244442
	3	Mr Etti Tom	Coordinator Public sector	0772826566

Issues discussed	Recommendations;
• Working closely with regional AIDS networks throughout the country. • The spread of HIV/AIDS • Health centres around the project sites	• The contractor should work with District Local Government. These have District AIDS Network and have developed District HIV strategic plans that can guide the contractor on HIV mainstreaming during project implementation • Continuous sensitization of the workers and the community should be done to create awareness of the disease • The contractor should engage the local health service providers in providing services. An outreach should be done to identify the status of the workers. Those infected should be referred to these local health service providers • The following key services should be provided to the workers and the project

	community; - Information, Communication and education - HIV counseling and testing and referral for medication - Constant provision of condoms for the workers Legal framework to guide project implementation includes the following; • National HIV strategic plan • National HIV policy • National HIV prevention road map • District HIV/AIDS strategic plan, among others
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Meeting 3: Kitgum District Local Government

Subject	CONSULTATIONS WITH DISTRICT OFFICIALS														
Location:	District Headquarters														
Present	Consultant team 1. Mr. Sengendo Eriab- Environmental Engineer 2. Mr. Muyangu Baker - Sociologist														
	<table> <thead> <tr> <th>NO</th><th>NAME</th><th>DESIGNATION</th><th>CONTACT</th></tr> </thead> <tbody> <tr> <td>1</td><td>Mr. Nkumbi Willy</td><td>SPSWO</td><td>0776411946</td></tr> <tr> <td>2</td><td>Mr. Byaruhanga Joseph</td><td>Environmental Officer</td><td>0772825426</td></tr> </tbody> </table>	NO	NAME	DESIGNATION	CONTACT	1	Mr. Nkumbi Willy	SPSWO	0776411946	2	Mr. Byaruhanga Joseph	Environmental Officer	0772825426		
NO	NAME	DESIGNATION	CONTACT												
1	Mr. Nkumbi Willy	SPSWO	0776411946												
2	Mr. Byaruhanga Joseph	Environmental Officer	0772825426												

Key concerns	Recommendation measures
- Stakeholder engagement throughout the project - Gender mainstreaming - Issues concerning HIV/AIDS - Restoration of the areas used for excavation of materials	- Involve all the leaders at all levels around the project site; - First priority should be given to community members especially during recruitment - The project should have a gender focal person so as to ensure it is observed critically ; - Support the community through purchase of the of construction material; Emergency Preparedness Plan; and a stand-by vehicle in case of serious accidents; - The project should also support the community through trainings o school drop outs - Engage the community members at all levels of the project; - The project should also support the community through value addition to Kitgum s' products like the fishing business - The community should be sensitized about HIV/AIDS as well as the workers and students - PWDs should be catered on all the buildings to be constructed at the institute

RENOVATION AND UPGRADING OF INSTITUTIONAL BUILDINGS FOR LOT-1: LIRA
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	▪ Provide all workers involved in construction works with adequate PPE; ▪ Replace trees cut during project implementation. If 1 is cut, it should be replaced with 5 trees ▪ Restore all excavated areas before re-greening in order to control erosion ▪ Water bowsers should be used to suppress dust because soils in Kitgum are very dusty
--	--

Meeting 4: Community Meeting

Subject	CONSULTATIONS WITH THE NEIGHBORING COMMUNITY
Location:	Kitgum Technical Institute premises.
Present	Consultant team 1. Mr. Sengendo Eriab - Environmental Engineer 2. Mr. Muyangu Baker - Sociologist

Remarks from the community	Proposed mitigation measures
- Issues concerning HIV/AIDS - Pollution from the construction site - Supporting the community through purchasing materials, employment opportunities and may be project incentives.	- Support the neighbouring community by purchasing construction material from them and providing them with employment opportunities. - Provide free HIV/AIDS counselling and testing services for the workers and community; - The contractor should sensitize the workers on social behaviours especially family break ups and early pregnancies that normally happens on various projects - Sprinkling of water on dusty haulage routes outside the institute to suppress dust; - The project should provide the community with some trainings especially in agriculture

ANNEX 2: Management Plans

1. OCCUPATIONAL, HEALTH AND SAFETY PLAN

2. GENERAL STATEMENT OF THE PLAN

Our plan is to provide and maintain safe and healthy working conditions, equipment and systems for all our employees, and to provide such information, training and supervision as needed for this purpose.

This detailed Occupational Health and Safety management plan will therefore guide the project Contractor in implementing occupational health and safety safe guards. The plan will constitute the day to day activity to guide the contractor's integrate safety measures in her works. Periodic reviews will be undertaken to cater for any eventualities and emergencies that may arise during implementation.

1.1 Proposed Safety and health policy

Contractor believes that **NO JOB OR TASK IS MORE IMPORTANT THAN WORKERS' HEALTH AND SAFETY.**

If a job represents a potential safety or health threat, every effort will be made to plan a safe way to do the task.

Every procedure must be a safe procedure. Shortcuts in safe procedures by either foremen or workers are not to be tolerated.

If a worker observes any unprotected job, which may pose a potential threat to their health or safety, he or she must inform management and management must take adequate precautions.

"IF A JOB CANNOT BE DONE SAFELY IT WILL NOT BE DONE."

Our future is only built through our people. We aim to protect them.

1.2 Goals

The main goal of this Occupational Health and Safety plan is to promote a safe and secure work environment through careful identification and management of hazards. The plan seeks to facilitate and empower workers and managers at all levels to participate in the avoidance, minimization and complete eradication of accidents and diseases associated with unsafe and insecure work places.

The plan further seeks to enhance worker productivity through appropriate training and provision of tools that enhance performance, reduce lost time through accidents and limit material and financial losses arising from inappropriate equipment's, workers, methods and complacent personnel.

The safety and health plan is designed to achieve the following specific objectives:

- a) Achieve Zero reporting of accidents of all sorts and near misses throughout the construction life span of the project; thereby eliminating losses resulting from injuries and infections and diseases at the work place;
- b) Eliminate exposure and incidences of occupational injuries and diseases among all categories of the workforce; and
- c) Operate a flexible and quick response system to injuries at the work sites, following thorough training of all project staff in OHS procedures at induction; thus instilling a culture of responsibility and accountability on Safety and Health.

1.3 OSH Plan Institutional Matters, Reporting and Quality Assurance

The overall implementation of this plan will lie with the Project Manager who will delegate functional duties to the Health and Safety Officer. A safety committee comprising of section managers, foremen and workers representatives shall be constituted. The Supervising Environmentalist and Sociologist shall advise the Health and Safety officer and the committee. This OHS plan is a living document that will be updated in consultation with all employees, the client and supervising consultants. Periodic audits both internal and those commissioned by regulatory agencies shall also inform periodic updates of the health and safety plan. Through quality assurance mechanisms specified in here, the contractor is expected to achieve its stated objectives.

In addition, the Contractor will:

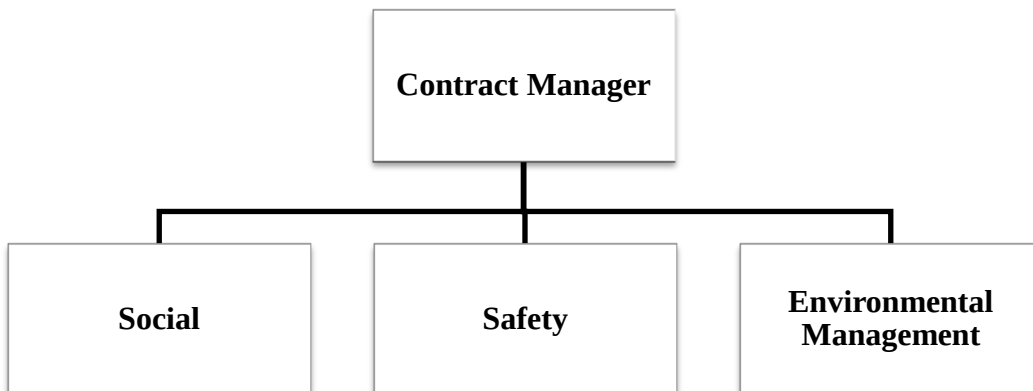
- ❖ Make this plan readily available to all workers and all people concerned about this project and ensure they have an opportunity to read, understand, clarify and ask questions
- ❖ Keep a copy of the management plan for the whole duration of the project
- ❖ Review the plan regularly throughout the project and make any revisions known to those working on the project

1.4 Organisation

Overall and final responsibility for health and safety on the project is that of the Contractor's Project Manager.

The following supervisors are responsible for health and safety.

- ❖ Social Officer.
- ❖ Safety Officer
- ❖ Environment Officer



All employees have the responsibility to cooperate with supervisors to achieve a healthy and safe sensitive workplace, and to take reasonable care of themselves and others.

Whenever an employee, supervisor or manager notices a health and safety problem which they are not able to put right, they must straight away report to the responsible persons as named above.

3. HEALTH AND SAFETY REPORTING AND AUDITS

4.

2.1 Monthly Health and Safety Reports

The OHS officer shall produce monthly reports to be discussed at the site monthly meetings. The content of the report shall reflect all aspects of hazards identified. Detailed statistics on Implementation of safety plan including but not limited to the following shall be presented:

- i. Induction training carried out by section
- ii. Fire drills conducted (number and sections)
- iii. Health and safety tool box talks conducted
- iv. Incident statistics categorized where possible
- v. Fatalities on the project by section If any
- vi. Near misses records
- vii. Notifiable incidences
- viii. Disbursement and use of PPEs
- ix. Compliance levels among employees by section
- x. Equipment certification by relevant agencies
- xi. External inspections and their outcomes (If any).

2.2 Quarterly Internal Audits

The Health and Safety Officer working with the Committee and section managers shall undertake quarterly health and safety audits on the entire project. The team with the guidance of the OHS officer shall prepare and audit protocol to be administered by section managers, sub-contractors or their designated representatives. The scope of this type of audit shall depend on the nature of ongoing operations. The purpose of this Level of audit is to evaluate performance of the plan and the outcome will be used to fine tune, refocus and improve overall plan implementation. The audit report shall be submitted to the Resident Engineer and discussed at the subsequent site meeting. The content of the quarterly audit report shall mirror the monthly reports though with much more in-depth analysis.

2.3 Annual Health and Safety Audits

Annual health and Safety audits shall be carried out by a competent external auditor hired by the Contractor. The annual audit will be a performance audit whose scope and content shall be determined by the Lead auditor, Resident Engineer, Environmentalist and Sociologist of the RE, Health and Safety officer of the contractor and the general management team shall be consulted. The purpose of this audit shall be to evaluate compliance with the contractor's own health and safety plan and guidelines and further evaluate compliance with statutory Health and Safety legislation and regulations.

Outcomes of this audit shall inform updates to the existing OHS plan. Being a statutory requirement, this annual audit shall be submitted to the client through the Engineer for onward transmission to designated lead agency.

2.4 Hazard Identification and Risk Assessment

Hazard identification and risk assessment are critical to Health and Safety planning in construction projects. Prior to the commencement of any works, introduction of any plant, substances, processes or work practices in this project, hazard identification will be carried out to identify whether there is any potential for injury, illness or disease

associated with such introduction. This plan identifies hazards and risks associated with sections of the project. The following generic hazards have been identified to apply to entire project:

1. Manual handling,
2. Use, installation, inspection and/or repair of plant and equipment,
3. Working at heights,
4. Falling objects,
5. Working in confined spaces,
6. Vehicle movements on site,
7. Handling and storage of hazardous substances and dangerous goods,
8. Electrical installations and repairs,
9. Fire,
10. Noise and Vibrating Equipment,
11. Dust, fumes
12. Stressing,
13. Traffic control,
14. Inadequate sanitation and illicit sexual relationships
15. Congestion
16. Falls and slippery surfaces
17. Electric transmission lines and towers
18. Bites from poisonous Insects.

5. OCCUPATIONAL HEALTH & SAFETY MANAGEMENT

The management and monitoring of OHS will be under the docket of a fulltime Safety Officer together with Environmental Control officer. This team will produce guidelines to be followed by all employees and visitors while within the premises and work sites.

1.1 Site Safety

The following procedures and actions will be implemented by the implementing Contractor.

- ❖ Yellow safety mesh will be placed around any excavation area, to reduce the possibility of injury to workers, residents and domestic animals.
- ❖ The safety mesh will be installed in such a way that small children cannot gain access to the excavation area.
- ❖ Appropriate safety signage will be placed around excavation areas and sections with work in progress (with appropriate picture illustrations).
- ❖ The Contractor will on a daily basis inspect all pit construction and ensure that all safety mesh and all exposed “pits” are appropriately covered.
- ❖ Communities around the schools where construction works are taking place will be sensitized on safety issues.
- ❖ Provision of warning signage on all high-risk equipment and on work surfaces
- ❖ An accident register will be established at all work sites
- ❖ A fully equipped safety kit will be available at all work sites
- ❖ Provision of onsite toilet and washing water for workers.
- ❖ Provision of portable water for workers at all times.

1.2 Personnel Safety

- ❖ Working hours will be from 08h00-17h00 with construction occurring from Monday to Friday only (any work beyond these hours will be treated as overtime).
- ❖ All workers will undertake compulsory induction training in work safety
- ❖ Warning signage and proper housekeeping will be maintained at all work areas.
- ❖ Induction training to all new workers on safety and risk in construction sites.
- ❖ Provision of PPEs to all employees and posting of signage reminding use of PPE at appropriate Locations in the project area including ancillary work sites.
- ❖ All employees shall be properly trained in the handling of appropriate fire fighting equipment and that such equipment will be on hand at all times.
- ❖ The contractor shall ensure that as far as practical, suitable arrangements are made on the site for the maintenance of health, the prevention and overcoming of outbreaks of disease and of adequate first aid services.
- ❖ The Contractor will provide portable water in appropriate Locations for all workers on site to drink especially on hot days. The contractor shall ensure safe drinking water is provided on site at all times.

1.3 Fire safety and Management

Fire safety and management planning will be key to this assessment. The Contractor will ensure that all, resources required to manage a fire outbreak are appropriately deployed at all times. The following routine and emergence response procedures and actions will be followed:

- ❖ All employees will be inducted on fire safety and undertake regular fire evacuation drills.
- ❖ The Safety Officer will be required to produce routine reports on fire safety management and awareness.
- ❖ Appropriate equipment of either class A, B or C, water hose pipes and sand buckets for fire suppression will be located in designated places
- ❖ All potential fire hazard areas will be screened off including fuel storage and dispensing areas. Appropriate signage will also be displayed on such areas
- ❖ Install “no smoking” signage in high fire risk (fuel tanks and dispensers), public and communal areas.
- ❖ All building at the campsite will have emergency fire exits well marked for all people.
- ❖ A well designated fire assembly point will be availed at the camp.
- ❖ Ware houses for all inflammable materials will be well labelled and precaution signage posted.

GENDER ACTION PLAN

1. What Is a Project Gender Action Plan (GAP)?

A Project Gender Action Plan (GAP) is ADB’s key gender mainstreaming tool and mechanism for ensuring gender-inclusive design and implementation of projects. GAPs

give visibility to and accountability for gender mainstreaming. They make gender mainstreaming tangible and explicit in program and project design and implementation. GAPs include quotas, targets, activities, and design features to address gender-equality issue, and to facilitate women's involvement, participation in, and tangible benefits from the project. GAPs provide a road map for project implementation, monitoring, and evaluation.

2. The Scope

This Plan shall apply to all operations and Employees of the Contractor and Sub-Contractors.

3. Legal and Policy Context

The Constitution of the Republic of Uganda provides overall legal frame work for the Uganda Gender Policy (UGP). It recognizes equality between women and men. Specifically, it provides for gender balance and fair representation of marginalized groups; recognizes the role of women in society; accords equal citizenship rights, freedom from discrimination, and affirmative action in favor of women; and articulates specific rights of women including outlawing customs, traditions and practices that undermine the welfare, dignity and interests of women.

4. The Gender Policy, 2007. The Government of Uganda's first National Gender Policy (NGP) was approved in 1997. The policy provided a legitimate point of reference for addressing gender inequalities at all levels of government and by all stakeholders, including contractors (The Contractor).

Convention on Elimination of All Forms of Discrimination against Women

The Convention on the Elimination of all Forms of Discrimination against Women (CEDAW) is an international treaty adopted in 1979 by the United Nations General Assembly. Described as an international bill of rights for women, it was instituted on 3 September 1981 and has been ratified by 189 states including Uganda. Article 1 defines discrimination against women as; any distinction, exclusion or restriction made on the basis of sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women, irrespective of their marital status, on a basis of equality of men and women, of human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field.

Therefore, all forms of discrimination against women during implementation of the aobove named projects shall be condemned

4. Gender Analysis

4.1 National Perspective

According to the Gender Policy (2007), the percentage of women who are HIV positive are 7.8% as compared to 6.4% of men, among 15-49 year olds, HIV prevalence for females is 12.8% in urban and 6.5% in rural areas.

Total fertility rate is at 6.7 children per woman. Sixteen percent (16%) of women are married by age 15 and 53% by age 18. (UDHS 2006).

Sixty percent (60%) of women aged 15-49 years' experience physical violence, 39% sexual violence and 16% have experienced violence during pregnancy (UDHS 2006).

The employment status of employed persons aged 10 years and above stands at 89.6% for the self-employed, with 84.0% male and 95.3% female in the rural areas and 54.3% for the male and 68.7% female in the urban areas

Women continue to suffer very high time burdens in pursuing their livelihood strategies. The Uganda Strategic Country Gender Assessment (World Bank 2005) reveals that women work considerably longer hours than men (between 12 and 18 hours a day, with a mean of 15 hours), compared with an average male working day of 8 to 10 hours. Women bear the brunt of domestic tasks, in addition to agricultural and other productive work. The time and effort required for these tasks, in almost total absence of even rudimentary domestic technology, is staggering. This has a negative effect on food security, household income, children's schooling, and participation in community life, health, and overall productivity.

There are significant gender inequalities with regard to the right to property. Land is a critical resource for over 90% of households in Uganda, and women own only 16% of the registered land. (Gender Baseline Study: Land sector, 2004). Apart from a few, economically advantaged, the majority of women have only user rights determined by the nature of the relationship they have with a male land owner - father, husband or brother. A large part of women's contribution at household level tends to be non-monetary and hence does not directly go into what is generally understood as property. The right to livelihood for young people has increasingly become an issue of concern. Young women and girls' rights are violated through early marriages, 16% of women are married by age 15 and 53% by the age of 18. The average Ugandan girl gets married at the age of 17 years (UDHS 2006) teenage pregnancy rate is at 34% and women's age for sexual debut is 16.7 years compared to men at 18 years. The UDHS 2006 further reveals that 24% of the girls have had sexual intercourse by the age of 15 and 69% by the age of 18. The right to livelihood of young men and boys remains a challenge. Out of school male youth in rural and peri-urban areas are unable to find viable livelihood opportunities, due to inadequate skills, lack of assets and limited options in other lucrative sectors. As a result male youth are vulnerable to alcohol, drug abuse and crime. The UGP recognizes that gender disparities in rights to property and livelihoods on the part of the youth undermines the future of the country as a whole

4.2 Project Area Perspective

Site inspection, review of relevant documentation such as the ESMF undertaken in 2016, reveal that at comparing the roles of women and men in the project environment. It was established that men are more likely to be responsible for buying or acquiring assets as deduced by 51% of the community members as compared to the likelihood of women rated at only 8%. Women are more involved in domestic activities participating in 70% of the household chores as compared to men who only participate in 4%. But the survey findings revealed that 26% of the household activities are jointly done by all family members. Though farming was noted as an activity in which all family members participate, marketing of agricultural produce was a women dominated activity as noted by 43% of the community members and less by men whose participation was estimated at 27%. Plate 43 illustrates women taking produce to Kihaguzi weekly market

From the survey it was established that boys mainly participate in animal rearing, farming and buying basic necessities while girls are mainly involved in helping with domestic chores, child caring and marketing of agriculture produce. It was noted that roles participated in by girls are similar to those for women which can be attributed to cultural practices that tend to prepare girls for future roles as house wives

The gender dynamics within the wider community were also investigated through considering activities in which the larger community participates. Sports were mainly defined as a male dominated activity with men and boys participation standing at 52 and 32% respectively. Both men and women participated in attending community meetings although the percentage of men still outweighed that of women in all meetings held during consultations. These findings show that men have more control over community resources whereas women are more involved in activities at household level. This means that men have to be consulted widely on where community resources are likely to be affected because they are the decision takers.

5. Project Impacts on Gender

5.1 Positive Project Impacts on Gender

The construction of the planned projects in UTC- Nyamitanga will invariably enhance gender in the project area where both men and women will be employed to undertake different roles of [project construction.

5.2 Negative Project Impacts on Gender

- Women are likely to be least favoured in the job provision. This is because of the nature of jobs available in the construction of the listed projects under chapter 2 are all civil work related and are perceived to be done by mainly men.
- There is likely to be developments of relationships between workers and the women of the area that are either engaged or already married, this can result into marriage break ups.
- There could be immorality especially with the young girls within the college or from around the technical college, in efforts to gain favour for employment opportunities, this can result into spread of sexually transmitted diseases such as HIV/AIDS. Impact on HIV will be long-term as its spread and associated impacts will continue even after construction.
- Farming activities in rain seasons demand a lot of garden work by women, which may impede their employment in construction. Married women may benefit less from construction employment because their spouses may dictate their level of participation in the available jobs if any. In general therefore, the impact on gender is evaluated as High Negative as it is long-term and spreads beyond project area
- Discrimination in terms of distributing jobs and unequal pay is likely to occur.

5.3 Project Mitigation

- Jobs should be equitably distributed to both women and men as long as one has the qualification rather than basing on gender to allocate jobs.

- Information dissemination about dangers of HIV/AIDS to the community should be done all throughout the period of the project. The messages should be passed on using the locally understood language for better understanding.
- A gender management plan be prepared by the contractor under which it should ensure among others the following:
- To the extent possible, equal employment opportunity shall be available for women for road construction jobs. To effect this, the contractor shall encourage women to apply for available jobs by indicating this in job adverts. Additionally Local council representatives working with the contractor on recruitment shall encourage women to apply for project jobs. The aim will be to have at least 10% of workers being female.
- During construction, women can be involved in a wide range of activities including traffic control, store-keeping, security, painting stone pitching, beautification/ landscaping and sweeping.
- The contractor should use gender-sensitive language such as: “Go Slow, Work in Progress” instead of “Go Slow, Men at Work”. This, coupled with women’s visibility in this construction project would, contribute to women’s empowerment as well as breaking the stereotype that construction works is a preserve of men.
- The contractor will be selective in awarding service contracts, giving preference to women- owned entities. This, for example, is in regard to supply of foodstuffs to workers camps, housekeeping and culinary services for workers.
- The parents should advice their girls against indulging in any kind of relationships with the workers.

6. Gender Action Plan for the Contractor

The Table below summarizes the Gender Action Plan

Project Activities and targets	Responsible person
• Ensure standardized designs for reconstructed buildings	Project Sociologist
• The signs on site should use gender sensitive language, i.e. WORKS IN PROGRESS, PEOPLE AT WORK, rather than MEN AT WORK	Consultants
• Ensure participation of women (at least 50%) in community consultations and meetings and conduct these in vernacular languages (this is according to the best practice).	
• Ensure females are represented on Grievance Management Committee (GRC).	
• If land is acquired for sub projects, ensure that affected females are compensated at the same rate of payment as affected males, and provided with adequate	

arrangements to restore/maintain livelihoods

- The Contractor and sub-contractors will prioritize the use of local unskilled labor where possible
- The Contractor and sub-Contractors will hire women for at least 30% of the required unskilled labor.
- Unskilled men and women workers will receive equal pay for equal work.
- Contractors will not hire child labor.
- Contractors will ensure strict implementation of the safeguard measures during civil works including wearing personal protection equipment, hard hats, gloves, safety boots, etc.
- Workers will elect a capable representative, who can advance gender concerns, to act as a liaison between them and the contractor.
- During construction, women can be involved in a wide range of activities including such as porters, delivery, store-keeping, security, painting stone pitching, beautification/ landscaping and sweeping.
- The contractor should use gender-sensitive language such as: “Go Slow, Work in Progress” instead of “Go Slow, Men at Work”. This, coupled with women’s visibility in road works would, contribute to women’s empowerment as well as breaking the stereotype that construction is a preserve of men
- Capacity of the local contracting industry will be built, including gender and labour-based approaches to routine maintenance. Project Sociologist
- A sex-disaggregated registry of local unskilled labour will be available for contractors, and the district Labour Officer will be able to track the use of local labour. Consultants
- Training on maintenance will be provided to local women and men.
- At least 20% of should have maintenance workers will be women.
- Strict enforcement of the core labour standards (equal pay for equal work for men and women, no child labour, etc.)
- An HIV/AIDS and Human Trafficking prevention Project Sociologist

program will mitigate potential negative impacts during and after construction. The program will target communities, construction workers, schools, and other stakeholders. 40% of residents (50% women) and all contractor personnel will participate in the programme.

Consultants

- All socio-economic baseline data will be sex-disaggregated
- Capacity building will be provided to all staff and sub-contractor staff
- Recruit at least two Gender Officers to support the Sociologist and E & S Team (at least 1 woman).
- All Project Management Unit (PMU) staff will participate in training on social and gender issues.

Project Sociologist

Consultants

7. Implementation Arrangements

The GAP will be implemented by the Contractor who will employ a Sociologist overseeing execution and compliance of all social and gender dimensions of the project, and social safeguards who will report directly to the Environment and Social Manager. The Contractor will employ gender specialist at each camp site who will be responsible for incorporating the GAP into project planning and implementation programs, including awareness training and establishment of sex-disaggregated indicators for project performance and monitoring. The progress of GAP activities will be included in regular progress reports on overall project activities submitted to the District Labour Officer and MoES.

8. Monitoring and Reporting

All monitoring processes shall incorporate a gender perspective to facilitate the assessment of the sub-sector's contribution to national gender equality and equity goals in general and the extent to which the respective programs or projects are progressing towards gender specific outputs. Accordingly, all the sub-sector's monitoring indicators should, as far as possible, be disaggregated by sex and gender

Monitoring of implementation of construction works will be undertaken in a participatory manner involving the contractor, community leaders, District Labour Officer, CBOs with a gender mandate and the workers. This will be in the form of meetings with the focus of being how well the contractor is complying with the gender equality contractual obligations. CDOs who are involved in gender work will also be part of the monitoring process.

Gender Risk Management

Gender and family Risk management

Objectives: i. To ensure that there is no violence related to gender based discrimination during project implementation.
 ii. To ensure that contractor workers do not involve themselves into extra marital affairs.

Management strategy. The management will primarily manage this through establishment of Gender Action Plan

Responsibility

		Implementation	Monitoring/checking	Timing
Actions/controls	i. Awareness creation for community members on the challenges of additional disposable income and how it can have a disruptive effect on the family. ii. The contractors should be bound to follow the Environment and Social Policy, procedures and guidelines. iii. Contractors with their staff - should be obliged to have Codes of Conduct for employees and anti-retaliation policies. iv. Administrative controls should be instituted to prevent unethical use of employers' resources. v. Sensitization of community members on the challenges of additional disposable income of migrant workers how it can	Sociologist	E & S Manager	Throughout the construction phase

have a disruptive effect on the family and therefore be prepared.

- vi. Empower community leadership to be able to protect the rights of children, woman and family norms.
- vii. The contractors should have regular community engagement meetings.
- viii. To take disciplinary action against perpetrators.
- ix. Workers will be sensitized on their gender rights and responsibilities. MoES - USDP will Work with the contractor on establishing zero tolerance policies and codes of conduct related to violence against women and girls (VAWG). The Contractor will conduct gender sensitization to the work force on matters such as gender sensitive communication and on the gender sensitive conduct of workers towards women amongst others.
- x. Display signs throughout the site making it clear that the work site is a violence free zone and VAWG will not be tolerated.
- xi. To the extent possible, there will be gender sensitivity in task allocation to the women.
- xii. There will be a Specialist (Environmental/Social Specialist) to

	oversee implementation of the gender action plan.			
	xiii. The project will install gender sensitivity facilities (toilets and bath shelters).			
Performance indicators	i. Number of gender based violence reported. ii. Number of extra marital cases reported. iii. Number of complaints coming from communities. iv. Number of workers employed disaggregated by sex, age. v. Task allocation by sex. vi. Proportion of women employed in supervisory positions. vii. Proportion of wages accruing to women. viii. Capacity building for both female and male workers.	Sociologist	E & S Manager	Throughout the construction phase
Monitoring	Daily inspection of any gender/family related issue.	Sociologist	E & S Manager	Throughout the construction phase
Reporting	All gender related based violence and family concerns should be reported to the project Sociologist.	Sociologist	E & S Manager	Throughout the construction phase
Corrective actions	Implement any corrective measures during the project implementation	Sociologist	E & S Manager	Throughout the construction

phase

9. Key Questions for the Monitoring Process

1. Are the data sources and the data for verifying status broken down by sex and analysed in gender terms?
2. Is there progressive achievement of gender equality and equity? Is the intervention addressing gendered travel patterns and transport needs?
3. Are women and men being given equal opportunities to participate in and benefit from the intervention?
4. Is the distribution of benefits taking gender relations into account?
5. Are women and men equally participating in the intervention?
6. Are the gender/women-specific activities being implemented?
7. Are resources being disbursed in a gender-sensitive manner

10. Reporting

The contractor shall submit a monthly report detailing:

- Mobilisation and recruitment strategies employed.
- Number of workers employed disaggregated by sex, age.
- Task allocation by sex.
- Proportion of women employed in supervisory positions.
- Proportion of wages accruing to women.
- Facilities provided to enhance women's participation in construction works.
- Capacity building for both female and male workers.
- Lessons learnt from implementations that can be the basis of documenting good practices.
- The report shall be verified by the Environment and Social manager

2. TRAFFIC MANAGEMENT PLAN

2.1 Purpose of the TMP

This traffic management plan is developed to provide guidelines that will be employed or used during the construction works to ensure that the safety of the pedestrians, workers (employees), contractor, drivers and other people accessing the site is guaranteed.

2.2 Traffic management objectives

The main objectives for the formulation of this traffic management plan are:

- ❖ To ensure that the safety of the working personnel, the public and all those that will be affected by the project;
- ❖ To find out the responsibilities of different personnel involved in managing traffic for the project duration.
- ❖ To ensure that the persons using the roads within the institute especially within the project sites are not inconvenienced while the project activities are being implemented.
- ❖ To minimize on the likelihood of traffic accidents that may occur during the construction of the satellite lab especially arising from material transportation to the site.
- ❖ Ensure that all relevant statutory requirements in relation to traffic are met during the construction, operation and decommissioning of the Project.

Traffic management measures to be considered:

- ❖ Use of Static Signs

Clear and effective traffic signs are essential at construction sites for the efficient operation of the road network within the institute for the safety of both road users and workers, and for enforcement of traffic regulations. Traffic signs at road works may be divided into three broad types:

- ❖ Warning – signs which warn of hazards/danger on the road ahead or advise persons of the precautions to be taken against such danger, or both.
- ❖ Regulatory – signs which give instructions or apply prohibitions or restrictions which road users must obey; and
- ❖ Information – signs which give directions and distances to destinations on the road ahead or on intersecting roads, or which provide other information relevant to the road user.

However it is important to note that the proposed traffic signs will be customized to the proposed project boundaries except for cases where construction is being collected from routinely.

2.3 Permanent Barricade

Permanent barricades provided around the construction work sites will channel the vehicles along the existing access roads. Main intention of this barricade is to make traffic aware about the construction work in progress. This is a psychological barrier preventing vehicles from going astray in to construction area.

2.4 Construction Entry/ Exit points

Construction entry/ exit points will be clearly identified and marked. Construction traffic will be allowed to enter/ exit the construction area through these openings only. These will be marked with signboards or red coloured flag.

2.5 Accidents

To control accidents on site, the following measures will be instituted:

- ❖ The contractor will adopt best transport safety practices with the goal of preventing traffic accidents and minimizing injuries suffered by project personnel and the public.
- ❖ Project will require contractors to regularly maintain vehicles to minimize potentially serious accidents such as those caused by brake failure commonly associated with loaded construction trucks.

- ❖ The site shall be completely hoarded off and signs put in place with security personnel to stop unauthorized people from accessing the site.
- ❖ For falling debris, and hoarding/scaffoldings; clear warning signs will be placed around the construction premise, install interceptors and net traps to divert falling debris, and emphasize (provide) person protective gears to persons in the area.
- ❖ Warning signs will be provided to warn of falling debris.
- ❖ Protective gear shall be provided to workers on site.

ANNEX 3: Grievance Log

GRIEVANCE LOG/REGISTER

This form shall be utilized to provide written documentation expressed by a resident representative and to record the follow up action to be taken and result thereof.

Receipt of grievance/complaint

Date received:

Individual initiating complaint:

Complaint reported to:

Documentation of grievance/complaint

Describe concerns using factual terms:

Documentation of grievance follow up

Individual designated to take action on this concern

Date assigned:

Date to be resolved by:

Was a group meeting held: ☐

Yes: if yes identify individuals ☐ attendance:

No:

What other action was taken to resolve the concern (be specific):

Result of action taken:

Resolution of the grievance/complaint

Was grievance /complaint resolved: ☐

Yes: ☐ describe action:

No: explain why not:

Identify the methods used to notify the resident /resident representative of the resolution

☐ Written notification: ☐

☐ Phone Conversation:

One to one discussion:

Date of notification:

Further action needed / Grievance to be escalated to another level:

This form was completed by:

ANNEX 4: Accident Log

Details of person completing this form			
Name:		Date:	
Job title			
Accident ☐	Dangerous occurrence ☐	Near miss ☐	illness ☐
Details of the injured person			
Name of the injured person		Age:	Sex:
Address of the injured person			
Tel. no.			
Name of supervisor/foreman		Tel. No.	Email:
Accident or incident details			
Location of accident/incident			
What works where occurring at the time of accident /incident?			
Summary of the accident/ incident and the injury caused (parts of the body and severity). Attach photographic evidence if possible			
Actions taken:			
Comments:			

ANNEX 5: Physical Cultural Resources Management /Chance Finds Procedure

For purposes of this EIA, Physical Cultural Resources include the following

- Archaeological deposits and remains,
- Historical monuments, sites and buildings,
- Historical and culturally significant Landscapes,
- Places of worship,
- Cemeteries, graveyards,
- Places associated with folklore, mythology (and traditions) and the location of historical and cultural festivals, events and rituals.

Before commencement of the clearing of the terrain at these sites, the contractor will acquaint itself with the type and Location of any sites of cultural or historical importance enumerated in the ESIA report, but shall not limit itself to those mentioned. The elements ultimately to be affected can only be determined during construction. Elements that can be easily identified are old stone structures, churches and graves. If cultural and historical elements including archaeological finds are present or if the contractor is unsure about a specific site, the Department of Museums and Monuments should be consulted.

Activities that are Likely to results in these above mentioned impacts include:

- Marram Extraction
- Contractor's yards, labor accommodation
- Storage areas
- Institutional Access roads
- Cuts and fills
- Maintenance
- Earthworks

Where a sensitive feature is found in an area (chance find), the following procedure will be adhered to:

- Stop the construction activities in the area of the chance find;
- Delineate the discovered site or area;
- Secure the site to prevent any damage or loss of removable objects.
- Notify the supervisory Engineer who in turn and the administration at BAC, as well as the responsible local authorities;
- Responsible local authorities and the relevant Ministry would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures.
- Decisions on how to handle the finding shall be taken by the responsible authorities and the relevant Ministry. This could include changes in the layout (such as when finding an irremovable remain of cultural or archaeological importance) conservation, preservation, restoration and salvage.
- Implementation for the authority decision concerning the management of the finding shall be communicated in writing by the relevant Ministry.
- Construction work could resume only after permission is given from the responsible local authorities and the relevant Ministry concerning safeguard of the heritage.
- The department of Museum and Monuments will be responsible for only nationally identified significant cultural and historical sites while the local

communities are responsible for their cemeteries, traditional and physical cultural resources according to the societal norms.

- If any significant physical cultural resources are encountered during the construction, the department of Museum and Monuments should be contact for further guidance.
- The World Bank's requirements regarding property cultural aspect are detailed in Operation Policy Framework 4.11 and shall be applicable to the project if any significant cultural aspects are found within the sites or within the project area during construction.

Once the sensitive feature's nature and location has been confirmed, the following shall be applied.

- Stop all construction activities in the area and notify the SE. The Contractor's environment officer will consult the relevant Local Authority, Department of Museums and Monuments and other relevant cultural institutions for the appropriate procedure to be followed.

Grave sites and Translocation

The issue of translocation of graves is an extremely sensitive one. If possible, the boundary of the proposed project will be curved out and left undisturbed. Or relocate the bodies to a suitable site together for temporary location. The relocation of graves should be seen as a Last option only and should be handled with the utmost sensitivity as described below. The Department of Museums and Monuments, relevant cultural Institution, other Government Agencies with a mandate will be consulted in such instances. There is a strict order of events which will be adhered to:

- The gravesite will be reported to the Supervising Engineer who will then forward the information to both the Institute and USDP task team.
- The client must then negotiate with the family of the deceased or any concerned institution to reach an agreement on the exhumation and reburial.
- Once the agreement is reached, the exhumation and reburial will be performed in accordance with the applicable rituals. It will then be the duty of the BAC administration to supply the caskets, dig new graves and perform the exhumation and reburial upon request by the authority.
- All gravesites remain in-situ and are avoided as far as possible.
- If a grave site is accidentally damaged or uncovered during construction activities, all construction activities will stop in the area and the Administration. The contractor should consult the relevant cultural institution for the appropriate procedure to be followed.
- Gravesites or other socially significant structures will be protected by means of a physical barrier both during construction and operation to prevent disturbance, vandalism or destruction.

ANNEX 6: Code of Ethics and Conduct

POLICY BRIEF AND PURPOSE

The code of ethics and conduct sets out the company's values, ethics, objectives and responsibilities. Our **Employee Code of Ethics and Conduct** outlines our expectations regarding employees' behaviour towards their colleagues, supervisors and overall organization. We promote freedom of expression and open communication. We expect all employees to follow our Code of Conduct and exercise maximum restraint and discipline while executing their duties.

PURPOSE OF THE CODE OF ETHICS AND CONDUCT

1. It should give guidance to employees on how to deal with certain ethical situations.
2. It defines how company employees should act on a day-to-day basis.
3. It reflects the company's daily operations, core values and overall company culture.

SCOPE

This policy applies to all our employees regardless of employment agreement or rank.

Policy elements

Compliance with law

1. All employees must protect the company's laws. They should comply with all environmental, safety and fair dealing laws. We expect employees to be ethical and responsible when dealing with our company's finances, products, partnerships and public image.
2. All employees must register in and out at the gate and/or on their respective time sheets. Failure to sign may lead to forfeiting of employees hours or days of work.
3. Personal protective equipment (PPE) must be worn **WHILE ON** duty to avoid unnecessary injuries. Failure to do so may lead to warning, suspension from work, and eventual termination of employment in case of persistent violation.
4. All employees must follow instructions and report to their respective supervisors at all time. Violation of this code will lead to appropriate disciplinary action including termination in accordance with the disciplinary code schedule 1, Employment Act 2006.
5. All employees should respect their colleagues. We won't allow any kind of discriminatory behavior, harassment or victimization. Employees should conform with our policy in all aspects of their work, from recruitment and performance evaluation to interpersonal relations.
6. All employees should treat our company's property, whether material or intangible, with respect and care. Employees shouldn't misuse company equipment or use it frivolously. They should respect all kinds of property including trademarks, copyright and other property (information, reports etc.) that should

be used only to complete their job duties. Employees should protect company facilities and other material property (e.g. company cars) from damage and vandalism, whenever possible.

7. Misuse, theft or sabotage of such property including but not limited to siphoning fuel may lead to deduction of salary to the sum equivalent to the misused, stolen or sabotaged property, and to disciplinary action, including immediate termination. The Company may also bring the matter to attention of the enforcement authorities.
8. Sexual relationships with minors or under-aged children, school children, and married women as well as sexual harassment shall not be tolerated. Any employee caught, reported or suspected to engage in such acts will be investigated, suspended and, if proved guilty, immediately dismissed. (Please refer to the Company's Sexual Harassments Policy).
9. All employees must respect children's rights. It's every employee's responsibility to protect children while conducting work within the college or where construction material is sought. Violation of this code may lead to immediate dismissal. The Company may also bring the matter to attention of appropriate law enforcement authorities.
10. Prostitution, alcoholism, smoking or use of any other illicit drugs, abusive language and fighting shall not be tolerated. The company expects its employees to conduct themselves in a businesslike manner. Drinking, gambling, fighting, swearing, and similar unprofessional activities are strictly prohibited while on the job. Employees must not engage in sexual harassment, or conduct themselves in a way that could be construed as such, for example, by using inappropriate language, keeping or posting inappropriate materials in their work area, or accessing inappropriate materials on their computer. The Company may also bring the matter to attention of appropriate enforcement authorities.
11. Gifts, favors, bribes or any other forms of corruption are prohibited.
12. All employees are required to work in a friendly manner and cooperating with each other.
13. All employees are obliged to report to their supervisors anything harmful or potentially harmful to the dignity or welfare of the staff and the company. Whistle-blowers shall be protected only when their justification is well-intended, right and fact-based.
14. Any employee once assaulted or mistreated by his/her superiors or field supervisors must report such persons to higher authorities in the company, i.e. project manager, for follow-up actions.
15. Any form of GBV shall be not be tolerated on the project and if found shall be punishable or reprimanded to police depending on the violation such as rape

cases. Other GBV cases involve sexual harassment, gender discrimination among others.

Privacy and Confidentiality:

When handling financial and personal information about clients and employees or others with whom the company has dealings, observe the following principles:

- Collect, use, and retain only the personal information necessary for the company's business. Whenever possible, obtain any relevant information directly from the person concerned. Use only reputable and reliable sources to supplement this information.
- Deny both internal and external access to personal and confidential company information to those seeking it with no authority or approval to do so.
- Use only personal information for the purposes for which it was originally obtained. Obtain the consent of the person concerned or company before externally disclosing any information, unless legal processes or contractual obligations provide otherwise.

By signing and returning this Code, you are specifically acknowledging that you have read, understood and agree to adhere fully to its terms and conditions.

Employee Signature

HR Manager Signature

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ANNEX 7: Data Collection Tool

PRELIMINARY ENVIRONMENTAL AND SOCIAL ASSESSMENT

DATA COLLECTION FORM

PROJECT:

LOCATION:

DATE:

Summary of Potential Environmental and Social Impacts with Adequate mitigation measures

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SOCIO – ECONOMICAL ASSESSMENT

CULTURAL HERITAGE
Designation

Name	Features of interest	Distance from works
The Historical and Monuments Act, 1967		
Value and importance of the heritage feature		
Potential impact upon cultural heritage and recommended mitigation		
Impact	Mitigation Measure	
AIR QUALITY		
Areas sensitive to changes in air quality		
Sensitive Areas	Features of interest	Distance from works
Draft National Air Quality Standards, 2006		
Sensitive Receptors		
Potential impact from change in air quality and recommended mitigation		
Impact	Mitigation Measure	
Features of interest GENDER		
Activities that women and men involved in		
Social Areas	Importance	Distance from works
Potential impact and recommended mitigation		
Impact	Mitigation Measure	

LAND USE		
Designation		
Land Use Type	Importance	Distance from works

Potential impact on the Land use and recommended mitigation	
Impacts	Mitigation Measure

NOISE AND VIBRATION		
Areas sensitive to changes in NOISE AND VIBRATION		
	Features of interest	Distance from works
Sensitive Receptors		
Potential impact from change in noise and vibration and recommended mitigation		
Impact	Mitigation Measure	

VULNERABLE GROUPS		
Designation		
Description	Sensitive Receptors	Distance from Impact
Potential impact from change on vulnerable groups and recommended mitigation		
Impact	Mitigation Measure	

MARKET STRUCTURES		
Type and numbers of market structures		
Name	Sensitive Areas	Distance from Impact
Potential impact from change on markets and recommended mitigation		
Potential Impacts	Mitigation Measure	

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DEMOGRAPHICS		
Designation		
Description	Feature of Interest	Distance from Impact
Potential impact on the demographic aspects and proposed recommended mitigation		
Impact	Mitigation Measure	

BIOLOGICAL

ECOLOGY AND NATURAL CONSERVATION		
Designation		
Statutory	Features of interest	Distance from works
National Forestry and Tree Planting Act, 2003		
The Uganda Wildlife Act, Cap 200, 2000		
The Water Act , Cap 250		
Habitants		
Onsite Habitants	Importance	
Offsite Habitants	Importance	
Potential impact on the Natural Conservation and recommended mitigation		
Protected Species	Impact	Mitigation Measure
Un Protected Species	Impact	Mitigation Measure

FAUNA**Type of Fauna**

Name	Feature of Interest	Distance from Impact
Potential impact on the Fauna and proposed recommended mitigation		
Impact	Mitigation Measure	

FLORA**Number and Type of Flora**

Name	Feature of Interest	Distance from Impact
Statutory		
Non - Statutory		
Potential impact on the Flora and proposed recommended mitigation		
Impact	Mitigation Measure	

PHYSICAL**GEOLOGY & SOILS****Designation**

Statutory	Features of interest	Distance from works
Non-Statutory	Features of interest	Distance from works
Potential impact on the Natural Conservation and recommended mitigation		
Impacts	Mitigation Measure	

LANDSCAPE AND VISUAL EFFECTS		
Designation		
Landscape Character	Importance	Distance from works
Potential impact on the Natural Conservation and recommended mitigation		
Impacts	Mitigation Measure	

WATER QUALITY AND DRAINAGE		
Location Areas that may be sensitive to water pollution or changes in the Hydrological Regime		
Name	Feature of Interest	Distance from works
Value and importance of area for water quality and drainage		
Potential impact to water quality and drainage and recommended mitigation		
Impacts	Mitigation Measure	