Federal Ministry of Education

Innovation Development and Effectiveness in the Acquisition of Skills (IDEAS) Project

IDEAS

DRAFT Report

Environmental and Social Management Plan (ESMP) for the Rehabilitation of Workshop, Classroom and Offices in 20 Federal Science and Technical Colleges (FSTCs) Under the IDEAS Project.

February, 2024

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October, 2023

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ACRONYMS AND ABBREVIATIONS

ACHPR	African Commission on Human and Peoples' Rights
AEPB	Abuja Environmental Protection Board
AGO	Automotive Gas Oil
AMAC	Abuja Municipal
BBC	Bricklaying & Block Moulding Construction
CAT	Convention Against Torture
CBOs	Community Based Organizations
CCP	Catering Craft Practice
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CIPs	College Improvement Plans
CIUs	College Implementation Units
CO	Carbon Monoxide
CoC	Code of Conduct
COVID-19	Coronavirus Disease 2019
CD-waste	Construction & Demolition Waste
CRA	Child Rights Act
CRC	Convention on the Rights of the Child
CRPD	Convention on the Rights of Persons with Disabilities
dB	Decibel
DO	Dissolved Oxygen
DPK	Dual Purpose Kerosene
E&S	Environmental and Social
EA	Environmental Assessment
ECOWAS	Economic Community of West African States
EIA	Environmental Impact Assessment
EKSEPA	Ekiti State Environmental Protection Agency
EMS	Environmental Management System
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESSG	Environmental and Social Safeguards
E- Waste	Electronic Waste
FBOs	Faith Based Organizations
FCT	Federal Capital Territory
FGN	Federal Government of Nigeria
FME	Federal Ministry of Education
FMEnv	Federal Ministry of Environment
FMF	Federal Ministry of Finance
FMLP	Federal Ministry of Labour and Productivity
FMST	Federal Ministry of Science and Technology
FMWASD	Federal Ministry of Women Affairs and Social Development
FRSC	Federal Road Safety Corps
FSTC	Federal Science Technical College
FGD	Focus Group Discussions
G&C	Guidance and Counselling
GBV	Gender Based Violence
GHG	Green House Gas
GIS	Geographical Information Systems
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism

GSM	Global System for Mobile communication
HazCom	Hazard Communication
H_2S	Hydrogen Sulphide
Hz	Hertz
IAT	Informal Apprenticeship Training
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICT	Information and Communication Technology
IDEAS	Innovation Development and Effectiveness in the Acquisition of Skills
IGR	Internally Generated Revenue
ILO	International Labour Organization
IPF	Investment Project Financing
IPV	Intimate Partner Violence
JAMB	Joint Admission and Matriculation Board
JCC	Joint Consultative Committee
JHA	Job Hazard Analysis
JSS	Junior Secondary School
LEA	Local Education Authority
LED	Light-Emitting Diode
LGAs	Local Government Area/Authority
MDA	Ministries, Departments and Agencies
M&E	Monitoring and Evaluation
MVM	Motor Vehicle Mechanic
NABTEB	National Business and Technical Examinations Board
NBTE	National Board of Technical Education
NCE	National Council of Education
NE	North East
NEC	National Examination Council
NEEDS	National Economic Empowerment and Development Strategy
NESREA	National Environmental Standards and Regulations, Enforcement Agency
NGOs	Non-Governmental Organization
NOS	National Occupational Standard
NOx	Nitrogen Oxides
NPCU	National Project Coordination Unit
NPE	National Policy on Education
NPSC	National Project Steering Committee
NSQF	National Skills Qualification Framework
NSQs	National Skills Qualifications
NUC	National Universities Commission
NCDC	Nigeria Center For Disease Control
NYSC	National Youth Service Corps
OHS	Occupational Health and Safety
OHSP	Occupational Health and Safety Policy
OHSMP	Occupational Health and Safety Management Plan
OP	Operational Policy
PAD	Project Appraisal Document
PAPs	Project Affected Persons

EXECUTIVE SUMMARY

ES 1: Background

The Government of Nigeria has secured USD200 Million from the World Bank for the Innovation Development and Effectiveness in the Acquisition of Skills (IDEAS) Project which aims to strengthen the country's Technical and Vocational Education and Training (TVET) system. The Project Development Objective (PDO) of IDEAS is to enhance the capacity of the Nigerian skills development system to produce relevant skills for the formal and informal sectors. The IDEAS project aims to improve skills acquisition in Nigeria using a comprehensive approach by addressing key aspects of the skills development delivery system. It leverages industry involvement for better labour "market-fit" and "crowding-in" of private resources in the formal training system. The project is structured into four components – i) Incentivizing Public-Private Partnerships (PPPs) for enhanced quality and labour-market orientation of skills development in public Technical Colleges (TCs); ii) Improving skills formation for the informal sector; iii) Increasing the availability of competent and motivated technical teachers and instructors in the Nigerian skills space; and iv) Strengthening the regulatory environment and public management capacities for market-oriented skills development.

The IDEAS project is being implemented by the Federal Ministry of Education (FME) through the Technology and Science Education Department (TSED), National Board of Technical Education (NBTE) as well as the state governments of the participating states. A total number of 38 TCs – twenty (20) Federal Science Technical Colleges (FSTCs) and eighteen (18) State Technical Colleges (STCs) have been identified for structural rehabilitation in twenty-two (22) states of the country, under the project. The project will provide grant funding for the rehabilitation and upgrade of these Technical Colleges (TCs) with the aim of transforming their operational models into PPPs, in which industry partners assume a prominent role in institutional governance, management, planning, training and service delivery. Consequently, there will be several civil works, involving construction, rehabilitation and expansion activities. These civil works raise environmental and social safeguards concerns and have triggered the World Bank's safeguard policy on Environmental Assessment (OP 4.01) and Involuntary Resettlement (OP 4.12). On this basis, the IDEAS National Project Coordinating Unit (NPCU) has set aside a portion of its allocated funds to procure consultancy services for the development of an Environmental and Social Management Plan (ESMP) for the rehabilitation of technical workshops, classrooms and offices in twenty (20) Federal Science and Technical Colleges (FSTCs)..

ES 2: Rationale for the ESMP

The ESMP will be carried out to establish modalities of implementing the project in line with World Bank Safeguard Policies, while taking into consideration the environmental and social procedures of the Federal Government of Nigeria. The project has been identified as **Category B** according to the World Bank environmental assessment screening criteria, meaning that impacts will be site specific and manageable (the activities will involve limited adverse social or environmental impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures). For site-specific projects such as this, the most suitable EA safeguard instrument is an ESMP. The proposed project comprises essentially, civil and electromechanical engineering works which will be carried out within the premises of the selected technical colleges. These works will inevitably result in some environmental and social impacts thus triggering the World Bank's Operational Policy on Environmental Assessment OP 4.01 ***(See Chapter 2 for more details).*** The ESMP will identify the environmental and social impacts of the proposed project and define the roles and responsibilities of all critical stakeholders throughout the project life cycle in order to ensure that mitigation measures including cost estimates are implemented and overall sustainability of the project is assured.

ES 3: Objective of the ESMP

The objective of the ESMP is to ensure that all identified adverse E&S impacts likely to arise from the proposed rehabilitation activities at the selected FSTCs are addressed using appropriate mitigation measures integrated into the project implementation to protect the environment and human health.

This ESMP consists of a well-documented set of identified impacts, mitigation measures, monitoring, and institutional actions to be taken before and during sub-project implementation to eliminate adverse environmental and social impacts, offset or reduce them to acceptable levels. It also includes the measures required to implement these actions, addressing the adequacy of the monitoring and institutional arrangements in the intervention site(s).

ES 4: Applicable Legal and Administrative Frameworks

The table below provides information on some legal frameworks applicable to the intervention works under the project and institutions for responsible for environmental management, protection, sanitation and waste management services in the project states.

National Regulations	State-Level Regulations
• Environmental Impact Assessment (EIA) Act CAP E12, LFN 2004 • National Policy on the Environment (2016) • National Environmental Standards and Regulation Enforcement Agency (NESREA Act) (2007) • National Environmental (Sanitations and Wastes Control) Regulations (2009) • National Environmental (Soil Erosion and Flood Control) regulations (2011) • National Guidelines on Environmental Audit (2011) • National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations. (1991) • National Guideline and Standard for Environmental Pollution Control (1991) • National Guidelines on Environmental Audit (2011) • National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations (1991) • National Guideline and Standard for Environmental Pollution Control (1991) • National Environmental (Hazardous Chemicals and Pesticides Regulations (2014) • National Guidelines on Environmental Management Systems (EMS) (1999) • National Guidelines and Standards for Water Quality (1999) • National Air Quality Standards Decree N0. 59 (1991) • Nigeria Labour Law (2004); • Social Development Act, (1974); • National Occupational Health and Safety (OHS) Act of 2007; • National Occupational Health and Safety Policy, (2020); • The Child Right Act (2003); • Employee Compensation Act (2010); • Violence Against Persons Prohibition Act (VAPP, 2015)	• Abia State Basic Environmental Law (2013) • Abia State Policy on Environment (2010) • Abuja Environmental Protection Agency Law • Anambra State Environmental Protection Agency Edict (1998) • Akwa Ibom State Environmental Protection and Waste Management Agency Act, Cap. 47 (2000) • Bayelsa State Environmental Sanitation Authority Edict (1999) • Bayelsa State Environment and Development Planning Edict (1998) • Benue State Environmental Sanitation Authority (BENSESA) Law (2005) • Edo State Sanitation and Pollution Control Law No.5 (2010) • Ekiti State Environmental Protection Agency Law (2009) • Kaduna State Environment Protection Authority (KEPA) Amendment Edict (1997) • Lagos State Environmental Protection Agency (LASEPA) Law (2017) • Lagos State Waste Management Authority (LAWMA) Law (2007) • Niger State Environmental Protection Agency Law (2011) • Ogun State Environmental Protection Agency Law (1995) • Ondo State Waste Management Authority Law (1999) • Osun State Environmental Protection Agency Law (2022) • River State Environmental Protection and Management Law No. 7 (2019) • River State Waste Management Agency Law (2014) • Taraba State Water, Sanitation and Hygiene Services Law No 7 (2019).
Institutions for responsible for Environmental Management, Protection, Sanitation and Waste Management Services in the Project States.	
• Abia State Environmental Protection Agency (ASEPA) • Adamawa State Environmental Protection Agency (ADSEPA) • Akwa-Ibom State Environmental Protection and Waste Management Agency (AKSEPWMA) • Anambra State Environmental Protection Agency (ANSEPA) • Anambra State Waste Management Authority (ASWAMA) • Bayelsa State Environmental Protection Agency (BAYSEPA) • Benue State Environmental Protection Agency • Edo State Environmental & Waste Management Board • Edo State Ministry of Environment & Sustainability • Ekiti State Environmental Protection Agency (EKSEPA) • Ekiti State Waste Management authority • Abuja Environmental Protection Board (AEPB) • Kaduna State Environmental Protection Agency (KEPA) • Katsina State Environmental Protection Agency (KTSEPA) • Kebbi Environmental Protection Agency • Lagos State Environmental Protection Agency (LASEPA) • Lagos Waste Management Authority (LAWMA) • Ministry of Environment and Natural Resources Nasarawa State. • Niger State Environmental Protection Agency (NISEPA) • Ogun State Environmental Protection Agency (OGEPA) • Ogun State Waste Management (OGWAMA • Ondo State Environmental Protection Agency • Ondo State Waste Management Authority • Osun State Environmental Protection Agency	

- Osun Waste Management Agency (OWMA)
- River State Environmental Sanitation Authority
- Taraba State Environmental Protection Agency (TEPA)

ES 5: Overview of Project Locations.

The proposed intervention works will be undertaken across twenty (20) FSTCs. Generally, the rehabilitation activities will be carried out in technical workshops, classrooms, and offices within the premises of the colleges. The table below provides a list of the total structures earmarked for structural rehabilitation and expansion at the FSTCs under the IDEAS project, including their locations.

S/N	Geopolitical Zones	IDEAS Project Participating States	Name of Federal Science Technical Colleges (FSTCs)	GPS Coordinates		Total Priority Rehabilitation
				Latitude(N)	Longitude (E)	
1	North-Central	Benue	Federal Science Technical College, Otukpo	7.198360	8.139329	4 Structures
2		FCT	Federal Science Technical College, Orozo.	8.897916	7.569647	7 Structures
3		Nasarawa	Federal Science Technical College, Doma.	8.398860	8.328441	6 Structures
4		Niger	Federal Science Technical College, Kuta Shiroro.	9.856911	6.719373	6 Structures
5	North-East	Adamawa	Federal Science Technical College, Michika	10.597960	13.352250	14 Structures
6		Taraba	Federal Science Technical College, Jalingo	8.903368	11.356644	5 Structures
7	North-West	Kaduna	Federal Science Technical College, Kafanchan	9.599665	8.321549	6 Structures
8		Katsina	Federal Science Technical College, Dayi	11.963712	7.688179	3 Structures
9		Kebbi	Federal Science Technical College, Zuru	11.425906	5.243700	3 Structures
10	South-East	Abia	Federal Science Technical College, Ohanso	4.889429	7.357005	4 Structures
11		Anambra	Federal Science Technical College, Awka	6.199615	7.063851	5 Structures
12	South-South	Akwa Ibom	Federal Science Technical College, Uyo	5.023785	7.917174	8 Structures
13		Bayelsa	Federal Science Technical College, Tungbo	5.130305	6.172133	5 Structures
14		Edo	Federal Science Technical College, Uromi	6.732494	6.346107	4 Structures
15		Rivers	Federal Science Technical College, Ahoada	5.076349	6.649303	4 Structures
16	South-West	Ekiti	Federal Science Technical College, Usi-Ekiti	7.885698	5.172193	10 Structures
17		Lagos	Federal Science Technical College, Yaba	6.522242	3.378314	6 Structures
18		Ogun	Federal Science Technical College, Ijebu-Imusin	6.788621	4.010069	4 Structures
19		Ondo	Federal Science Technical College, Ikare Akoko	7.539231	5.721399	5 Structures
20		Osun	Federal Science Technical College, Ilesha	7.635958	4.754410	5 Structures

ES 6: Scope of Proposed Intervention Works

The IDEAS Project has selected twenty (20) FSTCs for structural rehabilitation, renovation and expansion. In order for the proposed civil works to commence, the College Implementation Unit (CIU) of each of the Technical colleges were mandated to prepare a College Improvement Plan (CIP) detailing the features to be renovated in order of priorities ***(See Chapter 3, Table 5 for the full list of TCs and their priority works)***. It is important to state that these CIPs are not like conventional feasibility study reports, where there are full descriptions and narratives of the proposed works to be carried out and their engineering contexts; rather they provide a listing of the items to be repaired or installed where necessary. Due to the number of TCs and equivalently the anticipated number of items and materials e.g. doors, ceiling boards, etc., this section only mentions the major aspects of civil works which generally cuts across all TCs and a brief on the nature of works to be carried out. The proposed rehabilitation, renovation and expansion of the TCs will generally include the following civil works:

Rehabilitation Works:

- **Roofing** – Removal of old and dilapidated roofing sheets and replacement with aluminium roofing.
- **Ceiling Finishes** – Removal of old, damaged, and dilapidated Polyvinyl Chlorides (PVCs), Asbestos ceilings and Board ceilings.
- **Floor Finishes** – Removal and rehabilitation of damaged floors along technical workshops, project offices, classrooms, etc.
- **Doors and Windows** – Replacement of doors and windows with steel types.
- **Wall Finishing** – Wall filling and smearing, and finishing with cement.
- **Painting** – Wall screeding and painting.
- **Electrical Installations** – New electrical installations and connections; including re-conductoring of existing electrical connections and installation of energy saving Light-Emitting Diode (LED) bulbs, switches, fans, etc.

- **External Works** – This will include cement, sand, gravel and water mixing. It will also include the transport of materials into the college premises for civil works.
- **Mechanical and Plumbing Works** – These will include several fittings and fixtures as well as the installation of WASH facilities such as:
    a. **Toilets** – Rehabilitation of dilapidated and/or abandoned toilets; including the installation of new ones. Toilet rehabilitation and renovation will also include water reticulation to ensure equitable water supply to toilets and sanitary infrastructure such as Wash Hand Basins (WHBs).
    b. **Boreholes** – Installation of boreholes, including solar powered boreholes and conversion of some existing boreholes to solar powered boreholes. Installation of overhead tanks and water reticulation to hostels, offices, workshops, etc. where use of water may be required.
    c. Septic Tanks – Rehabilitation of collapsed or dilapidated septic tanks serving some of the technical workshops, offices and classrooms.

Extension Works:

In certain FSTCs, expansion or extension of existing technical workshops, classroom blocks and offices will be required to increase capacity. These additions will involve similar civil works as the rehabilitation activities. However, some specific additional civil works to be undertaken are outlined below:

- **Site Clearing –** This will involve the removal of overgrown grasses, shrubs, etc. around some abandoned structures where the proposed extension is to be undertaken.
- **Digging of New Foundation and General Masonry –** To include raising of walls, finishes, flooring, etc.

ES 7: E&S Baseline Description of the Project Area

The site-specific E&S description of the project areas is provided in the table below.

Site-Specific Description of E&S Conditions at the Technical Colleges	
FSTC Orozo, Abuja, FCT. (N8.897916, E7.569647)	**FSTC Doma, Nasarawa State. (N8.398860, E8.328441)**
FSTC Orozo is located in a peri-urban area. The College is situated in Abuja Municipal Area Council (AMAC) along the Nyanya – Karshi express road and is located adjacent to the popular Orozo Market which at the same time has parts of the market bordering the fence of the College. The college stretches across a vast land area of approximately 110 hectares (and a perimeter of 4,795 meters). Two (2) communities border the school primarily (i.e. Orozo and Ungwar Hakimi) and may be likely locations for Contractors to purchase material resources for rehabilitation works considering that the Orozo market is located in the Orozo community. Importantly, residents of both communities practice agriculture, petty trading, are civil servants, artisans (carpenters, welders, etc.). The college is completely fenced off from the surrounding communities. FSTC Orozo is separated from the built-up and densely populated areas of Orozo by the Nyanya-Karshi express road which experiences heavy traffic in the morning and evenings rush hours (between 7am-10am, and 5pm-10pm). During less traffic periods, intermittent traffic occurs mainly at the Orozo market area due to the encroachment of marketers and roadside hawkers (between 10am – 4pm). Within the school, the terrain is fairly level and slopped towards its north-western end. The soil within the school premises is generally sandy-clay while some parts of the premises are asphalted. The 100-meter driveway from the main entrance of the college to the administrative block is partly interlocked and surface dressed in some areas. Structures such as the ICT building, technical workshops (MVM, W&F, CCP, etc.) have been identified by the CIU team for priority renovation, overhaul of existing makeshift structures and expansion. Generally, the school is currently experiencing challenges as regards access to water, hence the rationale behind the proposed installation of a new borehole. Although there are eight (8) existing boreholes in the school, most of them are shallow and dry faster (because of the depth).	FSTC Doma was established in 2008. It is about 15km (20 minutes' drive) from Lafia the State capital. The college is situated in a rural neighbourhood, off Doma-Lafia Highway at the outskirts of Doma LGA. This highway is narrow, eroded and constantly experiences increased traffic daily (especially mornings/afternoons from 10am–3pm) majorly consisting of motorbikes and heavy-duty trucks which convey sand to nearby construction sites during the daytime. With a land area of approximately 57ha and the entire perimeter (approx. 3.2km) of the college is fenced off from the surrounding community. Technical workshops such as the Electrical Installation and Maintenance, Painting and Decoration, etc. has been earmarked for rehabilitation owing to their dilapidated state. The access route leading to these workshops are generally earth roads (with noticeable rills and groove formation) which occasionally expels dust. A major finding during visits to this college was that most structures in the college are made of asbestos ceiling (including structures to be rehabilitated). Power supply is a chronic issue, and has significantly affected water availability in the college (a solar powered borehole has been proposed by the CIU to this effect). The college sporadically experiences extreme weather conditions (wind, lightning strikes, etc.) which destroys structures and school infrastructures. Doma people are majorly business men and women engaged in trading and commercial agriculture. A good number of inhabitants in this LGA are also craftsmen while the low class are into peasant farming and artisanal and small scale mining. Open grazing of livestock (goat, sheep, pigs, etc.) is very predominant in this LGA.
FSTC Kuta Shiroro, Niger State. (N9.856911, E6.719373)	**FSTC Michika, Adamawa State. (N10.597960, E13.352250)**
FSTC Kuta Shiroro was established in 1988, on a landmass of approximately 31 hectares, completely enclosed by a fence, isolating it from the rest of the Kuta community. The Minna – Kuta highway, the primary route leading to the college, experiences significant traffic during mornings and afternoons, particularly between 10am and 3pm. Access routes to the workshops are generally unpaved, leading to occasional dust expulsion. Additionally, some access roads leading to the workshops designated for rehabilitation have pockets of rills and grooves. During the assessment, several scraps of metal waste and disused items were observed scattered around the college premises, particularly in the Welding and Fabrication section. Proper management of construction waste generated during the rehabilitation is essential to address health and safety risks effectively. Additionally, a comprehensive waste management strategy will contribute to maintaining a clean and safe environment throughout the rehabilitation project. Besides the proposed rehabilitation work for the Brick/Block Laying and Concreting (BLC) Workshop, an additional measure involves constructing a mini-fence or barricade to safeguard moulded blocks from theft. While the Shiroro Local Government Area has experienced security challenges such as banditry and kidnapping in recent years, the CIU team assured the consultants' team that there have been no reported cases of insecurity within the Kuta community lately. Inhabitants of Kuta community are into highland agriculture (crops cultivated include rice, maize, yam, sweet potato, pepper, groundnuts, etc.) and open grazing of livestock is a predominant practice.	In 2002, FSTC Michika was established as a co-educational day and boarding school, encompassing both junior and senior secondary sections. It is nestled at the base of the Adamawa highlands, situated about 5km away from Michika township, along the Yola-Maiduguri highway. The college's extensive land area spans 3.7km2 and is enclosed by a fence, separating it from the neighbouring communities of Yambule and Madze. Block Bricks and Concreting (BBC), Catering Workshop and Production (CWP), Electrical Works (EW) are among the major trades offered at this college. Unfortunately, the region has been affected by insurgencies, leading to active military operations and the imposition of a curfew from 6pm to 6am, covering the entire town and its surroundings. The Yola-Maiduguri highway leading to the college experiences high traffic flow during the mornings (10am - 12pm) and afternoons (3pm - 5pm). Additionally, ongoing road construction within the college premises has resulted in fugitive dust generation, affecting air quality. Water availability poses a significant challenge as the college currently has two non-functional boreholes and relies on an abandoned well and tanker supply twice daily. This has led to inadequate water supply, impacting students and staff. To address this, a proposed solar-powered borehole will be drilled near the kitchen area and staff block. Furthermore, academic studies face constraints due to limited classroom and workshop spaces, which are insufficient to accommodate all students. The reason behind this shortage is the damage caused by a Bomb blast in 2014 by Boko Haram members to existing workshops, including the BBC, certain parts of the CWPU, and the EW. Michika's culture is highly diverse, with various languages spoken in the town, such as Nkafa, Dakwa, Krghea, Fwea, Humsi, Moi, etc.
FSTC Uromi, Edo State (N6.732494, E6.346107)	**FSTC Ohanso, Abia State (N4.889429, E7.357005)**
FSTC Uromi is situated in the built up area of Uromi, along the Onewa Road whose condition has significantly deteriorated and almost unmotorable during the rainy season. The college has a large land area of about 18ha approx. and the entire perimeter is fenced off from the community. Within the college, the earth is sandy and occasionally expels dust. The school currently boasts a student's population of 1,217, with 67.4% being male and 32.6% female. The number of Technical Teachers available in the school is 21. This gives a teacher to student ratio of 1:55. Facilities within the school consists of classrooms, workshops for the various trades offered in the college, an ICT building, Toilets, and office buildings. The current state of these facilities and trade equipment are either dilapidated, outdated or insufficient to cater to the student population. Notably, the college is currently experiencing challenges as regards access to water as the existing boreholes have collapsed. This has consequently affected activities requiring the use of water e.g. Catering Craft Practice (CCP) works (Priority 3) and has informed the planned rehabilitation of existing boreholes which the college. The people of Uromi amongst others within the Esan LGA are commonly known as the Esan people.	FSTC Ohanso is located in the Ohanso-Ndoki community of Ukwa East LGA in Abia State, along Obehie-Akwete Azumini Road. It is situated about 3 km from the Azummiri Blue River, surrounded by palm plantations in a remote hamlet. The access road (Obehie-Akwete Azumini Road) leading to the school becomes nearly impassable during the rainy season, posing health and safety risks and potential accidents. The college, encompassing a total land area of approximately 10 hectares (1307.08m perimeter), is fenced off from the community. It consists of several bungalow structures with sandy ground surfaces and Bahama grass around key areas like the administrative block and technical workshops. The student population at FSTC Ohanso is around 1,258 (776 Boys and 482 Girls), with about 76 teaching staff. Visual observations and stakeholder engagement with the college's IDEAS project team revealed that most of the classrooms and workshops are infested with termites. As part of the rehabilitation, the college plans to fumigate these facilities. Additionally, uncompleted buildings serving as practical workshops for students are in a dilapidated state with no roofing, ceilings, doors, windows, or sanitary facilities. To improve water availability within the college, a new borehole will be installed near the Catering Craft Practice (CCP) workshop. The majority of locals in Ohanso-Ndoki community are engaged in sand mining, petty trading, fishing, and agriculture, cultivating food crops such as maize, cassava, yam, cocoyam, and vegetables.
FSTC Jalingo, Taraba State. (N8.903368, E11.356644)	**FSTC Ahoada, River State. (N5.076349, E6.649303)**
FSTC Jalingo has two locations: temporary and permanent. Currently, all students reside and academic activities take place at the temporary location in Jalingo. The proposed interventions will be implemented at the permanent site, situated along Jalingo – Wuro Sembe Road, approximately 1km from the Wuro Sembe rural community (around 10km from the more developed capital). Traffic along the Jalingo – Wuro Sembe Road is minimal, mainly occurring during school runs in the morning (6am-9am) and late afternoon (2:30pm-4pm). The permanent site already has several ongoing and completed structures and infrastructures, but no students or staff	FSTC Ahoada is located in a peri-urban area in Ahoada town. The college is completely fenced and stretches across a land area of approximately 2 hectares (and a perimeter of 560.29m). It is situated along Old GTC road; a major landmark is the Ahoada prison which is less than 1km from the northernmost end of the college. The entire tracks and driveways within this college are either tarred or interlocked. The management of the college is functional and well established. Currently, the college has a total number of 1,255 students (875 boys and 380 girls respectively). The college operates a staff strength of about 177 Staff (96 males and 81 Females).

Site-Specific Description of E&S Conditions at the Technical Colleges	
reside or study there. Extreme weather conditions, particularly windstorms, have caused deterioration in some structures, notably the technical workshops (BBC, MVM, and Garment Making/Fashion Design section). The soil within the college premises is sandy loam and susceptible to erosion. A gully divides the driveway at a distance of approximately 100m from the main entrance, leading to the construction of a temporary access road for vehicles entering the school. Additionally, a seasonal stream (a tributary of the Taraba River) runs through the college from east to west, close to some workshops and the IDEAS Office earmarked for rehabilitation. A few farmlands are located at the southern end of the school. At the temporary site, the college houses around 699 students, with 564 male and 135 female students. It shares borders with the Kurkaye, Takanaban, and Kanaban communities, whose residents are predominantly engaged in livelihood activities such as farming, cattle rearing, and various trading and petty trading activities.	The college has earmarked some structures for priority renovations due to their dilapidated state. These include workshops such as the Auto-mechanic, Brick/Block Laying and Concreting and Catering Craft Practice. The IDEAS Office has also been identified for rehabilitation and upgrade.
FSTC Awka, Anambra State (N6.199615, E7.063851)	**FSTC Dayi, Katsina State (N11.963712, E7.688179)**
FSTC Awka is located at the site of GTC Awka, across from St. Paul University along Zik Avenue in Awka City. Traffic along this access road leading to the school is light (2-3 minutes), but heavy traffic is observed at the Nkpor ring junction connecting this route. Works Road is a detour which could be leveraged during procurement and haulage of construction materials to the college. The college spans an area of 10.96 hectares with a perimeter of 1,408.29 meters and is completely fenced-off from the built-up and densely populated Amikwo-Awka community. The school's terrain is generally sandy and compact, with asphalted driveways in certain areas. Fruit trees like Coconut, Orange, Mango, and Paw-paw are scattered throughout the college grounds. Since its establishment, the student population has doubled (over 100% increase) to about 2,558 students, with approximately 23% (597) being girls. The teaching staff at FSTC Awk a comprises over 100 members, 60% of whom are female. Waste generated in the school is open dumped and occasionally burnt at a central dumpsite. Several ongoing civil construction works were observed near the Motor Vehicle Mechanic (MVM) workshop which has been earmarked for structural rehabilitation under the project. The female dormitory is next to the Catering Craft Practice (CCP) workshop, which is also slated for renovation and expansion. The water tank serving this workshop, the female hostel, kitchen, and refectory may be shared by the Contractor during the planned expansion of the CCP workshop. Restabilization with reinforced concrete pillars is needed at the Computer Craft/ICT building (Priority 3), due to its deplorable condition and dilapidated walls and beams which presents health and safety risks to staff and students of the college. The Amikwo-Awka community, bordering the school, mainly comprises petty traders, businessmen, and civil servants.	FSTC Dayi is located in Dayi community, along Dayi-Malumfashi highway, Malumfashi LGA, Katsina State. Dayi is a rural community where farming and trading of agricultural produce are the main activities. The surrounding environment is characterized by a semi-arid to arid climate with a distinct dry season and a short rainy season. Vegetation in Dayi and particularly within this college is typically sparse, consisting of drought-resistant grasses, shrubs, teak and acacia trees. The school interior has a level terrain characterized by sandy soil and lacks paved surfaces and drainage. There are over 600 students, with about 80% being male. The project team at the college have identified some existing workshops which are currently dilapidated including other outdoor learning infrastructure such as a demonstrative farm, fish pond, greenhouse, and orchard for priority rehabilitation under the project. Despite being known for banditry, Dayi and nearby towns have experienced relative calmness in recent periods. The college is securely fenced with presence of local vigilante and police, along with a security watchtower.
FSTC Ijebu Imushin, Ogun State (N6.788621, E4.010069)	**FSTC Tungbo, Bayelsa State (N5.130305, E6.172133)**
FSTC Ijebu-Imusin is completely fenced and spans approximately 110 hectares (perimeter: 4,230 meters). It is bordered by two communities (Itamogiri and Isagunsen) and located along the busy Old Benin - Ore road. Adjacent to the college are the Ijebu-Imusin police station and Tulip cocoa processing company. The local economy relies on agriculture and petty trading. The college enrolls over 2000 students (day and boarding) and employs around 270 staff. The soil type is generally sandy, and eastward of the plumbing workshop, tiny rills form due to the absence of proper drainage for rainwater and run-off. The college which has been in operation for over 25 years has seen a significant increase in its student population, hence the need for the extension and upgrade of the technical workshops to cater for the new intakes. Some of the workshops that have been identified include EEE, ICT/Robotics and the Construction section.	FSTC Tungbo is in Tungbo, a riverine community in Sagbama LGA, Bayelsa State. It's located along Tungbogiri road, less than 500km from the River Niger and features rainforest vegetation. Opposite the college entrance are various socioeconomic activities like petty trading, carpentry shops, welding outlets, etc. The CIU team plans to involve some of these local artisans for skilled/unskilled labor during the college's rehabilitation, as they are part of the SBMCs and PTA of the college. The workshops at the college are over 2 decades old and in deteriorating condition (needing repairs to beams, pillars, doors, and windows, etc.). The college currently has over 1000 students and approximately 60 staff. Due to its proximity to the Niger river, Tungbo community experiences seasonal floods, and the college was affected during the Nigerian flood of 2022. Residents of the Tungbo practice agriculture, fishing, lumbering, hunting, carving and petty trading.
FSTC Yaba, Lagos State (N6.522242, E3.378314)	**FSTC Zuru, Kebbi State (N11.425906, E5.243700)**
FSTC Yaba is situated in Yaba, a popular peri-urban area regarded as the heartbeat of Lagos Mainland, Lagos State, Nigeria. There are several federal government institutions in the area and in proximity to the college, which include Queen's College, the Nigerian Institute of Medical Research, the Yaba College of Technology, Igbobi College, the University of Lagos and the Federal College of Education (Technical) Akoka. The college has two entrances both of which lie along the Morris and Military roads. Commercial activities are high in this area and has resulted in increased traffic level along both roads, particularly during late morning to afternoon hours. Within the school, the terrain is levelled. The soil within the school premises is generally sandy-clay whereas the driveways from the main entrance of the college to the remaining parts of the college is interlocked and surface dressed. FSTC Yaba has a large student population of about 5,910 students (3,488 boys and 2,422 girls respectively). The college also operates a staff strength of about 531 Staff. There is need for the rehabilitation of the workshops in the colleges due to overstay and deteriorating conditions.	This college has two sites: the temporary and permanent site. While academic activities are currently ongoing at the temporary site situated along Zuru-Ribah road; the permanent site which is approximately 5km from the temporary site is devoid of any activity or residents. Zuru is prone to banditry and insecurities which may be the reason behind the heavy presence of the military along the road and at strategic locations within the community. The BLC, MVM and Electrical Laboratory will require some makeover owing to their long overstay without being put to use.
FSTC Ikare Akoko, Ondo State (N7.539231, E5.721399)	**FSTC Ilesha, Osun State (N7.635958, E4.754410)**
The college is located in a rural area on the outskirts of Ikare town along the Ado Ekiti – Ikare expressway. It covers approximately 15.5 hectares and is completely fenced off from surrounding communities. The expressway has minimal traffic congestion and is mainly used during festive periods. The college is coeducational and offers full boarding for male and female students. It currently has around 1029 students, with a growing demand for technical education. During site visits, it was observed that most technical and vocational training workshops are in poor condition with detached roofs and dilapidated ceilings, particularly the Carpentry and Joinery Workshop, which will require complete demolition of the existing PVC ceiling. The college plans to construct classroom partitions in existing workshops to accommodate more students during workshop sessions. Waste is openly dumped in the school and burnt in an open pit every two weeks. Surrounding areas outside the school are characterized by palm plantations, and some palm trees within the school may need to be uprooted for proposed workshop expansions. The neighbouring communities (Oke Ila, Ogbagi Akoko, and Oke Egbe)	FSTC Ilesha is in Ilerin community, a densely populated and urbanized area of Ilesha East LGA, Osun State, Nigeria. The coeducational college is situated along Oja Oba Ijebu Ijesha – Oke Mesi Road, with Methodist High School Ilesha directly opposite. The college spans around 10 hectares, entirely fenced off from surrounding communities. The road can be congested during peak hours due to school runs and activity of commuters. The terrain inside the school is fairly level, sloping towards the main entrance. The college has various facilities, including staff quarters, a clinic, e-library, laboratories, and technical workshops. There are about 180 staff members and over 1500 students in the college, with 69% male and 31% female students. Access to water is a challenge as all five boreholes are currently dysfunctional. The Plumbing and Pipe Fitting Workshop (Priority 2) and the Motor Vehicle Mechanic Workshop (Priority 3) are surrounded by trees some of which may need to be cleared to give way for planned expansions. Rehabilitation activities will include removing obsolete asbestos boards in the technical drawing studio. The Ilerin community mainly

Site-Specific Description of E&S Conditions at the Technical Colleges	
mainly engage in commercial food crop production such as maize, cassava, yam, cocoyam, and tomatoes, as well as cash crops like oil palm and groundnuts.	consists of businessmen involved in petty trading, civil servants, and farmers engaged in poultry and livestock production.
FSTC Usi-Ekiti, Ekiti State (N7.885698, E5.172193)	**FSTC Kafanchan, Kaduna State (N9.599665, E8.321549)**
FSTC Usi-Ekiti is located along Ido-Ayetoro highway in Usi-Ekiti LGA of Ekiti State. The highway is less often used by commuters and experiences less traffic. Within the college, the access road from the college's main entrance all the way to the workshops that need to be renovated is made of sand and periodically expels dust. There are also several potholes, rills and grooves along this road. Demolitions are currently underway at the Abuja hostel proposed for rehabilitation and conversion into W&F, MVM (Priority 1) and AMW (Priority 2). There is need for the obsolete roof and asbestos ceilings removed from the buildings to be collected and temporarily stored safely at a designated point prior to disposal by EKWAMA. At the fishery section (Priority 2), there is currently no sewer or drainage/outlet for wastewater from the fish pond. Thus the discharge of wastewater to adjacent areas and farms surrounding the fish pond has resulted in odorous conditions in this areas. Noise is high around the SS2E classroom and science laboratory in proximity to the Abuja hostel as some sections the hostel is currently being demolished for conversion into technical workshops. Open dumping of waste is a major practice in the college.	FSTC Kafanchan is located along Kafanchan-Kagoro road, Kafanchan, Kaduna state. The town lies within the Southern Guinea Zone, consisting of forests and savannah lands, and is located southwest of the Jos Plateau escarpment on the windward region. The college has a land area of about 16 hectares out of which 50% is built up. The soil within the college premises typically comprise of a coarse lateritic earth material. The entirety of the college lands is completely fenced off from the community. Kafanchan and the southern Kaduna as a whole experiences insurgencies and banditry sporadically, particularly in 2022. There are over 1500 students in the school most of which are male students (about 60%), the rest are female. The proposed rehabilitation for the college according to their CIP is to include: rehabilitation of workshops (Carpentry and Joinery, Painting and Decoration, Brick/Block Laying and Concreting, etc.) will involve a total makeover of these structures which are now in a deplorable state due to overstay without structural rehabilitation and maintenance.
FSTC Uyo, Akwa Ibom State (N5.023785, E7.917174)	**FSTC Otukpo, Benue State (N7.198360, E8.139329)**
FSTC Uyo is presently located in Aka Community, along the Ukana Offot Street, off Abak Road, Uyo. The college occupies a land area of approx. 13 hectares and is situated in a densely populated area in Uyo town. Within the school premises, the topography is flat and the driveway within the school is surface dressed and decorated with ornamental trees on both sides. With the exception of a few classroom blocks built for senior secondary students, the majority of the buildings in the school are bungalow houses. It is noteworthy to state that the college operates a robust and functional security system and the entire perimeter of the school is fenced off from the neighbouring community. Remarkably, the school has experienced a surge in demand for technical education and increased students' admission since its relocation from the rural Nsit Atai to the more urbanized Abak LGA (approx. 2500% increase from 55 to 1,400 students). Altogether, the school boasts a teaching and non-teaching staff strength of over 50 employees. Waste is improperly managed within the school as pockets of open dumps can be visibly sighted at different locations within the school. Furthermore, litters of demolition waste can also be seen at various sites in the college. Based on these observations, there is need to ensure and assure the safe management of construction and demolition wastes resulting from the intervention works at the college, (particularly asbestos boards) to foster health and safety of staff and students. Major inhabitants of Abak LGA are mostly Christians who are members of the Annang tribe. The Aka community locals are predominantly farmers and sundry traders. Other economic activities include Palm Wine Tapping, Palm Oil Trading, Pottery and Raffia Weaving.	FSTC Otukpo is located in Akpegede, a rural community at the outskirts of Otukpo LGA, Benue state. The college spans 304.39 hectares and is accessed via the Otukpo–Ikache road. There are schools, a Primary Health Care center, and residential buildings along the dirt road leading to the school, causing air pollution from fugitive dust. The community is sparsely populated, mostly consisting of farmers with a few traders and civil servants. The school is approximately 10km from Otukpo main market, making it a potential location for contractors to obtain rehabilitation materials. The soil within the school is predominantly red/brownish clay. Some areas of the 200m double lane driveway from the main entrance of the college are interlocked while others are under construction which also contributes to the increased fugitive dust especially during harmattan. The school premises feature low cut grasses, flowers, and various trees, used for decoration and aesthetics. The school has a sports complex with a pavilion housing sports facilities. Water scarcity is severe in the Akpegede community due to a low water table. FSTC Otukpo lacks functioning boreholes and relies on a designated water tanker for supply. A new borehole is needed on the school premises to address the water shortage.

Environmental Baseline Studies

Baseline data was acquired during field visits within the boundaries of the project locations. This is in order to ensure management of project-related adverse impacts, on the baseline levels. Groundwater samples were planned to be collected from FSTCs where boreholes are to be installed/rehabilitated (12 FSTCs in total) and water reticulation is proposed. However, ten (10) groundwater samples were collected, which is less than the planned number (twelve (12) samples). The limitation in sample collection arose from dysfunctional boreholes in certain colleges, such as FSTC Uromi and FSTC Otukpo, during the field visits, resulting in a reduced number of samples. Twenty (20) soil samples (Top Soil –TS) were collected from locations where the contractors may likely erect their equipment staging areas at the respective FSTCs (samples were subjected to composite analysis). Groundwater samples were collected from few functional boreholes and wells currently in use at the colleges. Air quality analysis was carried out using a Testo 350 XL. Measurements were taken in the various school premises. Noise levels were also collected in a similar manner using a Testo 815 Noise meter.

Groundwater Analysis (Physiochemical and Heavy Metals)

Groundwater samples were collected from wells and boreholes within the ten (10) technical colleges using sterile dark coloured 100ml bijour bottles. Samples for heavy metals and physiochemical studies were also collected in their respective coded plastic containers and stored in ice-packed coolers. Samples were preserved in refrigerators at 4˚C prior to laboratory analyses. Fast changing physiochemical parameters such as pH, Conductivity, and Total Dissolved Solids (TDS) etc. were measured in-situ using an in-situ water analyzer. The physiochemical analysis showed that all analyzed samples were mostly within the FMEnv permissible limits, except for FSTC Michika. The values for Turbidity (465mg/l), Total Dissolved Solids (831mg/l), Total Suspended Solids (934), Nitrates (160mg/l), and Phosphate (36mg/l) in samples obtained from FSTC Michika exceeded the FMEnv limits of 100mg/l, 500mg/l, 500mg/l, 50mg/l, and 5mg/l respectively. The samples from FSTC Michika were taken from an abandoned well in the college, which may account for the high Turbidity, TDS, and TSS levels observed. Elevated Nitrate and Phosphate values may have been as a result of potential leaching of NPK fertilizers used for soil amendment in nearby school farmlands. The well has dried up and is no longer in use; it has been converted into a dumpsite according to the project manager's update. The heavy metal properties of the groundwater samples from the FSTCs were all within the FMEnv limits ***(See Chapter 4 for more details).***

Soil Analysis (Physiochemical and Heavy Metals)

Soil samples were collected using a manual soil auger at locations which may be used as potential staging areas within the technical colleges. Topsoil samples were taken at a depth of 0-15cm and stored in high UV-resistant containers after wrapping in aluminum foil. Physiochemical and heavy metal samples were placed in coded plastic bags. Soil samples obtained from all the FSTCs revealed pH values that are within the FMEnv permissible limits.

Air Quality Measurements

Air quality measurements was carried out using a Testo 350 XL device at technical workshops, classrooms, and offices in technical colleges. On average, the measurements yielded results within permissible limits, except for Total Suspended Particulate Matter (SPM) at FSTC Michika, which recorded 305µg/m³, slightly surpassing the FMEnv limit of 250µg/m³. This elevated SPM level could be attributed to the ongoing road construction from the college's main entrance to its interior.

Noise Level

Noise Levels (NL) were measured using a Testo 815 Noise meter. Noise levels were measured with the corresponding coordinates as those for air measurements. Locations measured showed results within FMEnv/WHO maximum permissible limits.

Socioeconomic Studies

Primary Data: A random survey was carried out across all schools under study. Semi-structured questionnaires were administered to respondents (Staff, Students, Youth Corp Members) within the project corridors. Twenty (20) technical colleges was surveyed. The planned sample population was 40 respondents for each technical college; however, the actual number varied based on staff and student availability during the field visit (i.e.

December 2022). Notwithstanding these constraints, 30 respondents were surveyed at each of the FSTCs whose responses were retrieved and analysed. The survey was designed to understand the socioeconomic conditions within and around the FSTCs and project communities. The summary of the socioeconomic survey across the twenty (20) FSTCs is provided below.

Size of the Technical Colleges: Based on the student population at the colleges, the schools were categorized into Large Sized (>1500 students), Medium-Sized (500-1500 Students) and Small-Sized (<500 Students). Based on the results of the socioeconomic survey at the colleges, 30% (180) of the technical colleges were large sized while 70% (420) were medium sized. None of the technical colleges was classified as small.

Percentage of Technical Colleges with Bad Toilet Facility: According to the survey questionnaire and CIPs assessment 95% (570) of the FSTCs will require toilet rehabilitation/renovation at the workshops, classrooms and offices earmarked for structural rehabilitation. Only about 5% (30) of the technical colleges will not require toilet rehabilitation.

Water Supply Infrastructure: Similarly, only 60% of technical colleges will require the rehabilitation or installation of water supply infrastructures (including solar boreholes, overhead tanks and water reticulation works). Based on stakeholder engagements, these colleges constantly face water challenges due to shallow wells, no or insufficient boreholes, inadequate power source (hence their need for solar boreholes), etc.

Locations Prone to Insecurity: The survey results showed that about 25% (150) of the technical colleges are located in bandit occupied territories or whose LGAs have experienced significant insecurities in the past, while 75% (450) are not located in bandit occupied territories. These locations include FSTC Michika, FSTC Kuta Shiroro, FSTC Zuru, FSTC Dayi and FSTC Kafanchan.

Percentage of Schools with Asbestos Ceiling to be Removed: According to the field assessments, only about 20% (120) of the technical colleges require removal of asbestos ceiling while 80% (480) of the schools does not require removal of asbestos ceiling. These colleges include FSTC Ilesha, FSTC Usi-Ekiti, FSTC Uyo and FSTC Doma.

ES 8: Identified & Assessment of Potential Environmental and Social Impacts

The project impacts are highlighted in Chapter 5 of this document. Nonetheless, a summary of some identified positive and adverse environmental and social impacts of the intervention works at the TCs is provided below.

POSITIVE IMPACTS

The following are the positive impacts of the rehabilitation, renovation and expansion activities at the colleges.

- Increased enrolment of secondary students at the FSTCs, subsequently boosting revenue generation at the TCs.
- Rehabilitated structures (workshops, classrooms, etc.) will provide more conducive learning environment.
- Construction of toilets and WASH facilities will promote hygiene and sanitation at the technical colleges resulting in improved health.
- The rehabilitation phase of the intervention works may likely create short-term employment opportunities for unskilled workers most of whom are based within proximal communities at the FSTCs. This will foster improved community perception and stakeholder satisfaction of the IDEAS project.
- Considering that the technical workshops do not only serve as a practical space for the students, the proposed rehabilitation and expansion of the facilities will increase technical and vocational service delivery to the project communities thereby increasing the Internally Generated Revenue (IGR) of the technical colleges.
- The proposed rehabilitation at the FSTCs will improve job satisfaction for the teaching staff as well as the technical workshop instructors as a result of the provision of and access to better work facilities. Furthermore, staff productivity and quality of service delivery will be enhanced.

- The general health and safety of the Staff, Students, Youth Corp members and other personnel within the colleges will be improved as a result of the rehabilitations.
- The project will create an avenue for continuity or future investment including Public Private Partnerships (PPPs).

ADVERSE IMPACTS

Some adverse E&S risks and impacts of the proposed rehabilitation at the FSTCs and their respective mitigation measures are provided below.

PRE-REHABILITATION PHASE

Environmental Risks

- Carbon emission from exhaust fumes of vehicles carrying construction materials into school premises.
- Localized air pollution from cement dust during offloading of cement bags or Plaster of Paris (POP) which may exacerbate existing respiratory conditions of staff, students, workers, corps members, etc.
  Increased fugitive dust generation along unpaved tracks leading to workshops or along access roads in the colleges currently undergoing rehabilitation e.g. FSTC Otukpo and FSTC Michika.
  Site-specific increase in noise level.

Social Risks

- Short-term traffic build ups along some normally busy roads leading to the colleges. This may result in delayed travel time of commuters. These roads include Nyanya-Karshi Road; Doma-Lafia highway; Yola-Maiduguri highway, Zik Avenue/Nkpor Junction; Morris Road/Military Road; Minna-Kuta highway and Ijeshi-Oke Meshi Road, leading to FSTC Orozo, FSTC Doma, FSTC Michika, FSTC Awka, FSTC Yaba, FSTC Kuta Shiroro, FSTC Ilesha respectively.
- Dissatisfaction among teachers and students as a result of change of venue or the rescheduling of class periods at some of the workshops and classrooms.
- Transport of procured construction materials to the colleges through roads that are in deplorable or impassable conditions (e.g. Obehie-Akwete Azumini Road – FSTC Ohanso; Onewa Road – FSTC Uromi), may predispose commuters to road accidents possibly as a result of equipment fall from trucks.
- Livestock roadkill may occur as trucks move through some project communities where open grazing is practiced (e.g. FSTC Doma and FSTC Kuta Shiroro)

REHABILITATION PHASE

Environmental Risks

- Installation of new boreholes in proximity to existing septic tanks may lead to contamination of groundwater quality in the long-term via vertical infiltration.
- Localized, minor and short-term soil contamination from improper management of slurry (mixture of cement), oil, fuel, water, lubricants, paint, etc.
- In colleges where drainage installations is proposed, improper backfilling of installed drainages can create voids or air pockets around the drainage channels, hindering the flow of water through the system. It may also result in standing water, flooding, or waterlogging in the area.
- Bulk generation of Construction & Demolition Wastes. (CD-Waste) (wood, boulders/large stones, cement/POP bags, metal rods, etc.); Accumulation of stockpiles of Electrical Wastes; (E-Waste) (sockets, switches, wires/conductors, cables, circuit boards, cathode ray/mercury bulbs, etc.); Accumulation of plumbing wastes (pipes, disused toilets, ceramics, sinks, etc.); Generation of food wastes by Contractor workers.
- Generation of asbestos dust and likely release of asbestos fibrils which may expose Contractor workers, students and staff to the risk of respiratory diseases such as asbestosis. Likely locations include FSTC Doma, FSTC Usi Ekiti, FSTC Uyo and FSTC Ilesha.
- Open defecation by construction workers at the technical colleges, leading to a decline in environmental sanitary conditions.
- Occupational Health and Safety Risks: Electrical Works - Injuries, explosions, electrical fires, falls, release of hazardous energy, accidents, death etc.; Mechanical Works (Including Plumbing Works) –

Exposure to welding fumes during welding of doors/windows, Exposure of work personnel to Asbestos dust, Musculoskeletal Disorders (MSDs), Noise; Working at Heights – Falls, Injuries, Death; Conveying and Lifting Heavy Equipment – Collapse, Injuries, MSDs, Death; Civil and Rehabilitation Works – Risk of poisonous bites from snakes and scorpion stings from abandoned structures.

Social Risks

- Open Circuiting – Temporary interruption of learning processes and other school activities that rely on electricity e.g. Computer Laboratories, Workshop Practices, etc.
- Mechanical and plumbing works like installation of borehole and water reticulations may lead to temporary interruption of water supply within the college. This may also lead to temporary closure and restriction of access to toilets for sanitation purposes.
- Occurrence of on-site/off-site social vices and risk of illicit behaviour/practices such as physical assaults (fights, rape, harassments, theft, vandalization, etc.) and substance abuse attributable to labour influx.
- Temporary disruption of learning and other school activities in classrooms, laboratories and workshops.
- Grievance and displeasure from students and school staff who may need to temporarily vacate their classrooms, workshops, laboratories etc. during rehabilitation works within the schools.
- Gender Based Violence, including Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH).
- Security: Work personnel in areas like FSTC Michika, FSTC Dayi, FSTC Zuru, FSTC Kafanchan, and FSTC Kuta Shiroro may face kidnapping, attacks, and theft due to past and present insecurities around the project area.
- There may be social conflict between school staff and some Contractor workers as a result of non-adherence to school rules and regulations.
- Possible engagement in sexual activities leading to possible spread of STIs, STDs and unwanted pregnancies.
- Community Health and Safety: improperly labelled and stored construction and demolition materials could predispose school students, workers and staff to cuts, injuries, as well as exposure to hazardous chemicals.
- Also, horseplay around rehabilitation sites e.g. near drainages or septic tanks may result to falls.

OPERATION PHASE

Environmental Risks

- The facilities to be rehabilitated may be predisposed to wind and extreme weather conditions in locations such as FSTC Doma and FSTC Jalingo.
- Woods used for roofing and ceiling of the rehabilitated structures may be prone to infestation and future destruction due to attacks by termites.
- Generation and indiscriminate disposal of solid wastes from workshops, laboratories and offices.
- Excessive energy consumption.

ES 9: ESMP Mitigation & Monitoring Plan and Capacity Building

A matrix table format is used to describe the Environmental and Social Management Plan (ESMP) for the mitigation and monitoring of adverse environmental, social, and occupational health and safety risks and impacts associated with the proposed rehabilitation works for the FSTCs. The table has been designed to incorporate corresponding mitigation measures for all associated impacts of the proposed civil works as well as other ancillary activities under the subproject. Monitoring indicators and frequencies during the pre-rehabilitation, rehabilitation and operation phases of the project were also captured in the ESMP table (See Chapter 6). Some mitigation measures for the identified E&S impacts are provided in the table below.

Impacts	Mitigation Measures
Environmental Impacts	
Carbon emission from exhaust fumes of vehicles carrying construction materials into school premises.	• Use vehicles, plants and equipment that are in good condition generally less than 5 years' old • Ensure Vehicles are serviced regularly, depending on the frequency of use.
Localized air pollution from cement dust during offloading of cement bags or Plaster of Paris (POP) which may exacerbate	• Offload cement bags in surroundings with less people. • Ensure the distribution of nose masks to all the people offloading the cement

Impacts	Mitigation Measures
existing respiratory conditions of staff, students, workers, corps members, etc.	bags. • Early notification of PAPs (Staff, Students, Corp Members, etc.) • If possible, schedule supply and offload of cement during weekends. • Cover trucks carrying cement or POP bags with tarpaulin during haulage to project sites at the TCs.
Site-specific increase in noise level.	• Use vehicles that are not older than 5 years • Where possible retrofit vehicle exhausts with sound control or sound proofing devices. • Plan noise intensive activities to fall within a time period when academic activities are not in progress (off school hours).
Loss of beneficial flora e.g. Bahama and Carpet grass.	• Limit land clearing activity to specific zones delineated for construction of facilities
Installation of new boreholes in proximity to existing septic tanks may lead to contamination of groundwater quality in the long-term via vertical infiltration.	• Ensure the minimum allowable distance (18m) from septic tanks is maintained at the location where the borehole is to be drilled and installed. • Ensure that installed boreholes are retrofitted with Reverse Osmosis (RO) filters.
Localized, minor and short-term soil contamination from improper management of slurry (mixture of cement), oil, fuel, water, lubricants, paint, etc.	• Collect slurry into designated containers; label appropriately before final disposal by the respective SEPAs/SWMAs
Improper backfilling of installed drainages can create voids or air pockets around the drainage channels, hindering the flow of water through the system. It may also result in standing water, flooding, or waterlogging in the area.	• Ensure that the installation of drainages is carried out under proper supervision. • Use of suitable backfill materials • Ensure compaction of backfill material to eliminate voids and air pockets. • Ensure post installation monitoring of the newly installed drainage system to ensure that it functions as intended and there is no signs of ponding or waterlogging.
Bulk generation of Construction & Demolition Wastes. (CD-Waste) (wood, boulders/large stones, cement/POP bags, metal rods, etc.); Accumulation of stockpiles of Electrical Wastes (E-Waste) (sockets, switches, wires/conductors, cables, circuit boards, cathode ray/mercury bulbs, etc.). Accumulation of plumbing wastes (pipes, disused toilets, ceramics, sinks, etc.) Generation of food wastes by Contractor workers.	• Ensure proper sorting, storage and final disposal by the respective SEPAs/SWMAs or an accredited third-party waste disposal agency • Implement waste management plan (WMP) ***(See Annex 6)*** • Provision of waste bins. • Food waste and other organic and biodegradable waste should be composted and reused for maintenance of gardens and flowers and flora within the school premises.
Generation of asbestos dust and likely release of asbestos fibrils which may expose Contractor workers, students and staff to the risk of respiratory diseases such as asbestosis. Likely locations include FSTC Doma, FSTC Usi Ekiti, FSTC Uyo and FSTC Ilesha.	• Implement Asbestos Management Plan (AMP) (See Annex 8); • Apply caution in the removal of asbestos; • Ensure removed asbestos are carefully cut into conveyable pieces, wetted and carefully transported to a designated storage area within the college premises before eventual evacuation and final disposal.
Occupational Health and Safety Risks – Electrical Works - Injuries, explosions, electrical fires, falls, release of hazardous energy, accidents, death etc. Mechanical Works (Including Plumbing Works) – Exposure to welding fumes during welding of doors/windows, Musculoskeletal Disorders (MSDs), Noise. Working at Heights – Falls, Injuries, Death. Conveying and Lifting Heavy Equipment – Collapse, Injuries, MSDs, Death. Civil and Rehabilitation Works – Risk of poisonous bites from snakes and scorpion stings from abandoned structures.	• Conduct electrical safety trainings; Implement OHS Management Plan (OHSMP). ***(See Annex 7)*** • Conduct OHS Training and Education. • Conduct Job Hazard Analysis (JHA) & Process Hazard Analysis (PHA). • Use of PPEs. • Use fall protection equipment. • Safe Work Practices. • Make available polyvalent antivenin. • Provide First Aid kits and Conduct trainings on First Aid and Cardiopulmonary Resuscitation (CPR) for contractor workers and project team
The facilities to be rehabilitated may be predisposed to wind and extreme weather conditions in locations such as FSTC Doma and FSTC Jalingo.	• Ensure that the building's roof is designed to withstand the wind loads and extreme weather conditions specific to these locations. • Install a lightning protection system (lightning rods, conductors, and grounding) to divert lightning strikes away from the building safely dissipating electric charge.
Woods used for roofing and ceiling of the rehabilitated structures may be prone to infestation and future destruction due to attacks by termites.	• Recurrent fumigation of all structures within the college particularly the rehabilitated structures.
Social Impacts	
Short-term traffic build ups along some normally busy roads leading to the colleges. This may result in delayed travel time of commuters. These roads include Nyanya-Karshi Road; Doma-Lafia highway; Yola-Maiduguri highway, Zik Avenue/Nkpor Junction; Morris Road/Military Road; Minna-Kuta highway and Ijeshi-Oke Meshi Road, leading to FSTC Orozo, FSTC Doma, FSTC Michika, FSTC Awka, FSTC Yaba, FSTC Kuta Shiroro, FSTC Ilesha respectively.	• Schedule procurement and supply of construction equipment/materials for off peak periods (See TMP) or during weekends. • Liaise with Federal Road Safety Corps (FRSC) for easy management of traffic. • Use identified alternative routes e.g. for FSTC Awka – Works road can be used instead of going through Nkpor junction and Zik Avenue. • Implement Traffic Management Plan (TMP). ***(Annex 5)***

Impacts	Mitigation Measures
Dissatisfaction among teachers and students as a result of change of venue or the rescheduling of class periods at some of the workshops and classrooms.	• Early notification; • Ensure proper sensitization and awareness is conducted; • Consider rescheduling some major works for holidays, weekends or evenings at close of school.
Transport of procured construction materials to the colleges through roads that are in deplorable or impassable conditions *(e.g. Obehie-Akwete Azumini Road – FSTC Ohanso; Onewa Road – FSTC Uromi),* may predispose commuters to road accidents possibly as a result of equipment fall from trucks.	• Use appropriate tie-downs, straps, and restraints to keep the equipment in place during transit. Also, as much as possible cover with tarpaulin and fasten to the truck. • **Trip Scheduling:** Schedule procurement and transport of construction materials to these colleges for off peak hours (evenings and during weekends) • Provide proper training to drivers and equipment operators on safe loading and unloading practices, as well as how to navigate challenging road conditions.
Livestock roadkill may occur as trucks move through some project communities where open grazing is practiced (e.g. FSTC Doma and FSTC Kuta Shiroro)	• Implement and enforce appropriate speed limits for project drivers (<40km/hr) especially when driving through project communities. • Schedule haulage activities during times when livestock are less likely to be on or near the roads, such as avoiding peak grazing times or herding periods. Better still, plan transport of materials for late evening hours.
Temporary interruption of learning processes and other school activities that rely on electricity e.g. Computer Laboratories, Workshop Practices, etc.	• Early and adequate notification of students and teachers of the schools, prior to commencement of works and subsequent power cut offs. • Additionally, carry out works at non-operational hours such as evenings, weekends and public holidays.
Installation of boreholes and water reticulation for mechanical and plumbing work may temporarily disrupt college water supply, leading to restricted access to toilets.	• Early and adequate notification of students and teachers prior to commencement of works and where works must be carried out during operational hours, they shall be done in phases, in a manner that doesn't shutdown water supply completely • Alternative water supply sources should be made available prior to commencement of water works e.g. use of water vendors for supply of water.
Occurrence of on-site/off-site social vices and risk of illicit behaviour/practices such as physical assaults (fights, rape, harassments, theft, vandalization, etc.) and substance abuse attributable to labour influx.	• Enforce and ensure proper orientation on acceptable behaviours for construction personnel on/off-site. • Ensure fair wages. • Ensure unskilled labour is sourced within the community. • Continuous trainings and sensitization of students, school staff and corps members. • Adequate collaboration with local law enforcement and provision of security (armed security personnel, where possible).
Gender Based Violence, including Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH)	• Ensure all workers sign the Code of Conduct (CoC). • Organize trainings and workshops on GBV and SEA/SH and sensitize workers on zero tolerance for sexual integration with students/community. • Guidance and Counselling Unit and Parents Teachers Association (PTA) to sensitize students on safety habits and reporting mechanism for SEA/SH incidents.
Security Risks: Work personnel in areas like FSTC Michika, FSTC Dayi, FSTC Zuru, FSTC Kafanchan, and FSTC Kuta Shiroro may face kidnapping, attacks, and theft due to past and present insecurities around the project area.	• Carry out a Security Risk Assessment in conjunction with the State Security Adviser to identify potential areas and vulnerabilities in and around the FSTCs. • Provide personnel with comprehensive security training to educate them about the risks they might encounter and how to respond appropriately • Collaborate with local law enforcement and security agencies to enhance security measures • Travel Safety Protocols: Develop clear protocols for travel to and from work locations. To a minimum, this should include secure transportation, traveling in convoys, and avoiding travel during high-risk times or in poorly lit areas. • Avoid travelling during the curfew period (6:00pm – 6:00am) for FSTC Michika. • Use of Security Escorts: Provide personnel with security escorts or guards when transporting materials to the colleges. • Implement Security Management Plan ***(Annex 10)***
Community Health and Safety: improperly labelled and stored construction and demolition materials could predispose school students, workers and staff to cuts, injuries, as well as exposure to hazardous chemicals. Also, horseplay around rehabilitation sites e.g. near drainages or septic tanks may result to falls.	• Ensure to properly label and store away all construction and demolition materials. • Install danger signs and cordon off areas where hazardous materials are stored. • After use ensure that all hazardous materials are safely disposed by an approved vendor. • Cover and cordon off all open pits.

Capacity Building and Training

Capacity building measures will be required to ensure that institutions involved in implementing the various ESMP components have the necessary knowledge and skills to fulfil their roles. The IDEAS SPIUs, CIUs at the respective FSTCs, Contractor, and other relevant MDAs are among the groups that will be trained. The ESMP

training will include modules such as Occupational Health and Safety Management, Onsite Waste Management, SH/SEA and VAC Awareness and Application to the rehabilitation works – orientation on acceptable behaviours for construction personnel on/off-site, Introduction to Environmental and Social Framework (ESF), Operational Policies (OP) triggered for the IDEAS project, while the training for the monitoring component of the ESMP will include Monitoring and Evaluation Basics - Establishing Monitoring Indicators and Evaluating Performance, Communication Management, GRM Implementation and Monitoring, etc.

Implementation Schedule

The activities related to environmental management and monitoring will be integrated in the overall rehabilitation schedule. The project will be implemented over the course of Six (6) months.

ES 10: ESMP Cost Estimates

To effectively implement the mitigation and monitoring measures recommended in this ESMP, necessary provision will have to be made. The cost of these measures has been estimated and included in the ESMP and presented in the table below. The cost of mitigation by the Contractor will be included in the contract as part of the implementation cost by the Contractor. The overall total estimated cost for the ESMP implementation, monitoring and capacity building across the twenty (20) FSTCs is estimated at **Four Hundred Thousand and Thirty-Nine US Dollars Only (USD 400,039).** This is equivalent to **Three Hundred and Nine Million, Forty-Six Thousand, One Hundred and Thirty-Four Naira Only (N309,046,134).**

***Note:** The breakdown of the individual ESMP mitigation and monitoring cost including the capacity building plan is provided in details in Chapter 6 of this document.*

S/N	Item	Responsibility	Estimated Cost (USD)	Estimated Cost (NGN)
1	**ESMP Mitigation**	Contractors, SPIU, Communications Officer, CIU ESSG Officer, SEPAs/SWMAs, GBV Consultant, Independent NGOs/CBOs, College Principal/School Mgt.	213,103	164,630,593
2	**Monitoring Cost**	SPIU; Safeguards Unit; SMEnv; SEPAs/SWMAs; FRSC, NGOs, NPF, etc.	97,957	75,675,701
3	**Capacity Building**	NPCU, SPIU; Safeguards Unit; Contractors and Other relevant MDAs	54,180	41,856,220
		Sub-total Cost	**365,240**	**282,162,514**
4	**Contingency**	5% of Sub-total Cost	18,262	14,108,126
5	**Grievance Redress Mechanism**	SPIUs, GRC, NPCU, etc. ***(@ USD665 per TC for 20 FSTCs/States).***	13,300	10,274,782
6	**ESMP Disclosure**	SPIUs (Lump Sum)	3,237	2,500,712
		Total	**400,039**	**309,046,134**

Note: USD to Naira exchange rates as at October, 2023 (1 USD = 772.54 Naira) was applied and figures rounded up.

The ESMP mitigation costs to which the contractor is responsible will be included in the biding documents for Contractors, to enable them, implement intervention works in a manner consistent with environmental and social requirements of this ESMP document.

ESMP Disclosure

After the ESMP review and clearance by the World Bank; the ESMP will be registered with the FMEnv for approval to be granted for its disclosure in-country. The table below describes the process of disclosure.

S/N	Action	Remarks
1.	**Registration of ESMP with FMEnv**	Following clearance of the ESMP by the Bank, the SPIU shall proceed with the registration of the ESMP at the FMEnv through its website. A payment of N50,000 will be made via remita per project site–**Twenty (20) technical colleges (N1,000,000)**. Afterwards, two (2) hard copies and one (1) soft copy of the report will be sent together with the receipt of payment and a letter of

		"Request for Disclosure" addressed to the Minister or Permanent Secretary of the FMEnv as the case may be.
2.	**Letter of Approval by the FMEnv**	After all necessary inputs have been incorporated the SPIU will receive an acknowledgement by the FMEnv in form of a letter approving the disclosure of the ESMP.
3.	**Disclosure of the Cleared ESMP in Two (2) National Dailies or as directed by the FMEnv**	The SPIU will then proceed to disclose the ESMP in two (2) national dailies as required by the Nigeria EIA public notice and review procedures. The purpose will be to inform stakeholders about the project activities; environmental and social risks and impacts anticipated as well as the proposed mitigation measures for identified impacts.
4.	**Disclosure at the World Bank External Website**	The ESMP will be disclosed on the Bank's External Website upon evidence of in-country disclosure by the Project and according to the World Bank Disclosure Policy (OP 17.5).

ES 11: Stakeholder Engagement

The consultation process was conducted between December 2022 and February 2023. In the consultation, special care was taken to ensure the appropriate participation of female teachers, corps members and students within the project areas and to understand and appreciate their views. Critical stakeholders identified and consulted included: i) IDEAS SPIUs ii) CIU Team at the Respective FSTCs iii) School Management (Principal, Staff, Students and Youth Corp Members) (iv) State Environmental Protection Agencies (SEPAs)/State Waste Management Agencies (SWMAs) iv) Federal Road Safety Corps (FRSC) and other stakeholders within the boundaries of the project locations including women groups (locations for stakeholder engagement were at the sites, and offices of the respective agencies). Vulnerable Groups were identified at the level of consultations**.** The criteria utilized were based on establishing members of the project area of influence likely to be at the most risk of the adverse impacts of the proposed intervention works. This is with regards to: (*i) easy predisposition to SH and SEA, contracting STIs and STDs or unwanted pregnancies (social vulnerability); (ii) individuals likely to suffer temporary effects of renovation of classrooms, workshops, toilets, laboratories and on-site infrastructure and may face psychosocial impacts (physical and social vulnerability); (iii) staff and visitors with physical disabilities; and (iv) elderly persons (social and probably, economic vulnerability)*. In line with the criteria above, these include:

- **Female Students/Corpers/Staff within the FSTCs:** These stand the risk of suffering SH, SEA, contracting STIs, STDs or unwanted and/or early pregnancies caused by migrant workers, especially at the pre-rehabilitation and rehabilitation phases.
- **Persons with Disabilities:** Negative risks & impacts may be associated to restriction of movement and access to work areas/classrooms during the rehabilitation phase especially for teachers, students, corps members with disabilities. Barricaded or waste stacked routes or work areas may restrict and impede movement of staff living with disabilities to their office blocks.
- **Elderly Persons:** Considering that most schools have administrative personnel and security personal who are above 55years, it is imperative to put them into cognisance, as they might easily be susceptible to adverse environmental and social risks & impacts associated with the intervention works.

A summary of the key discussions, concerns and responses from the consultation at the FSTCs is provided below.

Participants: ESMP Consultant, SPIUs, CIU Team at the FSTCs in all states

The ESMP Consultants requested the CIPs and feasibility studies for the proposed rehabilitation at the colleges. He also explained the purpose of the ESMP and highlighted potential E&S risks and impacts at the colleges, along with suggested mitigation measures to be included in the ESMP report.

Participants: School Management (Principal/Vice Principal, Staff, Students, NYSC Corps Members)

Discussions were similar in most locations, with a few peculiarities as highlighted below:

i. Stakeholders (particularly Principals) enquired to better understand the rationale behind the ESMP study to be undertaken at the colleges and why it was necessary prior to the rehabilitation activities. The

ESMP Consultants explained the purpose and rationale for the ESMP and highlighted potential E&S risks and impacts at the colleges, along with suggested mitigation measures to be included in the ESMP report. The opinion of the stakeholders was sought as regards identified E&S risks peculiar to some of the college so as to come up with realistic mitigations which would offset or reduce the impacts as low as reasonably possible. Enquiries was also made about their cultural and socioeconomic activities and they were urged to express their views as regards the project.

ii. They appreciated the idea of the proposed rehabilitation and its numerous benefits for their colleges and expressed their optimism on its potential to stir up an improvement in the TVET subsector.

iii. They assured the team of their full assistance and cooperation. Also, they enquired on the scheduled period when the funds earmarked for the rehabilitation activities will be disbursed to them to enable them commence with implementation. The Consultant further informed that the scheduled period for the commencement of the rehabilitation cannot be ascertained in the meantime; however, the activity will most likely kick start after the current assessment is completed.

iv. The CIU at technical colleges, including FSTC Orozo, FSTC Doma, FSTC Michika, FSTC Awka, FSTC Yaba, FSTC Kuta Shiroro, and FSTC Ilesha, provided the consultant with information about traffic assessment. They informed the consultant that considering that these colleges are located along busy roads and highways, they experience significant traffic build ups, particularly during peak hours. Since there is no alternate route, they helped define off-peak hours that the Contractors could utilize for material procurement and supply/haulage during the proposed rehabilitation at the colleges.

***NOTE:** Initial stakeholder engagement was conducted with the respective SEPAs/SWMAs, FRSC, etc. at the states. The major output was that the MDAs are open to assisting with the implementation of the project as long as the FSTCs or the SPIUs liaise and seek their assistance via a follow up consultation during the rehabilitation phase.*

CHAPTER ONE

INTRODUCTION

1.1 Background

The Government of Nigeria has secured funding from the World Bank for the Innovation Development and Effectiveness in the Acquisition of Skills (IDEAS) Project which aims to strengthen the country's Technical and Vocational Education and Training (TVET) system. The Project Development Objective (PDO) of IDEAS is to enhance the capacity of the Nigerian skills development system to produce relevant skills for the formal and informal sectors. The IDEAS project aims to improve skills acquisition in Nigeria using a comprehensive approach by addressing key aspects of the skills development delivery system. It leverages industry involvement for better labour "market-fit" and "crowding-in" of private resources in the formal training system. The project is structured into four components – i) Incentivizing Public-Private Partnerships (PPPs) for enhanced quality and labour-market orientation of skills development in public Technical Colleges (TCs); ii) Improving skills formation for the informal sector; iii) Increasing the availability of competent and motivated technical teachers and instructors in the Nigerian skills space; and iv) Strengthening the regulatory environment and public management capacities for market-oriented skills development. The IDEAS project is being implemented by the Federal Ministry of Education (FME) through the Technology and Science Education Department (TSED), National Board of Technical Education (NBTE) as well as the state governments of the participating states. A total number of 38 TCs – twenty (20) Federal Science Technical Colleges (FSTCs) and eighteen (18) State Technical Colleges (STCs) have been identified for rehabilitation in twenty-two (22) states of the country, under the project. The project will provide grant funding for the rehabilitation and upgrade of these Technical Colleges (TCs) with the aim of transforming their operational models into PPPs, in which industry partners assume a prominent role in institutional governance, management, planning, training and service delivery. Consequently, there will be several civil works, involving construction, rehabilitation and expansion activities. These civil works raise environmental and social safeguards concerns and have triggered the World Bank's safeguard policy on Environmental Assessment (OP 4.01) and Involuntary Resettlement (OP 4.12). On this basis, the IDEAS National Project Coordinating Unit (NPCU) has set aside a portion of its allocated funds to procure consultancy services for the development of an Environmental and Social Management Plan (ESMP) for the Rehabilitation of Technical Workshops, Classrooms and Offices in twenty (20) Federal Science and Technical Colleges (FSTCs). The ESMP will be carried out to establish modalities of implementing the project in line with World Bank Safeguard Policies, while taking into consideration the environmental and social procedures of the Federal Government of Nigeria.

1.2 Rationale for the ESMP

The project has been identified as **Category B** according to the World Bank environmental assessment screening criteria, meaning that impacts will be site specific and manageable (the activities will involve limited adverse social or environmental impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures). For site-specific projects such as this, the most suitable EA safeguard instrument is an ESMP. The proposed project comprises essentially, civil and electromechanical engineering works which will be carried out within the premises of the selected technical colleges. These works will inevitably result in some environmental and social impacts thus triggering the World Bank's Operational Policy on Environmental Assessment OP 4.01 **(See Chapter 2 for more details).** The ESMP will identify the environmental and social impacts of the proposed project and define the roles and responsibilities of all critical stakeholders throughout the project life cycle in order to ensure that mitigation measures including cost estimates are implemented and overall sustainability of the project is assured.

1.3 Overview of Project Location

The proposed intervention works will be undertaken across twenty (20) FSTCs. Generally, the rehabilitation activities will be carried out in technical workshops, classrooms, and offices in the technical colleges. Table 1 below provides a list of the FSTCs proposed for rehabilitation under the IDEAS project and their locations.

Table 1: List of FSTCs Proposed for Rehabilitation Under the IDEAS Project and their GPS Coordinates.

S/N	Geopolitical Zones	IDEAS Project Participating States	Federal Science Technical Colleges (FSTCs)	GPS Coordinates	
				Latitude	Longitude
1	North-Central	Benue	Federal Science Technical College, Otukpo	7.198360	8.139329
2		Abuja FCT	Federal Science Technical College, Orozo.	8.897916	7.569647
3		Nasarawa	Federal Science Technical College, Doma.	8.398860	8.328441
4		Niger	Federal Science Technical College, Kuta Shiroro.	9.856911	6.719373
5	North-East	Adamawa	Federal Science Technical College, Michika	10.597960	13.352250
6		Taraba	Federal Science Technical College, Jalingo	8.903368	11.356644
7	North-West	Kaduna	Federal Science Technical College, Kafanchan	9.599665	8.321549
8		Katsina	Federal Science Technical College, Dayi	11.963712	7.688179
9		Kebbi	Federal Science Technical College, Zuru	11.425906	5.243700
10	South-East	Abia	Federal Science Technical College, Ohanso	4.889429	7.357005
11		Anambra	Federal Science Technical College, Awka	6.199615	7.063851
12	South-South	Akwa Ibom	Federal Science Technical College, Uyo	5.023785	7.917174
13		Bayelsa	Federal Science Technical College, Tungbo	5.130305	6.172133
14		Edo	Federal Science Technical College, Uromi	6.732494	6.346107
15		Rivers	Federal Science Technical College, Ahoada	5.076349	6.649303
16	South-West	Ekiti	Federal Science Technical College, Usi-Ekiti	7.885698	5.172193
17		Lagos	Federal Science Technical College, Yaba	6.522242	3.378314
18		Ogun	Federal Science Technical College, Ijebu-Imusin	6.788621	4.010069
19		Ondo	Federal Science Technical College, Ikare Akoko	7.539231	5.721399
20		Osun	Federal Science Technical College, Ilesha	7.635958	4.754410

Note: Whereas this ESMP addresses Federal Science Technical Colleges (FSTCs) proposed for rehabilitation in the twenty (20) states, it is noteworthy to state that six (6) standalone ESMPs has been prepared to capture intervention works to be implemented across the eighteen (18) State Technical Colleges in the Six (6) IDEAS Participating States.

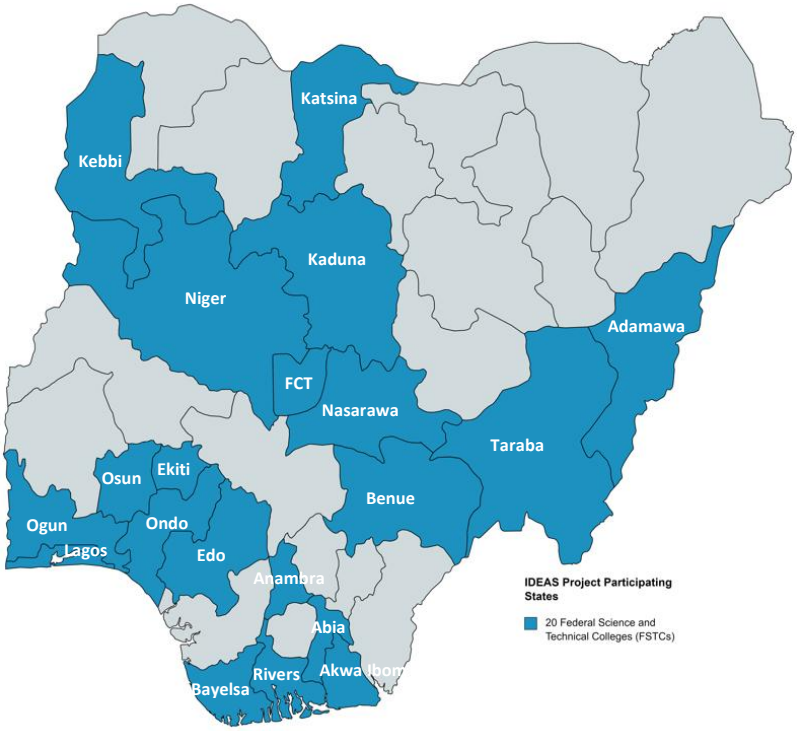

Figure 1: Map of Nigeria Showing the Geographic Spread of the Project Locations by States.

1.4 Description of the Proposed Intervention Works

The IDEAS Project has selected twenty (20) FSTCs for structural rehabilitation, renovation and expansion. In order for the proposed civil works to commence, the College Implementation Unit (CIU) of each of the colleges were mandated to prepare a College Improvement Plan (CIP) detailing the features to be renovated in order of priorities ***(See Chapter 3, Table 5 for the full list of TCs and their priority works)***. It is important to state that these CIPs are not like conventional feasibility study reports, where there are full descriptions and narratives of the proposed works to be carried out and their engineering contexts; rather they provide a listing of the items to be repaired or installed where necessary. Due to the number of TCs and equivalently the anticipated number of items and materials e.g. doors, ceiling boards, etc., this chapter only mentions the major aspects of civil works which generally cuts across all TCs and a brief on the nature of works to be carried out. The proposed rehabilitation, renovation and expansion of the TCs will generally include the following civil works:

Rehabilitation Works:

- **Roofing** – Removal of old and dilapidated roofing sheets and replacement with aluminium roofing.
- **Ceiling Finishes** – Removal of old, damaged, and dilapidated Polyvinyl Chlorides (PVCs), Asbestos ceilings and Board ceilings.
- **Floor Finishes** – Removal and rehabilitation of damaged floors along technical workshops, project offices, classrooms, etc.
- **Doors and Windows** – Replacement of doors and windows with steel types.
- **Wall Finishing** – Wall filling and smearing, and finishing with cement.
- **Painting** – Wall screeding and painting.
- **Electrical Installations** – New electrical installations and connections; including re-conductoring of existing electrical connections and installation of energy saving Light-Emitting Diode (LED) bulbs, switches, fans, etc.
- **External Works** – This will include cement, sand, gravel and water mixing. It will also include the transport of materials into the college premises for civil works.
- **Mechanical and Plumbing Works** – These will include several fittings and fixtures as well as the installation of WASH facilities such as:
    d. **Toilets** – Rehabilitation of dilapidated and/or abandoned toilets; including the installation of new ones. Toilet rehabilitation and renovation will also include water reticulation to ensure equitable water supply to toilets and sanitary infrastructure such as Wash Hand Basins (WHBs).
    e. **Boreholes** – Installation of boreholes, including solar powered boreholes and conversion of some existing boreholes to solar powered boreholes. Installation of overhead tanks and water reticulation to hostels, offices, workshops, etc. where use of water may be required.
    f. **Septic Tanks** – Rehabilitation of collapsed or dilapidated septic tanks serving some of the technical workshops, offices and classrooms.

Extension Works:

In certain FSTCs, expansion or extension of existing technical workshops, classroom blocks and offices will be required to increase capacity. These additions will involve similar civil works as the rehabilitation activities. However, some specific additional civil works to be undertaken are outlined below:

- **Site Clearing –** This will involve the removal of overgrown grasses, shrubs, etc. around some abandoned structures where the proposed extension is to be undertaken.
- **Digging of New Foundation and General Masonry –** To include raising of walls, finishes, flooring, etc.

1.5 Objective of the ESMP

The objective of the ESMP is to ensure that all identified adverse E&S impacts likely to arise from the proposed rehabilitation activities at the selected FSTCs are addressed using appropriate mitigation measures integrated into the project implementation to protect the environment and human health. This ESMP consists of a well-documented

set of identified impacts, mitigation measures, monitoring, and institutional actions to be taken before and during sub-project implementation to eliminate adverse environmental and social impacts, offset or reduce them to acceptable levels. It also includes the measures required to implement these actions, addressing the adequacy of the monitoring and institutional arrangements in the intervention site(s).

1.6 ESMP Methodology

The technical approach and methodology for preparing this ESMP have been explained in the inception report. The study followed a systematic process that involved literature review, field-based assessment in accordance with applicable world bank policies and Nigerian EA guidelines. It also emphasized effective collaboration with the IDEAS NPCU, SPIUs, CIUs and all relevant stakeholders, to ensure synergy and complementarity in the application of technical inputs required to respond to the scope of works outlined in the Terms of Reference. The methodology and sequence of activities for each phase of the ESMP are summarized below.

LITERATURE REVIEW PHASE

- **Project Planning, Logistics Arrangement and Literature Review –** To a minimum, this involved a) strategic project planning and logistical arrangements for effective project implementation; b) an initial stakeholder engagement with the NPCU, PMUs, SPIUs and FSTCs; c) review of project documents such as the Terms of Reference (ToR) for the assignment, IDEAS Environmental and Social Management Framework (ESMF), Resettlement Policy Framework (RPF), CIPs, GRM, PIM, PAD, etc. d.) review of existing legal and regulatory frameworks applicable to the IDEAS project at the national and state level. These included the following but are not limited: national education policy, state education policies, federal and state environmental regulations, decrees, acts, policies and guidelines, World Bank safeguard policies and other relevant documents.

FIELD DATA GATHERING PHASE

- **Reconnaissance Visits –** To selected FSTCs for scoping.
- **Environmental and Social Baseline Studies** (All locations) – Major baseline studies covered include but are not limited to the following:
    - Environmental (Biophysical) Studies
    - Socio-economic Baseline Studies (SEBS)
    - Initial Public Consultations/Stakeholders Engagement
    - Terrestrial & Aquatic Ecological Studies
    - Air, Soil & Water Quality Surveys
    - Nuisance/Noise Studies
    - Mapping & Geographical Information Systems (GIS)
    - Traffic Impact Assessment
    - Security Assessment, etc.
- **Sample Collection and Analysis –** Included air, soil, noise, groundwater quality, etc. where necessary.
- **Socioeconomic Assessment –** Sociocultural and Economic/Livelihood Assessments; Labour Influx; Assessment of Gender Based Violence (GBV) risks including Sexual Exploitation and Abuse (SEA)/Sexual Harassment (SH) – The ESMP will suggest need for mapping of GBV services and use of WB GBV risk assessment tool.
- **Stakeholder Engagement –** The ESMP incorporated direct engagement (Focus Group Discussions, One-on-One Interviews and Virtual Engagement) of critical stakeholders in a timely, participatory and meaningful consultations especially for those who are likely to be affected by intervention works and implementation of the ESMP. Attention was paid particularly to the impacts of the project on vulnerable groups (including but

not limited to people living with disabilities) – ***Refer to Chapter 7 for full details of the stakeholder engagement process for the project.***

- **Mitigation Measures and Institutional Responsibilities –** Chapter 6 of this ESMP highlighted institutional responsibilities for implementing mitigation measures. The chapter also proffered realistic mitigation measures addressing envisaged environmental and social risks and occupational health and safety impacts of the intervention works across all TCs. It also incorporated the preparation of management plans addressing identified environmental and social issues and sensitivities (such as waste generation including asbestos waste management; traffic congestion; occupational health and safety risks, etc.).

CHAPTER TWO

LEGAL AND ADMINISTRATIVE FRAMEWORK

The Environmental and Social Management Framework (ESMF) for the IDEAS Project has already addressed the relevant policies, legal and regulatory frameworks, and administrative structures for the project implementation and management in Nigeria. However, this chapter highlights additional policies, state-level legal and administrative frameworks, and the World Bank safeguards policies triggered by the project. It also covers other international regulations applicable to the project. This chapter provides an overview of the policies and institutional framework at both the national and state levels, which will guide the project's implementation.

2.1 Legal and Regulatory Frameworks

2.1.1 Federal Ministry of Environment Regulations and Guidelines

The Federal Ministry of Environment is the apex policy making body responsible for addressing environmental issues in Nigeria. To fulfil this mandate, the main instruments in ensuring that environmental and social issues are mainstreamed into development projects is the Environmental Impact Assessment (EIA) Act CAP E12, LFN 2004. With this Act, the FMEnv prohibits public and private sectors from embarking on major prospects or activities without due consideration, at early stages, of environmental and social risks and impacts. The act makes an EIA mandatory for any development project and prescribes the procedures for conducting and reporting EIA studies.

Other relevant legal and regulatory frameworks on environment are described in Table 2 below.

Table 2: Legal and Regulatory Framework on Environment

S/N	National Regulations	Year	Provisions
1.	**National Policy on the Environment**	2016	Coordinates environmental protection and natural resources conservation for sustainable development.
2.	**National Environmental Standards and Regulation Enforcement Agency (NESREA Act)**	2007	Established to ensure compliance with environmental standards, guidelines and regulations.
3.	**National Environmental (Sanitations and Wastes Control) Regulations**	2009	This regulation that was promulgated in 2009 among other things makes adequate provisions for waste control and environmental sanitation including punishments in cases of malfeasances.
4.	**National Environmental (Soil Erosion and Flood Control) regulations.**	2011	The overall object of the regulation is to check all earth disturbing activities, practices, development for non-agricultural, commercial, industrial and residential purposes.
5.	**National Guidelines on Environmental Audit**	2011	These are designed to serve as a reference for compliance with the Environmental Audit requirements of the FMEnv. It states that it is mandatory for a company to carry out an audit every 3 years or at the discretion of the Hon. Minister of the FMEnv
6.	**National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations.**	1991	Regulates the collections, treatment and disposal of solid hazardous wastes from municipal and industrial sources.
7.	**National Guideline and Standard for Environmental Pollution Control**	1991	The regulations provide guidelines for management of pollution.
8.	**Workmen Compensation Act**	1987	Occupational Health and Safety.
9.	**Urban and Regional Planning Decree No. 88**	1992	Planned development of urban areas (to include and manage waste sites).
10.	**State Waste Management Laws**	1991	Ensure proper disposal and clearing of wastes.
11.	**National Environmental (Hazardous Chemicals and Pesticides Regulations).**	2014	The objective of the regulation is to protect human health and the environment from the hazardous effects of chemicals and pesticides.
12.	**Public Health Law**	2014	Covering public health matters

S/N	National Regulations	Year	Provisions
13.	**National Guidelines on Environmental Management Systems (EMS)**	1999	Recognizes the value of EMS to EIA and sets out objectives and guideline on general scope and content of an EMS.
14.	**National Guidelines and Standards for Water Quality**	1999	It deals with the quality of water to be discharged into the environment, sets standards and discharge measures for a wide range of parameters in water discharged from various industries. It also sets out the minimum/maximum limits for parameters in drinking water.
15.	**National Air Quality Standards Decree N0. 59**	1991	The World Health Organization (WHO) air quality standards were adopted by the then Federal Ministry of Environment (FMEnv) in 1991 as the national standards. These standards define the levels of air pollutants that should not be exceeded in order to protect public health.
16.	**National Policy on Flood and Erosion Control (FMEnv)**	2006	This policy addresses the need to combat erosion in the country utilizing the procedures outlined in the National Action Plan for Flood and Erosion Control and Technical Guidelines, developed by the WIC Environmental Committee which was set up to plan an operational platform for these issues.
17.	**National Environmental (Energy Sector) Regulations, S. I. No 63`**	2014	The purpose of these regulations is to prevent or minimize pollution and encourage energy efficiency in all operations and ancillary activities of the energy sector in achieving sustainable economic development in Nigeria.

Some applicable state-level legal frameworks on environmental management and protection include:

- Abia State Basic Environmental Law (2013)
- Abia State Policy on Environment (2010)
- Abuja Environmental Protection Agency Law
- Adamawa State Environmental Sanitation Edicts
- Anambra State Environmental Protection Agency Edict (1998)
- Akwa Ibom State Environmental Protection and Waste Management Agency Act, Cap. 47 (2000)
- Bayelsa State Environmental Sanitation Authority Edict (1999)
- Bayelsa State Environment and Development Planning Edict (1998)
- Benue State Environmental Sanitation Authority (BENSESA) Law (2005)
- Edo State Sanitation and Pollution Control Law No.5 (2010)
- Ekiti State Environmental Protection Agency Law (2009)
- Kaduna State Environment Protection Authority (KEPA) Amendment Edict (1997)
- Katsina State Rural Water Supply & Sanitation Agency Law
- Lagos State Environmental Protection Agency (LASEPA) Law (2017)
- Lagos State Waste Management Authority (LAWMA) Law (2007)
- Nasarawa State Environmental Protection Agency (NASEPA) edict (1997)
- Niger State Environmental Protection Agency Law (2011)
- Ogun State Environmental Protection Agency Law (1995)
- Ondo State Waste Management Authority Law (1999)
- Osun State Environmental Protection Agency Law (2022)
- River State Environmental Protection and Management Law No. 7 (2019)
- River State Waste Management Agency Law (2014)
- Taraba State Water, Sanitation and Hygiene Services Law No 7 (2019).

2.2 Administrative Structure of Environmental & Social Regulatory Bodies/Agencies in the Project Locations.

Besides the Federal Ministry of Environment, several other ministries and agencies are involved in enforcing environmental and social compliance in Nigeria, and are relevant to the IDEAS rehabilitation activities. These include:

National Environmental Standards and Regulations Enforcement Agency (NESREA) – Is an environmental agency of the Federal Government of Nigeria that was established by law in 2007 to "ensure a cleaner and healthier environment for Nigerians". The agency functions as a parastatal of the Federal Ministry of Environment and is headed by a Director General who is also the chief executive officer. NESREA has recorded several achievements in the area of environmental compliance monitoring and enforcement since its establishment, including the enactment of several regulations pertaining to environmental protection, monitoring environmental compliance and enforcement actions.

State Ministry of Environment (SMEs) – The SMEs are state government ministries responsible for developing and implementing policies, programs, and legislation to protect and conserve the environment in the states to ensure sustainable development. To achieve this, these state ministries of environment oversee the operations of the respective environmental protection and waste management agencies at the state level.

State Environmental Protection Agencies (SEPAs) – The SEPAs enforce environmental regulatory compliance at the state levels respectively. They are mainly responsible for ensuring the overall protection of various aspects of the built, physical and biological environment by ensuring limits set by the FMEnv are not exceeded during development works, also ensuring that building constructions meets environmental requirements, proper siting of factories, air, noise, water quality monitoring etc. In some cases, they may be directly involved in waste management activities or allow the responsibility for waste management to be handled by the State Waste Management Agencies (SWMAs).

State Waste Management Agencies (SWMAs) – Generally at the state level, the SWMAs undertake the task of providing guidelines or enforcing proper waste management procedures. In some instances, the SWMAs may have designated dumpsites for specific types of waste and guide the process for waste conveyance to the dumpsites by waste generators or procure the services of licenced waste collection vendors to carry out the services of waste collection, treatment and final disposal.

Institutions Responsible for Environmental Management, Protection, Sanitation, and Waste Management Services in the Project Participating States

The main institutions responsible for environmental management, protection, sanitation, and waste management services in the participating states are provided in table 3 below.

Table 3: List of Institutions Responsible for Environmental Management, Protection, Sanitation and Waste Management Services in the Project States

State	Environmental Protection Agencies	Waste Management Agencies
Abia	Abia State Environmental Protection Agency (ASEPA)	
Adamawa	Adamawa State Environmental Protection Agency (ADSEPA)	
Akwa-Ibom	Akwa-Ibom State Environmental Protection and Waste Management Agency (AKSEPWMA)	
Anambra	Anambra State Environmental Protection Agency (ANSEPA)	Anambra State Waste Management Authority (ASWAMA)
Bayelsa	Bayelsa State Environmental Protection Agency (BAYSEPA)	Bayelsa State Environmental Sanitation Authority (BAYSESA)
Benue	Benue State Environmental Protection Agency	Benue State Environmental Sanitation Authority (BENSESA)
Edo	Edo State Environmental & Waste Management Board	
Ekiti	Ekiti State Environmental Protection Agency (EKSEPA)	Ekiti State Waste Management authority
FCT	Abuja Environmental Protection Board (AEPB)	
Kaduna	Kaduna State Environmental Protection Agency (KEPA)	
Katsina	Katsina State Environmental Protection Agency (KTSEPA)	

State	Environmental Protection Agencies	Waste Management Agencies
Kebbi	Kebbi Environmental Protection Agency	
Lagos	Lagos State Environmental Protection Agency (LASEPA)	Lagos Waste Management Authority (LAWMA)
Nasarawa	Ministry of Environment and Natural Resources Nasarawa State.	
Niger	Niger State Environmental Protection Agency (NISEPA)	
Ogun	Ogun State Environmental Protection Agency (OGEPA)	Ogun State Waste Management (OGWAMA)
Ondo	Ondo State Environmental Protection Agency	Ondo State Waste Management Authority
Osun	Osun State Environmental Protection Agency	Osun Waste Management Agency (OWMA)
Rivers	River State Environmental Sanitation Authority	Rivers State Waste Management Agency (RIWAMA)
Taraba	Taraba State Environmental Protection Agency (TEPA)	

Note: State Environmental Protection Agencies/Boards in Abia, Adamawa, Akwa-Ibom, Edo State, FCT, Kaduna, Katsina, Kebbi, Nasarawa, Niger and Taraba States also serve as waste management authorities. Hence, the reason why there are no waste management agencies ascribed to them in the table above.

2.2.2 Federal Ministry of Women Affairs and Social Development (FMWASD)

The FMWASD is a ministry that promotes the development of women and children in Nigeria. The objectives of the ministry include: stimulating action to promote civic, political, social and economic participation of women; coordinating and monitoring women's programmes; providing technical and financial support to women Non-governmental organizations, especially the National Council of Women Societies. The Ministry of Women Affairs is required to review substantive and procedural laws that affect women in the country. In December 2007, the ministry issued a policy for addressing HIV/AIDS in the workplace, helping ensure prevention, care and support for those living with the disease.

2.2.3 State Ministry of Health

The various units at the State Ministry of Health is saddled with various objectives to ensure the smooth running of the ministry. These objectives include; (i) To improve the health status and socio-economic advancement of individuals in the State, using preventive, promotive and curative approaches (ii) To maintain existing training institutions for health workers in the State, (iii) To provide essential infrastructure in all Public Health Institutions in the State for efficient, qualitative, affordable and effective health services. (iv) To establish health institutions in under-served areas and expand existing Health Centres all over the State (v) To ensure that satisfactory standards are maintained in both government and private health institutions throughout the State and (vi) To ensure good working environment and reduce occupational hazards in both public and private sectors.

2.2.4 State Ministry of Water Resources

The objectives of the State Ministry of Water Resources are as follows: i) To formulate water resource policies and monitor the implementation of such policies in the state. ii) To source, analyse, store and disseminate information on the water resource data in the state. iii) To establish, monitor and oversee water parastatals of the ministry. iv) To initiate and implement water supply projects in all areas of the state. v) To liaise with the federal government and international donor agencies on water supply and development for the benefit of the state. vi) To set standards, regulate, supervise and control the use of all water resources in the state. vii) To implement and provide water legislation/ by-laws.

2.2.5 State Ministry of Housing and Urban Development

The State Ministry of Housing and Urban Development has the mandate of advising the State Government on Economic matters, Developmental plans and Data management both for State and Local Governments. The specific objectives include: i) Facilitate easy access to land for government, its agencies, individuals and private developers for the social and economic development of the state through the implementation of the state land policy ii) Monitoring and control of all physical development activities in the State, iii) Formulation and Implementation of Housing policies and programme of the State Government, iv) Preparation of Land-Use Plans and Master Plan Policy, v)Design and implementation of Urban Renewal Programmes, vi) Issuance/approvals of all physical development applications in the State (Including Power, Gas and Telecommunication Installation), vii) Issuance/approvals of all

private development schemes application in the State (Layout Plans), viii) To foster inter-ministerial collaboration by providing expert technical support to state ministries, departments, and agencies (MDAs), and ix) Generation of Revenue to the State IGR from the activities of the Ministry.

2.2.6 Technical Vocational Education and Training (TVET) Sub-Sector Regulations and Guidelines

2.2.6.1 National Policy on Education (NPE), 2013

The Policy is established to ensure proper administration, management and implementation of the educational system in all areas of the society. It provides the direction for educational activities with the aim of achieving three (3) major objectives which are as follows: (a) to equalise educational opportunities for all children, (b) to provide adequate education for all handicapped children, and (c) to provide opportunities for exceptionally gifted.

2.2.6.2 National Science, Technology and Innovation Policy 2022

The 2022 reviewed Science Technology and innovation policy was launched during the opening ceremony of the Science, Technology and Innovation (STI) Expo in March 2022 to enable Science Technology and innovation maximally impact on the national social economic development landscape with a view to ensuring that Nigeria actually and in reality, emerges and remains among the top 20 leading economies in the world before the year 2030 and beyond. It mandates the Federal Ministry of Science and Technology (FMST) to operate as a platform for collaboration among agencies of the Federal Government and state ministries on science, technology and innovation and as a service.

2.2.6.3 National Policy on Science and Technology Education 2018

The goal of the National Policy on Science and Technology Education 2018 is to produce the critical science and technology workforce in Nigeria that can transform the nation's economic landscape to a world class economy. The policy will facilitate mastery of scientific and technological capabilities, provide frameworks for inter-institutional efforts in developing science and technology education programmes across all sectors of the economy. Furthermore, the policy creates conditions for the improvement of scientific and technological infrastructure for research, development and innovation in our institutions of learning and ensure that product of science and technology education programmes support Nigeria's economic endeavours for global competitiveness.

2.2.6.4 National Economic Empowerment and Development Strategy (NEEDS) 2004

The 2004 National Economic Empowerment and Development Strategy (NEEDS) focuses on Nigeria's commitment to sustainable growth, and poverty reduction. NEEDS is based on three pillars: 1) empowering people and improving social service delivery; 2) fostering economic growth, in particular in the non-oil private sector; and, 3) enhancing the effectiveness and efficiency of government, while improving governance.

2.2.6.5 State Economic Empowerment and Development Strategy (SEEDS) 2004

SEEDS provide a framework for the implementation of NEEDS at the state level. A major part of SEEDS is targeted at educational reforms.

2.2.6.6 State Ministry of Education (SME)

At the state level, the state ministry of education is responsible for liaising with the local education authority to develop education at the local levels; formulating policies, construction of schools, monitor and effectively manage tertiary, secondary and primary schools within the respective states.

2.2.6.7 State Universal Basic Education Board (SUBEB), 2004

SUBEB was established through the Universal Basic Education (UBE) Board Act of 2004. It provides free, compulsory and universal basic education to all children of school age in the state regardless of sex, ethnic or religious background. The objectives are Acquisition of literacy, numeracy, life skills and values for lifelong education and useful living and reducing school drop-out and improving relevance, quality and efficiency.

2.2.6.8 National Business and Technical Examinations Board (NABTEB), 1993

NABTEB (National Business and Technical Examinations Board) was established through the National Business and Technical Examinations Board Act No. 70 of 1993. The Board conducts examinations for technical and business innovation colleges on behalf of or in collaboration with other examination bodies or agencies and also issue results and certificates and make awards in examinations conducted by it in the State. Other organizations involved in administering formal and non-formal TVET include local education authorities, intergovernmental organizations such as the ECOWAS, and private sector actors.

2.2.6.9 National Board for Technical Education (NBTE),1977

The NBTE is a Federal Government parastatal and regulatory body operating under the ambit of the FME and established through the National Board for Technical Education Act No. 9 of 1977. The management of the board is made up of the executive secretary and the directors who give leadership to the various departments of the board. The board, also in collaboration and with the approval of the Ministry of Education, Science and Technology is to review the technical college curriculum in line with the provision of the national policy on education. The board oversees the development of youths for employability through technical and vocational education and is also saddled with the responsibility of looking into the financial needs of the technical colleges and recommending through the commissioner for education to the governor on the needs of individual colleges financially and for infrastructural requirements.

2.2.6.10 Technology and Science Education Department (TSED)

The TSED is mandated to formulate and implement policy on technology and science education. In consonance with its mission, the department is saddled with: i) vocational (job specification) education offered in Technical Colleges (TCs) and Vocational Training Centres nationwide. ii) Pre-vocational education offered in primary and secondary school nationwide, iii) Science education offered in primary and secondary schools, iv) Technology teacher education offered in the universities, colleges of education, and polytechnics, v) Vocational education quality control and assurance nationwide involving curriculum development and programmes accreditation, vi) Supervision of relate parastatals e.g. NABTEB, National Examination Council (NECO) established through the NECO Act of 2000 and West African Examination Council (WAEC), and vii) Related distance education in technology and science education curriculum.

2.2.6.11 Teachers Registration Council of Nigeria (TRCN), 2004

TRCN is an agency of the Federal Ministry of Education of Nigeria. It was established by the TRCN Decree No. 31 of 1993 (now TRCN Act CAP T3 of 2004). The major mandates are the regulation and control of the Teaching Profession at all levels of the Nigerian Education system, both in the public and private sectors. TRCN is responsible for implementing the following programmes and activities: i) Registration and licensing of qualified teachers, ii) Accreditation, monitoring and supervision of the courses and programmes of teacher training institutions in Nigeria to ensure that they meet national and international minimum standards. The institutions include the colleges of education, faculties and institutes of education in Nigerian universities, schools of education in the polytechnics, and the national teachers institute, iii) Organization of Internship Schemes for fresh education graduates to equip them with the necessary professional skills before licensing them for full professional practice, etc.

Several other TVET related legal and regulatory framework include:

1. National Skills Qualification Framework (NSQF) Policy (2012).
2. Industrial Training Fund Act No 47 (1971) (revised 2011).

3. Tertiary Education Trust Fund Act No 16 (2011).
4. National Policy on Public Private Partnership (2009).

Other relevant legal framework applicable to the project include:

- National Policy on Education (NPE) Act, 2013;
- Universal Basic Education (UBE), Act, 2004;
- Nigeria Labour Law (2004);
- Rehabilitation, Reconstruction and Development Act, 1999;
- Social Development Act, (1974);
- National Occupational Health and Safety (OHS) Act of 2007;
- National Occupational Health and Safety Policy, (2020);
- The Child Right Act (2003);
- Employee Compensation Act (2010);
- Factory Acts 1999-implemented by FMLP;

International Treaties/Agreements/Conventions Applicable to the Rehabilitation and Renovation Works:

- Dakar World Education Forum (2000)
- Global Strategy for Occupational Health and Safety for All (2003).
- International Convention on Economic, Social and Cultural Rights (ICESCR) (1966)
- Occupational Safety and Health (OHS) Convention (1981).
- Promotional Framework for Occupational Health and Safety Convention (2006) *(Nigeria has deposited documents for ratification with the Director General of International Labour Organization (ILO) as of 8th November 2022. The framework will enter into force by 8th November 2023).*
- Protocol on Water and Health (1999)
- The Dakar Framework for Action (2000).
- The Rights to Water (2002)
- United Nation World Summit on Sustainable Development, (2002)
- United Nations Framework Convention on Climate Change (UNFCCC), (1992)
- Vocational Rehabilitation and Employment (Disabled Persons) Convention (1983).

2.2.3 Gender Based Violence (GBV) – Relevance, Legal and Policy Importance in Nigeria

2.2.3.1 Nigeria Legal and Regulatory Framework on GBV

Nigeria's national government has taken steps to penalize and address SH and SEA, although a clear leadership with the leverage to garner multi sectoral support to address this complex problem seems absent. The institutional champion of women's and children's rights and GBV issues within the government is the **Federal Ministry of Women Affairs and Social Development (FMWASD)**. But it has limited influence on sectoral ministries who need to enforce policy, insufficient budgetary resources[1] and insufficient institutional capacity to enact its mandate.

The regulatory framework to address both GBV, SEA and VAC is uneven because the Nigerian legal system is plural, and different legal systems co-exist, namely, the statutory law, Sharia law in the northern regions, and customary law in rural areas. The simultaneous application of this three-tier system creates differentiated degrees of protection to women's and children's rights[2] which varies in every state and its enforcement is weak. There is a lack of clear mandates regarding which institutions oversee child protection and the design and implementation of violence prevention strategies and provision of services. Insufficient budget allocation both at

[1] UN Women data from 2011.
[2] UN CEDAW 2017.

national and state levels, coupled with inadequately trained and staffed structures to provide social welfare, justice, education and health services that are women, child and survivor-centred. While efforts to provide GBV survivors with basic response services is concentrated in the North East (NE) by international non-governmental organizations or the United Nation (UN) system, there are very limited government or non-governmental services in the rest of the country, those that exist are for the most part unregulated, uncoordinated and unpredictable.[3] This is aggravated by a generalized lack of trust of citizens, particularly women, in the criminal justice system to enforce the existing laws. Moreover, lack of awareness of laws and knowledge of rights, amidst a context dominated by social norms that legitimate the perpetration of abuse, stigma and underreporting, results in the consequent impunity of perpetrators, possible re-victimization of survivors and the reproduction of the cycle of violence.

Two key national laws address GBV, the Child Rights Act **(CRA, 2003), and the** Violence Against Persons Prohibition Act **(VAPP, 2015) which have been passed by the Federal Capital Territory (FCT) but not by many of the 36 states, making them inapplicable in those States that have not adopted them**. While CRA has been passed in 25 states, VAPP has been passed in 4 states in addition to the FCT. Where laws are domesticated, implementation remains weak as institutional capacities are weak (social welfare, police, family courts). In practice, the legal and judicial systems provide women and children with little protection against violence, and timely and adequate support services are scarce and often ill-equipped to respond to survivors' needs.

Nigeria has ratified or acceded to the core international human rights treaties and is a party to the major regional human rights instrument which obliged States to respect, protect and fulfil human rights of all persons within the territory and subject to the jurisdiction of the State, without discrimination. Rape may violate several human rights obligations enshrined in the instruments ratified by Nigeria and is also a form of gender-based violence and a brutal manifestation of violence against women, children and men. In addition, bias and unfairness towards certain genders with regards employment; promotion, privacy in using bathrooms or restrooms and granting of work-related benefits, may also communicate gender-based violence. As a State party to the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (the "Maputo Protocol"), Nigeria has made legally binding commitments to exercise due diligence to combat gender-based violence and discrimination and has signed international treaties as such. These include:

- Convention concerning the Prohibition and Immediate Action for the Elimination of the worst forms of Child Labour (2002)
- Discrimination (Employment and Occupation) Convention (1958).
- Equality of Treatment (Accident Compensation) Convention (1925)
- International Convention on the Elimination of All Forms of Racial Discrimination (1976)
- Optional Protocol to the Convention on the Rights of Persons with Disabilities (2007)
- The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (1985),
- The Convention on the Rights of Persons with Disabilities (CRPD) (2012)
- The International Covenant on Civil and Political Rights (ICCPR) (2004);
- The International Covenant on Economic, Social and Cultural Rights (ICESCR) (2004)

Regional Treaties Relevant to GBV, SEA, VAC and People Living with Disabilities

- Abolition of Forced Labour Convention (1957)
- Convention Against Torture & other Cruel, Inhuman or Degrading Treatment or Punishment (CAT) 2001
- Convention on the Rights of Persons with Disabilities (2007)
- The Convention on the Rights of the Child (CRC) (1990),

[3] UNICEF 2018.

- The National Action Plan for the Implementation of United Nations Security Council Resolution 1325 (2009);
- The Protocol to the African Commission on Human and Peoples' Rights (ACHPR) on the Rights of Women in Africa (the "Maputo Protocol") (2007).
- Solemn Declaration on Gender Equality in Africa (2004).

In addition, Nigeria also has obligations to protect the environment through various commitments to the African Union, the Economic Community of West African States (ECOWAS) and the Commonwealth. It is also committed through relations with the European Community under the Lome IV Convention.

2.3 Triggered World Bank Safeguard Policies & Comparison with Nigerian Environmental Law

Two (2) Operational Policies (OPs) were triggered for the IDEAS project namely: Environmental Assessment (OP 4.01) and Involuntary Resettlement (OP 4.12).

Environmental Assessment (OP 4.01)

This Operational Policy is triggered. The Bank requires environmental assessment (EA) of projects proposed for Bank financing to help ensure that they are environmentally sound and sustainable, thereby improving decision making. With regards to the IDEAS Project, activities involving the rehabilitation of workshops, classrooms, offices, etc., in the FSTCs may result in an increase in fugitive dust, carbon emissions from incoming vehicles or machines/equipment (generators) running on fossil fuels, noise, labour influx, SEA/SH. Furthermore, there will be subsequent generation of wastes, particularly Construction and Demolition Wastes (including but not limited to disused asbestos, weathered drywall, worn-out roofing sheets, classroom furniture, etc.), and biodegradable food wastes. Depending on the nature of these waste, quantity and degree of exposure, they may pose potential environmental and social risks and impacts. In this regard, the borrower will conduct environmental and social assessment of intervention works in a manner that is proportionate to the nature and scale of the identified environmental and social impacts. This ESMP has addressed the environmental and social impacts associated with the sub-project activities.

Involuntary Resettlement (OP 4.12)

While this policy is generally triggered for the IDEAS project, it is not triggered for the intervention works to be carried out under this consultancy assignment as they are on existing structure and lands owned by the technical colleges.

Table 4 below provides a comparative assessment of the strengths and shortcomings of Nigerian Extant EIA Law in relation to these triggered WB Operational Policies.

Table 4: Comparison between the Nigerian Extant EIA Law and the Triggered WB Safeguard Policies for the IDEAS Project.

Provisions	Nigerian Extant Laws	WB Operational Policies	Comparison
Mandatory Environmental Assessment	EIA Act Cap E12 LFN 2004	OP 4.01: Environmental Assessment	For all Bank supported project, consideration for EA as captured in OP 4.01 is required before the approval of the project to ensure environmental and social sustainability. This is similar to the EIA law which makes it mandatory for all development projects to undertake mandatory EA so as to ascertain the environmental sensitivity of the project, whether EIA is required or not before proceeding with project implementation. It is noteworthy that the more stringent policy will apply where gaps exist.
Screening	EIA Act Cap E12 LFN 2004	OP 4.01: Environmental Assessment	The EIA Act sets out the general principles, procedures and methods of environmental impact assessment in various sectors; similar to OP 4.01 it mandates that development projects or activities be screened in order to ascertain their eligibility for environmental assessment by the proponent prior to their implementation.
Projects for EIA	EIA Act Cap E12 LFN 2004	OP 4.01: Environmental Assessment	Both are similar in the sense that an EIA is required for all projects with significant adverse environmental and social impacts.
Exclusion from EIA	EIA Act Cap E12 LFN 2004	OP 4.01: Environmental Assessment	For the OP 4.01, projects that have been pre-determined to have no adverse environmental and social impacts (category C projects) are excluded from EIA while the EIA law sets out three EIA exclusion criteria for projects viz.

Provisions	Nigerian Extant Laws	WB Operational Policies	Comparison
			• All projects that fall under category 3, implying that they have no adverse environmental impacts. • Those in the list of projects which the President, Commander-in-Chief of the Armed Forces or the Council is of the opinion that the environmental effects of the project is likely to be minimal; • The project is to be carried out during national emergency for which temporary measures have been taken by the Government;
Scoping	EIA Act Cap E12 LFN 2004	OP 4.01: Environmental Assessment	Similar to OP 4.01, the EIA Act mandates that the nature, scope, environment and preliminary impacts of screened development projects or activities be established, so that they guide the preparation of the Terms of Reference for the environmental and social assessment.
Environmental Categorization	EIA Procedural Guidelines, 1995 Categories I, II & III	Environmental and Social Risk Classification	The guidelines propose the categorization for projects eligible for EIA mainly on the extent of the potential impacts, their magnitude, spread, range and irreversibility. This however varies from the Environmental and Social Risk Classification of the Bank, which rather follows a risk-based approach.
Environmental and Social Assessment	EIA Act Cap E12 LFN 2004	OP 4.01: Environmental Assessment	Similar to OP 4.01, the EIA Act sets out the general principles, procedures and methods of environmental impact assessment in various sectors; it mandates that development projects undertaken by public or private sector establishments with the potential to impact adversely on the environment must undergo Environmental Impact Assessment following their categorization (category I or II)
Environmental and Social Management Plan	EIA Act Cap E12 LFN 2004	OP 4.01: Environmental Assessment	The EIA Act mandate that an Environmental Management Plan (similar to the Environmental and Social Management Plan – ESMP for Bank funded projects) be part and included in the EIA report.
Public Consultation and Participation	EIA Act Cap E12 LFN 2004	OP 4.01: Environmental Assessment	The law mandates that stakeholder consultations be conducted during the EIA process and continuously during project implementation. The WB OPs recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice.
Disclosure	EIA Act Cap E12 LFN 2004	OP 4.01: Environmental Assessment	Public disclosure is required to be carried out in accessible public domain such as 2 national dailies, FMEnv, SMEnv, LGAs at the implementing agency in accordance with the Nigerian EIA Act Cap E12 2004, whereas disclosure is carried out at the World Bank External Website in accordance with the provisions of OP 17.50 (**See Chapter 5, Sub-section 5.4.2, Table 22 for disclosure process**).

2.4 Institutional Arrangements for the IDEAS Project

Project Steering: Responsibility for project oversight rests with the National Project Steering Committee (NPSC), which is already established, and the State Project Steering Committees (SPSCs) in the participating states. The NPSC is headed by the Minister of Education and composed of key public and private (industry) stakeholders, as well as representatives from SPSCs. The NPSC is charged with the overall strategic and policy guidance for project implementation and will review important progress and implementation reports. Specifically, the SPSCs are charged with guiding the implementation of project activities in their respective states.

Project Implementation Responsibilities: Responsibility for project implementation rests with the FME, specifically the Technology and Science Education Department (TSED), NBTE as well as the state governments of the participating states. Each of these PIUs implement parts of the IDEAS Project depending on their institutional mandate, whereas the FME/TSED assumes the overall implementation supervision and coordination. For the purpose of implementing the project activities, the FME/TSED has formed a NPCU, NBTE has formed a PMU, and each of the participating state governments have formed SPIUs. The NPCU, which is part of the TSED will (i) implement the grants and support to Federal TCs; (ii) implement all activities under Component 3 in consultation with relevant stakeholders such as state governments, Department of Higher Education, Teachers Registration Council, and others; (iii) provide capacity development in the FME; (iv) conduct policy studies; (v) award innovation grants for digital skills development; (vi) implement the communications strategy; and (vii) facilitate the work of the NPSC and report to the World Bank. The main tasks of the PMU in the NBTE is to monitor and provide Technical Assistance

(TA) to states by supporting STCs; implement all activities under Component 2, including the management of service providers that assist individual informal sector clusters; implement all activities in collaboration with the FME under Component 4 that are related to the NSQF roll-out, monitoring, evaluation and research; as well as award innovation grants for digital skills development.

Figure 2 below, shows the institutional arrangement for the IDEAS project

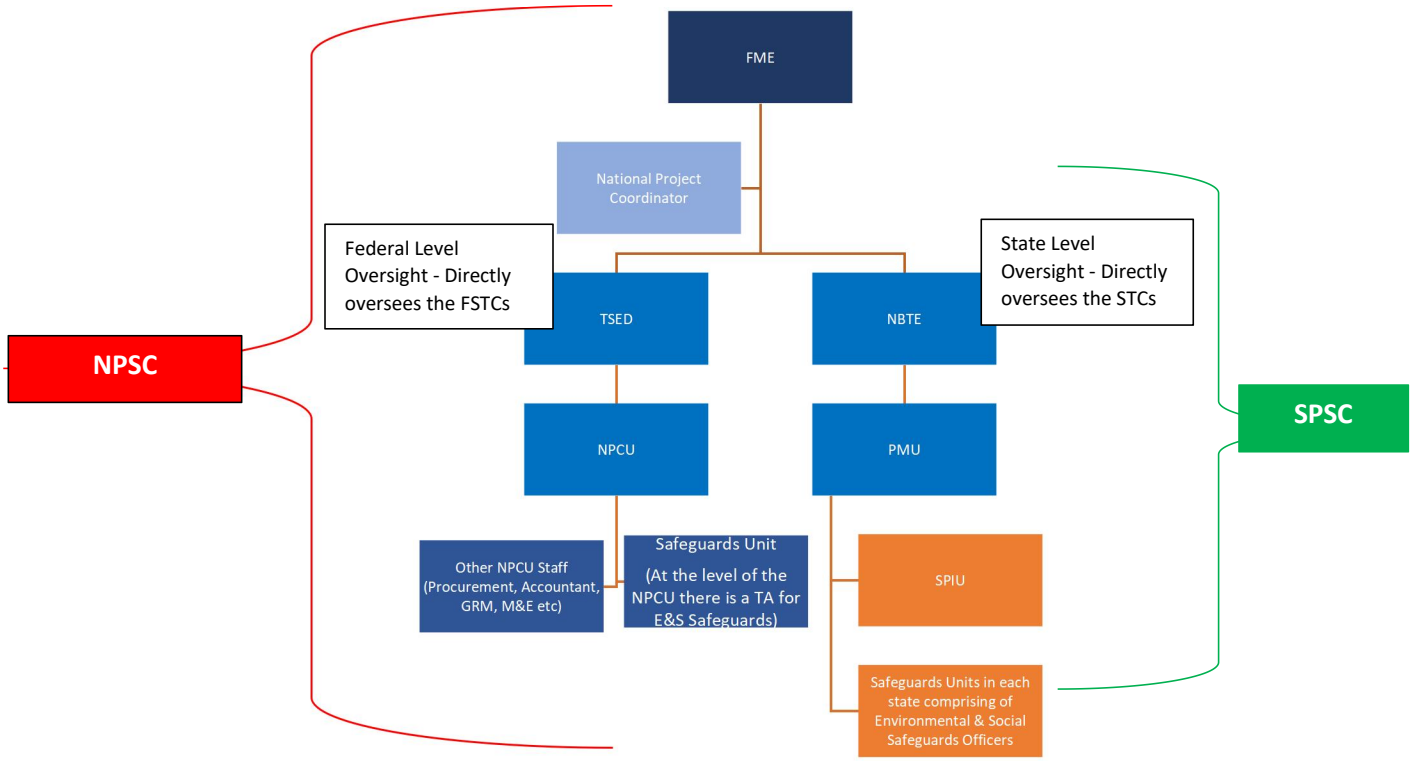

Figure 2: IDEAS Project Institutional Arrangement Chart

To ensure environmental and social safeguards compliance prior to and during safeguards implementation, the PMU/SPIUs at the state levels ensure responsibility through the Environmental and Social Safeguards (ESSGs) officers in their respective states.

CHAPTER THREE

PROJECT DESCRIPTION

This chapter offers detailed information about the IDEAS project, its objectives, and components. It provides a comprehensive scope and description of the proposed intervention works for the selected FSTCs. Additionally, it includes project-specific details such as material and labor requirements, staging areas, and the implementation schedule for the proposed works.

3.1. Project Objective

The Project Development Objective (PDO) of the IDEAS Project is to enhance the capacity of the Nigerian skills development system to produce relevant skills for the formal and informal sectors.

3.2. Project Components

The IDEAS project has four components:

Component 1: Incentivizing Partnerships with Industry for Enhanced Quality and Labour-Market Orientation of Public Technical Colleges The objective of component 1 is to sustainably enhance the labour-market responsiveness of selected TCs with the aim of increasing the pool of competent craftspersons' for industry and enhancing the chances that labour market entrants will transition into good jobs. This requires TCs to transform into dynamic and performance-oriented skills development hubs delivering market-driven training at high quality. The key lever to initiate this transformation is to bring industry onto the campus. To this end, under this component, the project will provide grant funding for the rehabilitation and upgrading of up to 38 TCs (20 FSTCs and 18 STCs) with the aim of transforming their operational models into partnerships between the colleges and the private sector.

Component 2: Improving Skills Formation in the Informal Sector

Component 2 aims to support skills acquisition in the informal sector by improving the quality and recognition of informal apprenticeships provided by master crafts persons. By improving the quality of this training segment, the project will provide support, in particular, to youth from poor families and those with low formal education qualifications. The project will enable those youths to acquire modern relevant skills facilitating gainful employment in the informal sector and chances to transit into the formal labour market. In close cooperation with local trade associations, the project will deliver a comprehensive capacity development intervention package for the improvement and modernization of informal apprenticeships to selected informal sector clusters.

Component 3: Increasing the Availability of Competent and Motivated Technical Teachers and Instructors

Under this component, the proposed IDEAS project aims to improve the availability of appropriately skilled and competent technical teachers and instructors in the skills development space throughout the country, including teaching staff of private skills development institutions, and starting with technical teaching staff in TCs. The project will address this using a two-pronged approach, by: (i) supporting immediate remedial solutions to capacity shortcomings, while at the same time (ii) initiating systemic change in the way teaching resources for skills development are built and strengthened.

Component 4: Strengthening the Regulatory Environment and Public Management Capacities for Market-Oriented Skills Development

The fourth component of the IDEAS project aims to enhance capacities and systems of Nigeria's regulatory and management structures by addressing critical shortcomings in the expansion of the NSQF and in the capacities of federal and state authorities in charge of skills development, with a focus on stakeholder involving planning

processes, monitoring and research. The planned activities are expected to have a significant impact on the quality and relevance of training delivery and management effectiveness in the system.

3.3 Scope and Description of the Proposed Intervention Works at the FSTCs

3.3.1 Overview of the Intervention Works

According to the College Improvement Plans (CIPs) prepared by the respective College Implementation Units (CIUs) at the selected FSTCs, the general summary of the proposed intervention works for the colleges are outlined in the plate below.

Rehabilitation Works:

- **Roofing** – Removal of old and dilapidated roofing sheets and replacement with aluminium roofing.
- **Ceiling Finishes** – Removal of old, damaged, and dilapidated Polyvinyl Chlorides (PVCs), Asbestos ceilings and Board ceilings.
- **Floor Finishes** – Removal and rehabilitation of damaged floors along technical workshops, project offices, classrooms, etc.
- **Doors and Windows** – Replacement of doors and windows with steel types.
- **Wall Finishing** – Wall filling and smearing, and finishing with cement.
- **Painting** – Wall screeding and painting.
- **Electrical Installations** – New electrical installations and connections; including re-conductoring of existing electrical connections and installation of energy saving Light-Emitting Diode (LED) bulbs, switches, fans, etc.
- **External Works** – This will include cement, sand, gravel and water mixing. Construction of ramps at the entrance of the workshops. It will also include the transport of materials into the college premises for civil works.
- **Mechanical and Plumbing Works** – These will include several fittings and fixtures as well as the installation of WASH facilities such as:
  a. **Toilets** – Rehabilitation of dilapidated and/or abandoned toilets; including the installation of new ones. Toilet rehabilitation and renovation will also include water reticulation to ensure equitable water supply to toilets and sanitary infrastructure such as Wash Hand Basins (WHBs).
  b. **Boreholes** – Installation of boreholes, including solar powered boreholes and conversion of some existing electrical boreholes to solar powered boreholes. Installation of overhead tanks and water reticulation to hostels, offices, workshops, etc. where use of water may be required.
  c. **Septic Tanks** – Rehabilitation of collapsed or dilapidated septic tanks serving some of the technical workshops, offices and classrooms.

Extension Works:

In certain FSTCs, expansion or extension of existing technical workshops, classroom blocks and offices will be required to increase capacity. These additions will involve similar civil works as the rehabilitation activities. However, some specific additional civil works to be undertaken are outlined below:

- **Site Clearing –** This will involve the removal of overgrown grasses, shrubs, etc. around some abandoned structures where the proposed extension is to be undertaken.
- **Digging of New Foundation and General Masonry –** To include raising of walls, finishes, flooring, etc.

3.3.2 Specific Summary of Proposed Rehabilitations for the FSTCs (Priorities)

The feasibility studies for the rehabilitation of the technical colleges have identified and categorized three (3) main priorities for the rehabilitation and expansion works, designated as Priorities 1, 2, and 3. However, during site visits, it was discovered that some technical colleges have an additional priority (i.e. Priority 4). Furthermore, certain proposed rehabilitation activities are referred to as **"General Works"** based on the CIPs prepared by the TCs (see section 3.3.3 below). All the planned intervention works will take place within the school premises, with the exception of activities involving the transportation of equipment to and from the FSTCs and the disposal of waste materials (including construction and demolition waste, food waste, and e-waste), to be undertaken by designated waste management agencies/vendors. The inventory of proposed intervention works for the FSTCs, according to priorities, is provided in Table 5 below.

Table 5: Inventory of Proposed Intervention Works at the FSTCs according to Priorities.

FSTCs	Priority Works		Description of Proposed Intervention Works Per Priority at the FSTCs								Total Structural Rehabilitation
	Priority	Intervention Sites (Workshops, Classrooms, Offices)	Roof and Ceiling Rehabilitation	Floor Finishes	Doors and Window	Wall Finishing (Screeding/Painting)	Electrical Installations	Mechanical & Plumbing Works	Site Clearing	Extension Works	
FSTC Orozo, Abuja, FCT	1	ICT Laboratory	✓	✓	✓	✓	✓	✓	✓	✓	4 Workshops, 2 Laboratories and 1 Office
		Electrical Laboratory									
		IDEAS Project Office	✓	✓	✓	✓	✓	✓	✓	✗	
	2	Motor Vehicle Mechanic	✓	✓	✓	✓	✓	✓	✗	✓	
		Welding and Fabrication									
	3	Catering Craft Practice	✓	✓	✓	✓	✓	✓	✗	✓	
		Garment Making									
FSTC Doma, Nasarawa State	1	One (1) Classroom Block	✓	✓	✓	✓	✓	✓	✗	✓	1 Classroom Block, 4 Workshops and 1 Office
		Welding and Fabrication									
		Electrical Workshop									
	2	Painting and Decoration	✓	✓	✓	✓	✓	✗	✗	✗	
	3	Catering Craft Practice	✓	✓	✓	✓	✓	✓	✓	✗	
	General	IDEAS Office	✓	✓	✓	✓	✓	✓	✗	✗	
FSTC Kuta Shiroro, Niger State	1	Brick/Blocks Concreting	✓	✓	✓	✓	✓	✗	✓	✓	4 Workshops, 1 Office and 1 Laboratory
	2	Catering Craft Practice	✓	✓	✓	✓	✓	✗	✓	✓	
	3	Welding and Fabrication	✓	✓	✓	✓	✓	✗	✓	✓	
	4	Motor Vehicle Mechanic	✓	✓	✓	✓	✓	✗	✓	✓	
	General	IDEAS Office	✓	✓	✓	✓	✓	✗	✓	✓	
		ICT Laboratory									
FSTC Michika, Adamawa State	1	Brick/Blocks Concreting	✓	✓	✓	✓	✓	✓	✓	✓	4 Workshops, 9 Classrooms and 1 Office
		Technical Drawing Studio									
		3 Classrooms	✓	✓	✓	✓	✓	✓	✗	✗	
	2	Electrical Workshop	✓	✓	✓	✓	✓	✓	✗	✗	
		3 Classrooms									
	3	Catering Workshop & Production Unit	✓	✓	✓	✓	✓	✓	✗	✗	
		3 Classrooms									
	General	IDEAS Office	✓	✓	✓	✓	✓	✓	✗	✗	
FSTC Uromi, Edo State	1	Electrical/Electronic Trade	✓	✗	✓	✓	✓	✓	✗	✗	3 Workshops and 1 Office.
	2	Furniture Making Wkshp	✓	✓	✓	✓	✓	✓	✓	✓	
	3	Catering Craft Workshop	✓	✓	✓	✓	✗	✓	✓	✓	
	General	IDEAS Office	✓	✗	✓	✓	✓	✓	✗	✗	
FSTC Ohanso, Abia State	1	Brick/Blocks Concreting	✓	✓	✓	✓	✓	✓	✗	✓	3 Workshops and 1 Office.
	2	Catering Craft Practice	✓	✓	✓	✓	✓	✓	✗	✓	
	3	Electrical/Electronic Wksp	✓	✓	✓	✓	✓	✓	✗	✗	
	General	IDEAS Office	✓	✓	✓	✓	✓	✓	✗	✓	

FSTCs	Priority Works		Description of Proposed Intervention Works Per Priority at the FSTCs								Total Structural Rehabilitation
	Priority	Intervention Sites (Workshops, Classrooms, Offices)	Roof and Ceiling Rehabilitation	Floor Finishes	Doors and Window	Wall Finishing (Screeding/Painting)	Electrical Installations	Mechanical & Plumbing Works	Site Clearing	Extension Works	
FSTC Jalingo, Taraba State.	1	Brick/Blocks Concreting	✓	✗	✓	✓	✓	✓	✗	✗	4 Workshops and 1 Office
	2	Motor Vehicle Mechanic	✓	✗	✓	✓	✓	✓	✓	✓	
	3	Garment Making	✓	✓	✓	✓	✓	✓	✗	✗	
	General Works	IDEAS Office	✓	✓	✓	✓	✓	✓	✓	✓	
		Technical Drawing Studio									
FSTC Ahoada, River State	1	Auto-Mechanic Workshop	✓	✗	✓	✓	✓	✓	✗	✗	3 Workshops and 1 Office.
	2	Brick/Block Laying and Concreting	✓	✗	✓	✓	✓	✓	✗	✗	
	3	Catering Craft Practice	✓	✗	✓	✓	✓	✓	✗	✗	
	General	IDEAS Office	✓	✗	✓	✓	✓	✓	✗	✗	
FSTC Awka, Anambra State	1	Motor Vehicle Mechanic	✓	✓	✓	✓	✓	✓	✓	✓	4 Workshops and 1 Office
	2	Catering Craft Practice	✓	✓	✓	✓	✓	✓	✓	✓	
	3	Computer Craft/ICT	✓	✓	✓	✓	✓	✓	✓	✓	
	General Works	IDEAS Office	✓	✓	✓	✓	✓	✓	✗	✗	
		Technical Drawing Studio	✓	✓	✓	✓	✓	✓	✗	✗	
FSTC Dayi, Katsina State	1	Animal Husbandry Wkshp	✗	✗	✗	✓	✓	✓	✓	✓	3 Technical Workshops
	2	ICT Workshop	✓	✓	✓	✓	✓	✓	✗	✗	
	3	Metal Fabrication Wkshp	✓	✓	✓	✓	✓	✗	✗	✗	
FSTC Ijebu-Imushin, Ogun State	1	Electrical & Electronics	✓	✓	✓	✓	✓	✓	✓	✓	3 Workshops and 1 Office
	2	ICT Robotics Workshop	✓	✓	✓	✓	✓	✓	✓	✓	
	3	Construction Department	✓	✓	✓	✓	✓	✓	✗	✗	
	General	IDEAS Office	✓	✓	✓	✓	✓	✓	✗	✗	
FSTC Tungbo, Bayelsa State	1	Engineering Trade (W&F)	✓	✓	✓	✓	✓	✓	✓	✓	4 Workshops and 1 Office
	2	Construction Trade (BLC & TD Studio)	✓	✓	✓	✓	✓	✓	✓	✓	
	3	Hospitality (CCP)	✓	✓	✓	✓	✓	✓	✗	✗	
	General	IDEAS Office	✓	✓	✓	✓	✓	✓	✗	✗	
FSTC Yaba, Lagos State	1	Construction Trade (BLC)	✓	✓	✓	✓	✓	✓	✗	✗	5 Workshops and 1 Office
		Painting and Decoration									
	2	ICT Workshop	✓	✓	✓	✓	✓	✓	✗	✗	
	3	Hospitality Section	✓	✓	✓	✓	✓	✓	✗	✗	
	General Works	IDEAS Office	✓	✓	✓	✓	✓	✓	✗	✗	
		Technical Drawing Studio									
FSTC Zuru, Kebbi State	1	Motor Vehicle Mechanic	✓	✓	✓	✓	✓	✓	✓	✓	2 Workshops and 1 Laboratory
	2	Electrical Laboratory	✓	✓	✓	✓	✓	✓	✓	✓	
	3	Brick/Block Laying Workshop	✓	✓	✓	✓	✓	✓	✓	✓	

FSTCs	Priority Works		Description of Proposed Intervention Works Per Priority at the FSTCs								Total Structural Rehabilitation
	Priority	Intervention Sites (Workshops, Classrooms, Offices)	Roof and Ceiling Rehabilitation	Floor Finishes	Doors and Window	Wall Finishing (Screeding/Painting)	Electrical Installations	Mechanical & Plumbing Works	Site Clearing	Extension Works	
FSTC Ikare Akoko, Ondo State	1	Electrical & Electronics	✓	✓	✓	✓	✓	✓	✓	✓	4 Workshops and 1 Office
		IDEAS Office									
	2	Brick/Block Laying and Concreting	✓	✓	✓	✓	✓	✓	✗	✗	
		Carpentry and Joinery									
	3	Catering Craft Practice	✓	✓	✓	✓	✓	✓	✗	✗	
FSTC Ilesha, Osun State	1	Electrical & Electronics	✓	✓	✓	✓	✓	✓	✓	✓	4 Workshops and 1 Office
	2	Plumbing and Pipe Fitting	✓	✓	✓	✓	✓	✓	✓	✓	
	3	Motor Vehicle Mechanic	✓	✓	✓	✓	✓	✓	✓	✓	
		Haulage Garage									
	4	Technical Drawing Studio	✓	✓	✓	✓	✓	✓	✗	✗	
		IDEAS Office									
FSTC Usi-Ekiti, Ekiti State.	1	Welding and Fabrication	✓	✓	✓	✓	✓	✓	✓	✓	8 Technical Workshops, 1 Library and 1 Office
		Motor Vehicle Mechanic									
	2	Fishery Section	✓	✓	✓	✓	✓	✗	✗	✗	
		Agric Mechanic Workshop									
	3	Electrical Workshop	✓	✓	✓	✓	✓	✓	✓	✓	
		Computer Craft Workshop									
	General	Technical Drawing Studio	✓	✓	✓	✓	✓	✓	✗	✗	
		IDEAS Office									
		E-Library									
		Computer Craft Studio 2									
FSTC Kafanchan, Kaduna State.	1	Carpentry & Joinery	✓	✗	✓	✓	✓	✓	✗	✗	6 Technical Workshops
		Painting & Decoration									
		Brick/Block Laying Wkshp									
	2	Electrical Laboratory	✓	✓	✓	✓	✓	✓	✗	✗	
		ICT Workshop									
	3	Mechanical Engineering	✓	✗	✓	✓	✓	✓	✗	✗	
FSTC Uyo, Akwa Ibom State.	1	ICT & Computer Craft	✓	✓	✓	✓	✓	✓	✓	✓	6 Workshops, 1 Library and 1 Office
		Electrical Installation									
		Radio & Television (Electronics) Workshop									
	2	Mechanical Engineering Craft.	✓	✓	✓	✓	✓	✓	✓	✓	
		Welding & Fabrication									
	3	Construction & Woodwork	✓	✓	✓	✓	✓	✓	✓	✓	
	General	E Library	✓	✓	✓	✓	✓	✓	✗	✗	

FSTCs	Priority Works		Description of Proposed Intervention Works Per Priority at the FSTCs								Total Structural Rehabilitation
	Priority	Intervention Sites (Workshops, Classrooms, Offices)	Roof and Ceiling Rehabilitation	Floor Finishes	Doors and Window	Wall Finishing (Screeding/Painting)	Electrical Installations	Mechanical & Plumbing Works	Site Clearing	Extension Works	
		IDEAS Office	✓	✓	✓	✓	✓	✓	✗	✗	
FSTC Otukpo, Benue State.	1	Catering Craft Practice	✓	✓	✓	✓	✓	✓	✓	✓	4 Technical Workshops
	2	Painting and Decoration	✓	✓	✓	✓	✓	✓	✗	✗	
		Spray Paint Workshop									
	3	Electrical Installation	✓	✓	✓	✓	✓	✓	✗	✗	

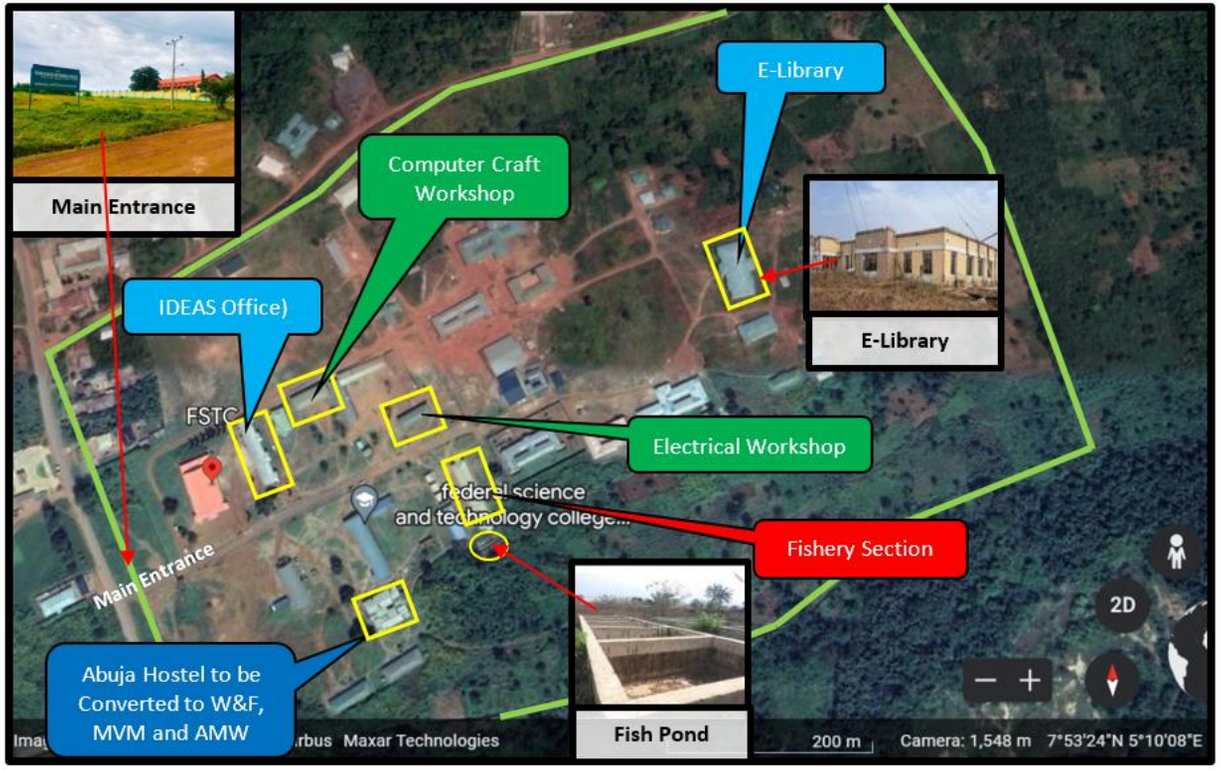

Figure 3: Google Earth Image of FSTC Usi-Ekiti Showing Locations where the Rehabilitation will be carried out.

Figure 4: Google Earth Image of FSTC Ohanso, Abia State Showing Priority Works.

3.3.3 General and Additional Works

Further to the priority works proposed for the FSTCs, some technical colleges have additional activities to be implemented under the **"General Works"**. These include activities such as:

- **Installation of Solar/Electric Boreholes:** Certain technical colleges (see table 6) facing water accessibility challenges have suggested the installation of boreholes as part of their project interventions. The proposed works include both solar-powered and electric-powered boreholes, depending on the specific college. Additionally, some colleges plan to convert existing boreholes to solar-powered pumps as part of their water solutions. In colleges where a fresh borehole installation is proposed, the method of installation to be adopted according to the project unit of the colleges is the rotary drilling system.

- **Installation of Drainage Channels**: Drainage installation is proposed particularly in colleges (indicated in table 6 below), where storm water accumulates, forming ponds around workshops and offices earmarked for structural rehabilitation. Additionally, in certain colleges with priority works involving fish pond rehabilitation, drainage installation is also part of the plan. The CIUs have included this activity in their CIPs as part of the general works for their college under the IDEAS project.

- **Installation of Solar Panels:** To enhance resource efficiency and overall project sustainability, certain colleges (see table 6) have proposed the installation of solar panels for structures to be rehabilitated.

Table 6 below presents the list of colleges where additional activities will be undertaken and the nature of the works.

Table 6: Proposed Additional Works at the FSTCs according to their CIPs.

Technical Colleges	Additional Works				
	Borehole Installation			Drainage Installation	Solar Installation in Buildings
	Solar Powered	Electric-Powered	Conversion to Solar		
FSTC Uyo		✓			
FSTC Kafanchan		✓			
FSTC Uromi		✓			✓
FSTC Otukpo		✓			
FSTC Ilesha		✓		✓	
FSTC Ikare Akoko				✓	
FSTC Michika		✓			
FSTC Zuru		✓			
FSTC Yaba		✓			
FSTC Tungbo			✓		✓
FSTC Orozo		✓			
FSTC Jalingo		✓			
FSTC Ijebu Imushin		✓			
FSTC Doma	✓				
FSTC Awka					✓

3.4 Material and Labour Requirements for the Proposed Intervention

A certain level of material resources and labour requirements have been conceptualized and are anticipated for the proposed rehabilitation and renovation of the FSTCs. These have been described according to the project phases and activities. See Table 7 below.

Table 7: Support Facilities/Equipment and Labour Requirements for Proposed Rehabilitation across the FSTCs.

S/N	Project Phase	Activities	Labour[4]/Staffing	Support Facilities
1.	**Preconstruction Phase**	• Movement and transportation of equipment & materials to site. • Mobilization of workers to site • Site clearing • Establishing equipment staging areas	Skilled Labour (Estimate of 2-persons per school x 20 FSTCs = 40 persons) Unskilled Labour (estimate of 7-person's per school x 20 FSTCs = 140 persons)	• Staging Areas for Equipment and Materials. • Personal Protective Equipment (PPE). • First Aid Kits.
2.	**Construction Phase**	**Demolition Activities:** • Removal of ceilings and roofs, doors and windows, etc. **Rehabilitation/Renovation/Expansion Activities:** • Installation of new roofs and ceiling fittings • Installation of Electrical Fittings (re-conductoring, installation of bulbs, switches, etc.). • Installation of Windows and Doors.	• Skilled Labour (Estimate of 4 persons per school x 20 FSTCs = 80 persons) • Unskilled Labour (estimate of 15-person's per school x 20 FSTCs = 300	• Staging Areas for Equipment and Materials. • Personal Protective Equipment (PPE). • First Aid Kits. • Scaffolds/Ladders.

[4] The rehabilitation/renovation works will require the use of different categories of workers. These will include:

- Direct workers (IDEAS SPIUs, College Implementation Units (CIUs) of all Twenty (20) FSTCs).
- Contracted workers: Skilled personnel hired by the Contractors to assist with civil works.
- Community workers: Artisans (majorly from the communities where College is located).
- Primary suppliers: suppliers of construction materials including cement, sand, wood, stone, iron rods etc.

S/N	Project Phase	Activities	Labour[4]/Staffing	Support Facilities
		• Wall Finishes (Screeding, Plastering and Painting). • External Works • Floor Finishes • Mini-fencing of rehabilitated structures. • Extension works. • Solar panel installation. • **WASH Facilities:** - Installation/rehabilitation of Toilets and Septic Tank. - Installation/Drilling of Borehole, Overhead tank and Reticulation. - Installation of drainages. • Demobilization from site (removal of equipment, disposal of construction waste, dismantling of scaffolds, etc.).	persons)	
3.	**Operation and Maintenance Phase**	• Academic and school activities • Workshop maintenance • Maintenance of WASH facilities.	• Unskilled Labour (estimate of 4-person's per school x 20 FSTCs = 80 persons)	• Water for WASH facilities. • Maintenance workshop • Maintenance equipment.

***Note:** The Contractor will not set-up labour camps within the Colleges; nonetheless, for the purpose of the rehabilitation activities, onsite makeshift equipment staging areas may be temporarily erected.*

3.5 Materials Sourcing

The procurement of "**Responsible Materials"** is of utmost significance during project implementation to ensure ethical management of sustainability challenges in the construction supply chain. This involves purchasing materials and products that have been certified to meet sustainability standards. Responsible sourcing evaluates the environmental impact of materials in the construction supply chain, thus promoting sustainability.

For the rehabilitation activities in technical colleges, contractors are likely to purchase most construction materials (cement, wood, doors, windows, ceiling boards, etc.) from building material markets near the schools. These materials are ready-made and will not require further disturbance to the natural environment. To minimize waste generation and ensure resource efficiency during project implementation, it is advised that contractors reuse materials like wood, rods, and blocks/boulders in good condition whenever possible. The markets where project materials may likely be sourced across the twenty (20) FSTCs is provided in the table 8 below.

Table 8: Proposed Market for Source Materials for the FSTCs.

S/N	Name of Technical Colleges	Proposed Markets for Source Materials
1.	**Federal Science Technical College, Ohanso**	Uratta Timber and Building Materials Market, Aba
2.	**Federal Science Technical College, Ahoada**	Ahoada Town Market
3.	**Federal Science Technical College, Awka**	Eke Oka Building Materials Market
4.	**Federal Science Technical College, Dayi**	Malumfashi Town Market or Yankura Market, Kano.
5.	**Federal Science Technical College, Doma**	Doma Market (*Kasuwan Laraba)*
6.	**Federal Science Technical College, Ijebu Imushin**	Ijebu Ode Market
7.	**Federal Science Technical College, Jalingo**	Jalingo Township Market
8.	**Federal Science Technical College, Kuta Shiroro**	Building Materials Market Minna
9.	**Federal Science Technical College, Orozo**	Kugbo Furniture and Building Materials Market.
10.	**Federal Science Technical College, Tungbo**	Sagbama Town Market
11.	**Federal Science Technical College, Yaba**	Ebute-Metta/Oyigbo Market
12.	**Federal Science Technical College, Zuru**	Zuru Building Materials Market
13.	**Federal Science Technical College, Michika**	Michika Township Market
14.	**Federal Science Technical College, Ikare Akoko**	Ikare/Irun Hardware Markets
15.	**Federal Science Technical College, Ilesha**	Oja Oba Market, Ilesha

S/N	Name of Technical Colleges	Proposed Markets for Source Materials
16.	**Federal Science Technical College, Uyo**	Ifa Timber Market and Akpanandam Market.
17.	**Federal Science Technical College, Usi-Ekiti**	Usi Building Material Market
18.	**Federal Science Technical College, Uromi**	**TBD**
19.	**Federal Science Technical College, Otukpo**	**TBD**
20.	**Federal Science Technical College, Kafanchan**	**TBD**

Sources of Energy: Energy will be provided for machines dependent on petroleum products, which include motor gasoline/Premium Motor Spirit (PMS), Dual-Purpose Kerosene (DPK), Automotive Gas Oil (AGO). Although the vehicles and machineries will operate on these fuel sources, keen attention will be paid to mitigation measures[5] to reduce pollution from vehicles and engines.

3.6 Staging Areas

The staging areas for the proposed civil works (storage of equipment and other material/machinery) will be identified by the Contractors engaged for civil works across the FSTCs and the SPIU working in conjunction with the administration of the schools. The following criteria will be adopted in the identifying and managing staging areas.

- Be located within the school premises but completely out of bound to students and other unauthorized personnel; in addition, the proposed staging area for the project shall be clearly indicated by use of signage, delineators or other means acceptable to clearly identify the area. Preferably, a makeshift batcher house made of wooden plank or aluminum roofing sheets should be constructed to temporarily serve as the staging area.
- Contractor shall use only site areas designated specifically by the college as staging area for the intervention.
- All equipment shall be within staging area and equipment placed or located outside of this shall be relocated to within staging area at no change in contract time and contract sum.
- The contractor shall ensure that labour camps are not situated within the premises of the FSTCs
- The contractor must keep the staging area, as well as any construction access routes and thoroughfares, clear at all times. The contractor must provide traffic and parking control signage that is acceptable to the college representative. Contractor shall not impede access to/from any facility within the college at any time.
- The Contractor shall take all necessary measures and precautions to ensure that the execution of the works is carried out in accordance with environmental, social, legal and regulatory requirements, including those set out in this document;
- The Contractor shall take all measures and precautions to avoid any disturbance to adjacent buildings, commercial activities and access roads/routes;
- The Contractor shall, whenever possible, apply measures to reduce or eliminate any sources of disturbances;
- The Contractor shall follow the provisions of this document, as well as the applicable legislation and standards, during the use, operation and maintenance of the staging areas, in particular with regard to water supply and sanitation, solid waste management, handling and storage of dangerous substances, etc.
- The proposed staging areas to be used for the rehabilitation/renovation must be decommissioned/dismantled at the end of the project, when the engaged skilled/unskilled labour have been demobilized, through the replacement of previously existing conditions, unless other uses are intended.

[5] **Drive Less:** Use of haulage services (public delivery trucks) for procurement and avoid extra trips, plan procurement trips ahead of time, use shorter routes.
Drive Wise: Drive efficiently – reduce vehicle speed (go easy on gas pedals and brakes); Regular Maintenance of Vehicles and Generators.
Choose Fuel Efficient Engines: Less pollution and cleaner burning gasoline vehicles; Diesel generators are the better choice where efficiency is concerned (petrol generators burn approximately 50% more energy over extended periods than diesel generators).
Avoid Unnecessary Idling of project vehicles.

3.7 Implementation Schedule

The colleges' rehabilitation and civil works is estimated to be implemented over a 6-month period. See Table 9 below.

Table 9: Project Implementation Schedule

S/N	Phase	Activities	Implementation Period (Months)																					
			Month 1				Month 2				Month 3				Month 4				Month 5				Month 6			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1.	**Pre-Construction**	Preparatory Works																								
2.	**Construction**	Civil Works																								
3.	**Operation**	Maintenance Works	***Operation Phase shall run all through, following completion of Intervention works***																							

CHAPTER FOUR

ENVIRONMENTAL AND SOCIAL BASELINE DESCRIPTION OF THE PROJECT AREAS

4.1 General E&S Baseline Characteristics of Project Locations

This section provides a summary of the general and broad biophysical and socioeconomic baseline conditions of the project participating states. Site-specific details on the biophysical and socioeconomic baseline conditions within and around the FSTCs is provided in section 4.2. See tables 10 and 11 below for general baseline characteristics of project locations.

Table 10: Summary of General Baseline Biophysical Conditions Across the Twenty (20) Project Participating States

S/N	States	Biophysical Conditions					
		Climatic Condition	Topography	Vegetation	Geology	Annual Rainfall/Hydrology	Soil Type
1.	**Abia**	Abia State experiences a warm and gloomy wet season as well as a scorching and oppressive dry season. The temperature rarely drops below 61°F or rises over 91°F throughout the entire year, fluctuating between 68°F and 88°F.	The topography in the southern part of the state is low-lying while the other parts of the state have moderately high plains with elevations ranging between 20 and 200 metres above sea level.	Abia includes areas of oil-palm bush and tropical rain forest comprising various species of scrubs in its southern part and woodland savannah in its hilly north. The southernmost part of the State lies within the Niger Delta Swamp Forests, while the rest of the state, lies within the Cross–Niger transition forests. The built-up regions are in Umuahia, the state capital, and Aba, the primary commercial hub of the state.	There are two principal geological Formations in the state namely Bende-Ameki and the Coastal Plain Sands otherwise known as Benin Formation. The Bende-Ameki Formation of Eocene to Oligocene age consists of medium-coarse-grained white sand stones. Abia State is an oil-producing state in the Niger Delta region of Nigeria. Lead, Iron Ore, Gypsum, Limestone, Kaolin, Laterite, Zinc, and Copper are among other minerals found in the state.	The southern portion gets heavy rainfall of about 2,400 millimetres (mm) (94 in) per year and it is intense between the months of April through October. The most important rivers in Abia State are the Imo and Aba Rivers which flow into the Atlantic Ocean through Akwa Ibom State.	The soils of the state fall within the broad group of ferralitic soils of the coastal plain sand and escarpment; other soil types include alluvial soils found along the low terrace of Cross river and other rivers.
2.	**Adamawa**	The climate is very warm with an annual average of 35 degrees but has few truly tropical and sultry months. It is yearlong warm or hot. Sometimes humidity is unpleasantly high from June to September.	Topographically, it is a mountainous land crossed by the large river valleys – Benue, Gongola and Yedsarem. The valleys of the Mount Cameroon, Mandara Mountains and Adamawa Plateau form part of the landscape.	Adamawa state is largely covered by short-grass savanna and is drained westward by the Benue River and its tributaries, including the Gongola, Taraba, and Pai rivers.	Adamawa region encompasses part of an ancient craton that was tectonically active in the geologic past. The granite gneisses constitute about 50% of the lithologies of the area and consist of minerals like biotite and feldspars.	Adamawa state is prone to flood water and have swampy terrain especially during the rainy season. The mean annual rainfall ranges from 700 mm in the north-eastern and of the 1600 mm in the southern part. The most rain days occur from May to September.	Soil texture of the state ranges from loam in Mubi Fadama, silt clay in Ngurore Fadama and silt loam in both the Gerio and Uba Fadama soils.
3.	**Akwa-Ibom**	On the basis of its geographical location the climate of Akwa Ibom State can be described as a tropical rainy type which experiences abundant rainfall with very high temperature.	The landscape of Akwa Ibom is mostly flat. Around Itu and Ibiono Ibom Local Area Councils, the topography of the land is undulating with some areas as high as 200 feet above sea level.	Akwa Ibom falls within the tropical zone with a dominant vegetation of green foliage of trees and shrubs.	The terrain in the state is virtually flat to gently undulating, sloping generally in the direction of the southern part of the state. Elevation is from about 100 to 120 m within the zone.	Akwa Ibom typically receives about 342.56 millimeters (13.49 inches) of precipitation and has 294.37 rainy days (80.65% of the time) annually. The Atlantic coastline stretches 129km from Oron in the East to Ikot Abasi in the West.	In Akwa Ibom State, the soil is underlain by a simple pattern of sedimentary geological formation, consisting of medium to coarse - grained sandstones and siltstones
4.	**Anambra**	The city's yearly temperature is 28.99°C (84.18°F) and it is -0.47% lower than Nigeria's averages.	The terrain generally consists of gully slopes within the western part of Enugu State and the southern part of Anambra State in south-eastern Nigeria	Dense vegetal cover with high trees is prominent around stream, river courses and the shaley lowlands while savannah vegetation and isolated trees are prominent on sandy highland; extensive man-made vegetation exist within the city and environs.	Anambra Basin is one of the energy-rich inland sedimentary basins in Nigeria. The Anambra Basin is situated west of the lower Benue Trough and is often considered the youngest formation of the Benue Trough. The basin harbours the largest deposit of coal and lignite in Nigeria.	Anambra typically receives about 212.36 millimeters (8.36 inches) of precipitation and has 243.38 rainy days (66.68% of the time) annually. The Anambra River (Igbo: Ọmambala) flows 210 kilometres (130 mi) into the Niger River and is found in Anambra, Nigeria.	The soils of the study area are derived from the underlying Ameki Formation and Imo Shale and as such comprise mainly porous, red and brown sandy soils, and brown and pale clay soils.

S/N	States	Biophysical Conditions					
		Climatic Condition	Topography	Vegetation	Geology	Annual Rainfall/Hydrology	Soil Type
5.	**Bayelsa**	The mean monthly temperature is in the range are of 25°C to 31°C. Mean maximum monthly temperatures range from 26°C to 31°C. The mean annual temperature is uniform for the entire Bayelsa State. The hottest months are December to April.	Bayelsa has a riverine and estuarine setting. Many communities are almost (and in some cases) surrounded by water, making them inaccessible by road.	The vegetation type is the lowland rainforest type mainly in the north and mangrove swamp forest type in the southern end. Bayelsa State is rich in fertile soil and plant species diversity, a factor that endears the rural dwellers mostly to agriculture related occupations.	Bayelsa State is located within the lower delta plain believed to have been formed during the Holocene of the quaternary period by the accumulation of the sedimentary deposits. The major geological characteristic of the state is sedimentary alluvium.	Bayelsa typically receives about 241.52 millimeters (9.51 inches) of precipitation and has 296.16 rainy days (81.14% of the time) annually.	The major soil types are light to dark grey, fine sand to silty clay. Soils are loose, coarse texture with 78 – 80% sandy fractions having single grain structure.
6.	**Benue**	The city's yearly temperature is 29.38°C (84.88°F) and it is -0.08% lower than Nigeria's averages. Benue typically receives about 135.2 millimeters (5.32 inches) of precipitation and has 160.01 rainy days (43.84% of the time) annually.	Benue State lies within the lower river Benue trough in the middle belt region of Nigeria	There are two notable vegetation zones in the state; the sub-Sudan zone and the northern guinea savannah zone.	The general geology of Lower Benue Trough in Abakaliki area is made up of thick sequences (500m) of slightly deformed Cretaceous sedimentary rocks made up of essentially of Albian shales, subordinate siltstones of the Asu River Group.	Benue typically receives about 135.2 millimetres (5.32 inches) of precipitation and has 160.01 rainy days (43.84% of the time) annually.	The textural composition of the soil ranged from loamy sand to sandy loam to clay loam.
7.	**Edo**	The city's yearly temperature is 27.9°C (82.22°F) and it is -1.56% lower than Nigeria's averages. Ekiti typically receives about 141.71 mm (5.58 inches) of precipitation and has 239.72 rainy days (65.68% of the time) annually.	They are mainly sandstone plateaux whose heights range from 200 to 300 metres above sea level. There is a gradual fail into the Orle and Niger Valleys from the north and south, while the landmass in the south and west descends gradually to the Benin Lowlands	The riverine areas of Edo State have mainly mangrove swamp vegetation. The rainforest of the Benin Lowlands is gradually being displaced by rubber plantations.	The geology is generally marked by top reddish earth, composed of ferruginized or literalized clay sand. Geologically, the Benin Region comprises of 1) the Benin formation; 2) alluvium; 3) drift/top soil and 4) Azagba-Ogwashi (Asuba-Ogwashi).	Edo typically receives about 183.49 mm (7.22 inches) of precipitation and has 265.91 rainy days (72.85% of the time) annually.	Uromi has 70.08% of sand, 19.92% of clay and 10.0% of silt. Ewu is 75.36% of sand, 15.92% of clay and 8.72% of silt.
8.	**Ekiti**	The city's yearly temperature is 27.9°C (82.22°F) and it is -1.56% lower than Nigeria's averages. Ekiti typically receives about 141.71 mm (5.58 inches) of precipitation and has 239.72 rainy days (65.68% of the time) annually.	Ekiti State is primarily a hilly area extending over 757 metres above mean sea level (m.a.m.s.l) with the highest contour line located around the state's Northeast boundary	Ekiti has its vegetation consisting of the dry lowland rainforest and the derived savannah.	The geology of Ado-Ekiti belongs to the basement complex (igneous rock) rock of South Western Nigeria.	Ekiti typically receives about 141.71 mm (5.58 inches) of precipitation and has 239.72 rainy days (65.68% of the time) annually.	In Ekiti state, the texture loamy sand is predominant and then there are some traces of clay loam, sandy and concretionary clay.
9.	**FCT**	The climate is very warm with an annual average of 32 degrees but has few truly tropical and sultry months. The FCT experiences three weather conditions annually. This includes a warm, humid	Abuja's geography is defined by Aso Rock, a 400-metre (1,300 ft) monolith left by water erosion. The Presidential Complex, National Assembly, Supreme Court and much of the city	The vegetation is mainly savannah with limited forest areas.	Geology of Abuja FCT. Comprising mainly of migmatite gneiss, biotite gneiss, porphyroblastic gneiss, quartzitic schists, amphibolitic schists and amphibolites. sedimentary origin but was later	Abuja Federal Capital Territory typically receives about 122.12 mm (4.81 inches) of precipitation and has 145.37 rainy days (39.83% of the time) annually.	The soils in the FCT are laterite soils.

S/N	States	Biophysical Conditions					
		Climatic Condition	Topography	Vegetation	Geology	Annual Rainfall/Hydrology	Soil Type
		rainy season and a blistering dry season.	extend to the south of the rock. Zuma Rock, a 792-metre (2,598 ft) monolith, lies just north of the city on the expressway to Kaduna.		profoundly altered into metamorphic and granite conditions.		
10.	**Kaduna**	The climate is very warm with an annual average of 34 degrees but has few truly tropical and sultry months.	The topography is generally flat and the elevation ranges from 590 to 653m above mean sea level. As a result of the flat topography, there are no gully erosion and slope instability problems.	The state's natural vegetation consists largely of savannah woodlands.	The entire Kaduna state is underlain by a basement complex of igneous and metamorphic rocks of mainly Jurassic to Pre-Cambrian ages. The basement complex rocks are essentially granites, gneisses, migmatites, schists and quartzites	Throughout the year, in Kaduna, Nigeria, there are 129.8 rainfall days, and 607mm (23.9") of precipitation is accumulated.	The main soil types in the Kaduna are Lixisols, Acrisols, Plinthosols, and Fluvisols, which are the typical soil types
11.	**Katsina**	Katsina State falls within the dry sub-humid agro-climatological zone of Sudan and Guinea Savannah vegetation zone. Generally, the climate of the area is semi-arid tropical climate with marked wet and dry seasons.	Generally, the relief of the region ranges from an average height of 450m to about 650m above mean sea level on the typical plains. The inclination of the relief of Katsina is oriented from north to south.	Katsina state is predominantly Sudan Savanna which consists of scattered trees with sparse shrubs and grass. This area has been subjected to many years of bush burning and over grazing. Trees such as *Azadiracha indica* (Neem) and *Perkia biglobosa* (Locust Bean) are now being planted to check against desert encroachment and erosion.	Katsina State is underlain by three geological units with distinct hydrogeological conditions, namely the Basement Complex, Katsina-Daura Sediments and the Chad Formation. There are also surficial Quaternary deposits that cover the Basement Complex and other sedimentary formations to a large extent.	Major rivers which originate in or traverse Katsina state include Kozaa, Sabke, Tagwai, Gada, Karaduwa, Bunsuru, Gagare, Turami, Sokoto, etc. These rivers contain water only during the rainy season and have little or no water during the dry season.	The soil around Katsina Drains are predominantly silty sand and clayey sand due to the sandy nature of the wind-blown desert sand. However, there are some deposits of Aeolic sand along the inverts of the drains.
12.	**Kebbi**	Kebbi is one of the warmest regions in Nigeria with an average daily high temperature of 36 degrees. The climate is very warm with an annual average of 36 degrees but has few truly tropical and sultry months. It is yearlong warm or hot	The topography within 2 miles of Birnin Kebbi contains only modest variations in elevation, with a maximum elevation change of 259 feet and an average elevation	Kebbi's area consists of short-grass savanna that is drained southwestward by the Niger River and its tributary, the Sokoto (Kebbi) River.	The geology of Kebbi State is characterized by thick and vast sequences of sedimentary deposits of the Sokoto Rima-basin, which underline about 50% of the area. The rest being underlain by Precambrian Basement complex rocks.	The average monthly and annual rainfalls are 112.21 mm and 787.53 mm, respectively, with the rainy season spanning April through October.	The predominant soil type in Kebbi State, however, is the ferrugirious tropical soils.
13.	**Lagos**	Lagos has a tropical wet and dry climate with two distinct rainy seasons; the more intense season occurs between April and July, with a milder one from October to November. At the peak of the rainy season, the weather in	The topography of Lagos is generally low-lying, flat in most parts with several points at sea level, thus exposing the area to prevalent seasonal flooding. Lagos is dominated by its system of islands, sandbars, and	The dominant vegetation of the State is the swamp forest of the fresh water and mangrove swamp forests, both of which are influenced by the double rainfall pattern of the state, which makes the environment a wetland region.	State is made up of coastal plain sands, clays and sandstone.	The average temperature in Lagos is 27 °C, and the annual average rainfall is 1657 mm.	The soil in Lagos has a texture of sandy clay. In Oyo, it is observed the texture sandy clay is of high dominance followed by the sandy loam, it is also observed that the texture of soil northward is mostly loamy

S/N	States	Biophysical Conditions					
		Climatic Condition	Topography	Vegetation	Geology	Annual Rainfall/Hydrology	Soil Type
		Lagos is wet about half the time.	lagoons.				sand and the texture of soil southward is clay loam.
14.	**Nasarawa**	In Nasarawa, the wet season is oppressive and overcast, the dry season is humid and partly cloudy, and it is hot year-round. Over the course of the year, the temperature typically varies from 63°F to 95°F and is rarely below 57°F or above 101°F.	he general topography of Nasarawa State is that of hills/ dissected terrain, undulating plains and lowlands.	Geographically, the state is mostly within the tropical Guinean forest–savannah mosaic ecoregion.	The geology of Nasarawa State consists of Basement Complex and Sedimentary rocks. Nasarawa Eggon LGA is underlain by Basement Complex rocks composed of granites and gneiss.	Nasarawa typically receives about 136.71 mm (5.38 inches) of precipitation and has 155.37 rainy days (42.57% of the time) annually.	Laterite Soil of Lafia, Nasarawa State, Nigeria.
15.	**Niger**	Mean annual temperatures range 21.9°–36.4°C, with substantially cooler temperatures in the mountainous regions.	The terrain is predominantly desert plains and sand dunes. There are also large plains in the south and hills in the north. In the extreme south, there is a tropical climate near the edges of the Niger River Basin	In the cultivated zone the vegetation includes acacia trees, doum palms, and palmyra palms, as well as baobabs.	The geology of Niger comprises very ancient igneous and metamorphic crystalline basement rocks in the west, more than 2.2 billion years old formed in the late Archean and Proterozoic eons of the Precambrian.	Annual rainfall varies from year to year, but generally is lower in the north (100–200 mm) than in the south (500–600 mm) and is limited to the summer months of June–September.	The soils were predominantly fine-grained poorly graded sand and silty sand (SP-SM), silty sand (SM), clayey sand (SC) and silty clayey sand (SM-SC).
16.	**Ogun**	Ogun is one of the coldest regions in Nigeria with an average daily high temperature of only 31 degrees. High humidity and hot temperatures make the weather at times pleasant but also tropical humid. It is warm to hot all year round and invites to bathe at average water temperatures of 27 degrees	Modest variations in elevation, with a maximum elevation change of 240 feet	It is covered predominantly by tropical rain forest and has wooded savannah in the northwest.	The geology of Ogun state comprises mainly of Basement complex and sedimentary rocks, which underlie the remaining surface of the state	Monthly Averages Average precipitation mm (inches), 20.99(0.83), 50.93(2.01), 116.75(4.6), 107.19(4.22); Average precipitation days (≥ 1.0 mm).	The texture of sandy clay is dominating followed by the sandy loam and then the loamy sand.
17.	**Ondo**	In Ondo, the wet season is warm and overcast, the dry season is hot and partly cloudy, and it is oppressive year-round. Over the course of the year, the temperature typically varies from 66°F to 91°F and is rarely below 60°F or above 95°F.	Generally, the land rises from the coastal part of Ilaje, Ese-Odo and Okitipupa areas to highlands and steeps down at the Northern parts of the state.	Ondo state includes mangrove-swamp forest near the Bight of Benin, tropical rain forest in the centre part, and wooded savanna on the gentle slopes of the Yoruba Hills in the north.	The sedimentary terrain of Ondo State falls within the eastern portion of the Dahomey Basin.	The city's yearly temperature is 28.42ºC (83.16ºF) and it is -1.04% lower than Nigeria's averages. Ondo typically receives about 182.94 mm (7.2 inches) of precipitation and has 266.26 rainy days (72.95% of the time) annually.	The soils are mostly well-drained, with a medium texture and have high agricultural value for plants.
18.	**Osun**	Located at an elevation of 266.33 meters (873.79 feet) above sea level, Osun has	The relief of the basin is generally undulating and descends from an altitude	The state has a covering of tropical rain forest, and the Oshun is the most important	They are predominantly represented by coarse grained to porphyritic pink and grey	Osun typically receives about 127.75 mm (5.03 inches) of precipitation and has 237.62 rainy	In Osun, the texture loamy sand is prominent; the soil texture on the west is shown

S/N	States	Biophysical Conditions					
		Climatic Condition	Topography	Vegetation	Geology	Annual Rainfall/Hydrology	Soil Type
		a Tropical wet and dry or savannah climate (Classification: Aw). The city's yearly temperature is 28.35°C (83.03°F) and it is -1.11% lower than Nigeria's averages.	of about 700 meters in Oke Imesi area to 50 meters and below in areas around Epe.	river.	granites with patches and enclaves of mafic rocks.	days (65.1% of the time) annually.	to be sandy clay while the south is composed of texture sandy loam and sandy.
19.	**Rivers**	The mean monthly temperature is in the range of 25°C to 28°C. The mean annual temperature for the state is 26°C.	Its topography ranges from flat plains, with a network of rivers to tributaries.	The Abura tree, oil palm, raffia palm, shrubs, lianas, ferns and floating grasses and reeds are the typical vegetation.	Rivers State lies on the recent coastal plain of the eastern Niger Delta. Its surface geology consists of fluvial sediments.	The state is characterised by high rainfall, which decreases from south to north. Total annual rainfall decreases from about 4,700 mm on the coast to about 1,700 mm in extreme north of the state.	The texture of the soil is predominantly coarse sand with clay content sometimes as much as 35%. The soil has been found to range from sand to sandy loam in the surface soil horizon with pH values of between 4.0 and 5.8 in water
20.	**Taraba**	Taraba is one of the coldest regions in Nigeria with an average daily high temperature of only 33 degrees. The climate is very warm with an annual average of 33 degrees but has few truly tropical and sultry months. It is yearlong warm or hot.	Taraba state has a total area of 54,473 km squared and the topography consists of undulating landscapes characterized by small mountains.	The vegetation of Taraba State comprises three types of vegetation zones namely; the Guinea Savannah which is marked by mainly forest and tall grasses are found in the southern part of the State like Wukari, Ussa, Kurmi, Takum, and Donga.	The geology and geological history of Taraba State is rather complex. Taraba State is underlain by Basement Complex and sedimentary rocks, each occupying a very distinctive part of the state	Mean annual rainfall ranges from 800 mm in the northern part of the state to over 2000 mm in the southern part.	The soil is predominantly sandy clay loam. Clay loam in lowland surface,

Table 11: Summary of Baseline Socioeconomic Conditions across the Twenty (20) Project Participating States

S/N	States	Socioeconomic Conditions				
		Demography	Administration	Religion	Education/Literacy Rate	Occupation/Livelihood
1.	**Abia**	Abia is the 32nd largest state and 27th most populous with an estimated population of over 3,720,000 as of 2016.	Abia is a state in the South-East geopolitical zone of Nigeria, it is bordered to the north and northeast by the states of Enugu, and Ebonyi, Imo State to the west, Cross River State to the east, Akwa Ibom State to the southeast, and Rivers State to the south	The people of Abia State are pre-dominantly Christians of different denominations. There are also a good number of Muslims, with adherents of the two religions living together peacefully.	89% 2018 Adult Literacy Rate. Projected Adult Literacy Rate for Abia; 3.4% 2018 Population with No or Uncompleted Primary Education.	Agriculture is the major occupation of the people of Abia State. This is induced by the rich soil, which stretches from the northern to the southern parts of the state. Subsistence farming is prevalent and about 70 per cent of the population is engaged in it.
2.	**Adamawa**	Adamawa state is the eighth largest in area, but the thirteenth least populous with an estimated population of about 4.25 million as	Adamawa state is a state in the North-East geopolitical zone of Nigeria, bordered by Borno to the northwest, Gombe to the west, and Taraba to the southwest, while its	Adamawa is an Islam majority state in Nigeria, with a substantial Christian population.	Adamawa - Education; 50.5% 2018 Adult Literacy Rate. Projected Adult Literacy Rate for Adamawa ; 42% 2018 Population With No or	Agriculture remains the major livelihood source in the region, especially crop production and animal husbandry.

S/N	States	Socioeconomic Conditions				
		Demography	Administration	Religion	Education/Literacy Rate	Occupation/Livelihood
		of 2016	eastern border forms part of the national border with Cameroon. It takes its name from the historic emirate of Adamawa, with the emirate's old capital of Yola, serving as the capital city of Adamawa state. The state is one of the most heterogeneous in Nigeria.		Uncompleted Primary Education.	
3.	**Akwa-Ibom**	Akwa Ibom is the 30th largest in area and fifteenth most populous with an estimated population of nearly 5.5 million as of 2016.	Akwa Ibom State is a state in the South-South geopolitical zone of Nigeria, bordered on the east by Cross River State, on the west by Rivers State and Abia State, and on the south by the Atlantic Ocean.	The people of Akwa Ibom are predominantly Christians.	Akwa Ibom - Education; 78.1% 2018 Adult Literacy Rate. Projected Adult Literacy Rate for Akwa Ibom ; 6.8% 2018	Akwa Ibom people are farmers, craftsmen, and merchants. A majority of the rural populace engage in farming. Other traditional occupations of the people are fishing, trading, hunting, wood-carving, raffia works, blacksmithing, pottery, iron works, tailoring, and crafts creation.
4.	**Anambra**	It has a population of 4,177,828 (2006 census) 5,527, 809 (2016 forecast) and a population density of 862.	Anambra State is a Nigerian state, located in the south-eastern region of the country. Anambra state is bounded by Delta State to the west, Imo State to the south, Enugu State to the east and Kogi State to the north.	Christianity is the dominant religion in Anambra State, although a number of its inhabitants practise traditional religion	Anambra - Education; 88.1% 2018 Adult Literacy Rate. Projected Adult Literacy Rate for Anambra ; 4.9% 2018 Population With No or Uncompleted Primary Education.	Trading/Merchants, Civil Service, Agriculture, Craftsmen, etc.
5.	**Bayelsa**	Bayelsa 2,537,400 Population [2022] – Projection 9,391 km² Area 270.2/km² Population Density [2022] 2.5% Annual Population Change [2006 → 2022]	Bayelsa is one of the states in the South-South region of Nigeria, located in the core of the Niger Delta region. Yenagoa is the capital city of Bayelsa State with most parts to have fallen within the high-risk of floods, suspects to occur annually. It shares a boundary with Rivers State to the East and Delta State to the west, with the waters of the Atlantic Ocean dominating its southern borders. It has a total area of 10, 773 km2. There are 8 LGAs in the state.	The dominant religion in Bayelsa State is Christianity, although some traditional religion is practised.	86.7% 2018 Adult Literacy Rate. Projected Adult Literacy Rate for Bayelsa ; 8.2% 2018 Population With No or Uncompleted Primary Education.	Fishing is the major occupation of Bayelsa people because of the abundant creeks, lagoons, rivers and swamps within which commercial fishing is practiced. Over 200 species of fish can be found in the waters within and around the state.
6.	**Benue**	Benue State is one of the North Central states in Nigeria with a population of about 4,253,641.	Benue State is one of the North Central states in Nigeria. The state borders Nasarawa State to the North; Taraba State to the East; Kogi State to the West; Enugu State to the South-West; Ebonyi and Cross-Rivers States to the South; and has an international border with Cameroon to the South-East.	The main religion in the state is Christianity. Islam and traditional religions are also practised by some of its inhabitants.	Education; 68.4% 2018 Adult Literacy Rate. Projected Adult Literacy Rate for Benue; 22.4% 2018 Population with No or Uncompleted Primary Education	Agriculture is the mainstay of the economy, engaging over 75% of the state farming population. The State also boasts of one of the longest stretches of river systems in the country with great potential for a viable fishing industry, dry season farming through irrigation and for an inland water highway

S/N	States	Socioeconomic Conditions				
		Demography	Administration	Religion	Education/Literacy Rate	Occupation/Livelihood
7.	**Edo**	The state population figures is expected to be about 8,000,000 in 2022. Edo State is the 22nd largest State by landmass in Nigeria.	Located in the South-South geopolitical zone of Nigeria. Edo State is the 22nd largest State by landmass in Nigeria. Edo State borders Kogi State to the northeast, Anambra State to the east, Delta State to the southeast and south-south and Ondo State to the west.	Christianity is the dominant religion in Edo State.	Benin Literacy Rate 1979-2022 is 42.36%	Agriculture is the predominant occupation of people in this State. The major cash crops produced are rubber, cocoa and palm produce.
8.	**Ekiti**	The current metro area population of Ado-Ekiti in 2022 is 516,000, a 3.82% increase from 2021. The metro area population of Ado-Ekiti in 2021 was 497,000, a 3.54% increase from 2020. The metro area population of Ado-Ekiti in 2020 was 480,000, a 3.67% increase from 2019.	Ekiti State is a state in southwestern Nigeria, bordered to the north by Kwara State, to the northeast by Kogi State, to the south and southeast by Ondo State, and to the west by Osun State	The dominant religions in Ekiti State are Islam and Christianity although a certain amount of traditional religion is still practiced.	Education; 84.9% 2018 Adult Literacy Rate. Projected Adult Literacy Rate for Ekiti; 5.5% 2018 Population with No or Uncompleted Primary Education.	The study was carried out in Ekiti State where the predominant occupation of the people is farming cultivating food crops like yam, maize, cassava, and cash crops such as cocoa, kola nut, cashew, and oil palm.
9.	**FCT**	The current metro area population of Abuja in 2022 is 3,652,000, a 5.43% increase from 2021. The metro area population of Abuja in 2021 was 3,464,000, a 5.67% increase from 2020. The metro area population of Abuja in 2020 was 3,278,000, a 5.91% increase from 2019.	Abuja is the eighth most populous city of Nigeria. Situated at the centre of the country within the Federal Capital Territory (FCT).	Over half of the population is estimated to be Muslim. Christian religions make up around 45 percent of the total.	Education; 76.3% 2018 Adult Literacy Rate. Projected Adult Literacy Rate for Abuja FCT; 16.3% 2018 Population with No or Uncompleted Primary	Agriculture, the economic mainstay, produces yams, millet, corn (maize), sorghum, and beans.
10.	**Kaduna**	The current metro area population of Kaduna in 2022 is 1,158,000, a 2.21% increase from 2021. The metro area population of Kaduna in 2021 was 1,133,000, a 1.8% increase from 2020.	The fourth largest and third most populous state in the country. Its northern half became Katsina state in 1987. The state is bordered by seven states.	Religion in Kaduna State is a secular state, with Christian, Muslim and some indigenous religious adherents. The Sharia is valid for the areas with a mainly Muslim population.	Education; 54.6% 2018 Adult Literacy Rate. Projected Adult Literacy Rate for Kaduna; 42.4% 2018 Population with No or Uncompleted Primary Education.	Agriculture is the main stay of the economy of Kaduna state with about 80% of the people actively engaged in farming. Cash and food crops are cultivated and the produce include: yam, cotton, groundnut, tobacco, maize, beans, guinea corn, millet, ginger, rice and cassava.
11.	**Katsina**	The current metro area population of Katsina in 2022 is 505,000, a 3.7% increase from 2021. The metro area population of Katsina in 2021 was 487,000, a 3.62% increase from 2020.	Katsina a state in the north-western geopolitical zone of Nigeria. Katsina State borders Kaduna, Zamfara, Kano, and Jigawa States.	Religion in Katsina State of Nigeria is mainly Islam. The Sharia is valid in the entire state.	Education; 47.6% 2018 Adult Literacy Rate. Projected Adult Literacy Rate for Katsina; 49.6% 2018 Population with No or Uncompleted Primary Education.	Agriculture is the main occupation of the people of Katsina State for almost every (male) is engaged in some form of agriculture.
12.	**Kebbi**	The current metro area population of Birnin Kebbi in 2022 is 396,000, a 3.94% increase from 2021. The	Kebbi is a state in the north-western Nigeria, Kebbi state is bordered east and north of Sokoto and Zamfara	Most of the population is Muslim.	Education; 25.1% 2018 Adult Literacy Rate. Projected Adult Literacy Rate for Kebbi; 72.1%	Agriculture is the main occupation of the people, especially in the rural areas. Crops produced are

S/N	States	Socioeconomic Conditions				
		Demography	Administration	Religion	Education/Literacy Rate	Occupation/Livelihood
		metro area population of Birnin Kebbi in 2021 was 381,000, a 4.1% increase from 2020.	states, and to the south by Niger state while its western border forms part of the national borders with Benin Republic and Niger.		2018 Population with No or Uncompleted Primary Education.	mainly grains. Animal rearing and fishing are also common.
13.	**Lagos**	The current metro area population of Lagos in 2022 is 15,388,000, a 3.54% increase from 2021. The metro area population of Lagos in 2021 was 14,862,000, a 3.44% increase from 2020. The metro area population of Lagos in 2020 was 14,368,000, a 3.34% increase from 2019.	Lagos is a state in south-western Nigeria. Of the 36 states, it is both the most populous and smallest in area. Bounded to the south by the Bight of Benin and to the west by the international border with Benin Republic, Lagos State borders Ogun State to the east and north making it the only Nigerian state to border only one other state.	Lagos as a town or state in Nigeria is a host to several religions but three major religious groups dominate its religious landscape, namely, the adherents of African traditional religion (ATR), Muslims and Christians.	89.2% 2018 Adult Literacy Rate. Projected Adult Literacy Rate for Lagos; 4.4% 2018 Population with No or Uncompleted Primary Education.	Trading/Merchant, Civil Service,
14.	**Nasarawa**	In this year, Nasarawa population density was 80.1 p/km². If population growth rate would be same as in period 2006-2011 (+3.05%/year), Nasarawa population in 2022 would be: 3 021 025*.	Nasarawa State is a state in the North-Central region of Nigeria, bordered to the east by the states of Taraba and Plateau, to the north by Kaduna State, to the south by the states of Kogi and Benue, and to the west by the Federal Capital Territory.	Nasarawa is also religiously diverse as about 60% of the state's population are Muslim with around 30% being Christian and the remaining 10% following traditional ethnic religions.	Education; 66.1% 2018 Adult Literacy Rate. Projected Adult Literacy Rate for Nasarawa; 24.6% 2018 Population with No or Uncompleted Primary Education.	Economically, Nasarawa State is largely based around agriculture, mainly of sesame, soybeans, groundnut, millet, maize, and yam crops. Nonetheless, there are also artisanal and small-scale miners, Civil servants and traders at some
15.	**Niger**	The current population of Niger is 26,324,035 as of Saturday, December 3, 2022, based on World meter elaboration of the latest United Nations data.	Niger is a state in the North Central region of Nigeria and the largest state in the country. Niger state has three political zones, zone A, B and C. The state's capital is at Minna. Other major cities are Bida, Kontagora and Suleja.	More than 98 percent of the population is Muslim. Of the Muslim population, the great majority is Sunni. Roman Catholics, Protestants, and other religious groups account for less than 2 percent of the population	Niger it has, according publishes UNESCO, an adult literacy rate of 30.56%. While the male literacy rate is 39.06%, for females is 22.55%,	Small-scale farming, fishing, raising livestock and non-farm activities are some of the common livelihoods that these populations survive on.
16.	**Ogun**	With the above Ogun state population growth projection, the current population of Ogun state is 6,153,869.	Ogun State borders Lagos State to the south, Oyo State and Osun State to the north, Ondo State to the east, and the Republic of Benin to the west. Abeokuta is both Ogun State's capital and most populous city; other important cities in the state include Ijebu Ode, the royal capital of the Ijebu Kingdom, and Sagamu,	Islam is the predominant religion in Ogun state, followed by traditional religions, while Christianity is last.	Education; 85.7% 2018 Adult Literacy Rate. Projected Adult Literacy Rate for Ogun; 9.9% 2018 Population with No or Uncompleted Primary Education.	Agriculture is the major occupation of the people of Ogun State, which is favoured by the climatic condition. Commonly cultivated crops are maize, yam, plantain, beans, cocoa, rubber, palm tree, sugar cane, kola nut, citrus and cassava.
17.	**Ondo**	The current metro area population of Ondo in 2022 is 460,000, a 3.37% increase from 2021. The metro area population of Ondo in 2021 was 445,000, a 3.01% increase from 2020. The metro area population of Ondo in 2020 was 432,000, a 2.86% increase from 2019.	It borders Ekiti State to the north, Kogi State to the northeast, Edo State to the east, Delta State to the southeast, Ogun State to the southwest, Osun State to the northwest, and the Atlantic Ocean to the south.	The vast majority of the population are Christians; minorities practice Islam and traditional worship.	Education; 75.6% 2018 Adult Literacy Rate. Projected Adult Literacy Rate for Ondo; 9.6% 2018 Population with No or Uncompleted Primary Education.	Agriculture (including fishing) constitute the main occupation of the people of the state. Indeed, Ondo state is the leading cocoa producing state in Nigeria. Other agricultural products include yams, cassava and palm produce

S/N	States	Socioeconomic Conditions				
		Demography	Administration	Religion	Education/Literacy Rate	Occupation/Livelihood
18.	**Osun**	Osun 4,435,800 Population [2022] – Projection 8,521 km² Area 520.6/km² Population Density [2022] 1.6% Annual Population Change [2006 → 2022]	Osun is a state in south-western Nigeria; bounded to the east by Ekiti and Ondo states, to the north by Kwara State, to the south by Ogun State and to the west by Oyo State.	The dominant religions in Osun State are Islam and Christianity although a certain amount of traditional religion is still practiced.	Education; 84.5% 2018 Adult Literacy Rate. Projected Adult Literacy Rate for Osun; 6.6% 2018 Population with No or Uncompleted Primary Education.	Civil servant, farming, artisans, transport, trading.
19.	**Rivers**	The population of Rivers state is currently estimated at 9,567,892 according to reliable population directory, population.	Rivers, is a state in the Niger Delta region of southern Nigeria. when it was split from the former Eastern Region Rivers State borders include: Imo to the north, Abia and Akwa Ibom to the east, and Bayelsa and Delta to the west. Rivers State is a diverse state that is home to many ethnic groups: Igbo, Ogoni and Ijaw. The state is particularly noted for its linguistic diversity, with 28 indigenous languages being said to be spoken in Rivers State, these include Igbo speaking groups, the Ogoni and Ijaw languages	A Christian state made up of 90% Christians and 10% orthodox with few practicing Islam unconventionally.	Rivers – Youth (91.1 %), Adults (65.0%)	Rivers State is traditionally a fishing area and the principal occupation of the riverine people is fishing and its associated industries.
20.	**Taraba**	If population growth rate would be same as in period 2006-2011 (+2.94%/year), Taraba population in 2022 would be: 3 649 792*.	Taraba is a state in North Eastern Nigeria named after the Taraba River. which traverses the southern part of the state. Taraba state's capital is Jalingo. The inhabitants are mainly the people from Mumuye, Fulani, Jenjo, Wurkum, and Kona tribes, who are predominantly resident in the northern part of the state, while the Jukun, Chamba, Tiv, Kuteb and Ichen tribes are in the southern part of the state. There is a total of 77 tribes.	56% of Taraba people are Muslims. 40% Christians and 4% others	Education; 52.5% 2018 Adult Literacy Rate. Projected Adult Literacy Rate for Taraba; 35.2% 2018 Population with No or Uncompleted Primary Education	Taraba State is among the leading states in the production of livestock with its dairy farms at Jalingo, Gembu and Nguorje. Communities living on the banks of River Benue, River Taraba, River Donga and Ibi engage in fishing all year round

4.2 Summary of Site-Specific Baseline at the Project Locations

This subsection provides a concise summary of the environmental and social baseline conditions in the FSTCs earmarked for structural rehabilitation under the project. Notably, the general environmental baseline conditions of the 20 FSTCs are similar as they are all federal colleges with mostly identical features. While some geographic differences exist between colleges in different geopolitical zones, their overall settings are mostly the same. Similarly, technical colleges located in towns share a common social environment, with borders along roads, petty businesses, and/or adjacent buildings. In peri-urban/rural areas, schools are typically bordered by tracks, earth roads, farmlands, sparse vegetation, and community structures like homes and mosques. The environmental and social baseline description in Table 12 below is presented in this format for clarity and conciseness in this section.

Table 12: Site-Specific E&S Baseline Conditions at the Project Locations.

Technical College	GPS Coordinates	Site-specific E&S Baseline Conditions	Pictures
FSTC Orozo, Abuja	**N8.897916 E7.569647**	FSTC Orozo is located in a peri-urban area. The College is situated in Abuja Municipal Area Council (AMAC) along the Nyanya – Karshi express road and is located adjacent to the popular Orozo Market which at the same time has parts of the market bordering the fence of the College. The college stretches across a vast land area of approximately 110 hectares (and a perimeter of 4,795 meters). Two (2) communities border the school primarily (i.e. Orozo and Ungwar Hakimi) and may be likely locations for Contractors to purchase material resources for rehabilitation works considering that the Orozo market is located in the Orozo community. Importantly, residents of both communities practice agriculture, petty trading, are civil servants, artisans (carpenters, welders, etc.). The college is completely fenced off from the surrounding communities. FSTC Orozo is separated from the built-up and densely populated areas of Orozo by the Nyanya-Karshi express road which experiences heavy traffic in the morning and evenings rush hours (between 7am-10am, and 5pm-10pm). During less traffic periods, intermittent traffic occurs mainly at the Orozo market area due to the encroachment of marketers and roadside hawkers (between 10am – 4pm). Within the school, the terrain is fairly level and slopped towards its north-western end. The soil within the school premises is generally sandy-clay while some parts of the premises are asphalted. The 100-meter driveway from the main entrance of the college to the administrative block is partly interlocked and surface dressed in some areas. Structures such as the ICT building, technical workshops (MVM, W&F, CCP, etc.) have been identified by the CIU team for priority renovation, overhaul of existing makeshift structures and expansion. Generally, the school is currently experiencing challenges as regards access to water, hence the rationale behind the proposed installation of a new borehole. Although there are eight (8) existing boreholes in the school, most of them are shallow and dry faster (because of the depth).	 Uncompleted IDEAS Office at FSTC Orozo in need of structural renovation and upgrade.
FSTC Doma, Nasarawa State.	**N8.398860 E8.328441**	FSTC Doma was established in 2008. It is about 15km (20 minutes' drive) from Lafia the State capital. The college is situated in a rural neighbourhood, off Doma-Lafia Highway at the outskirts of Doma LGA. This highway is narrow, eroded and constantly experiences increased traffic daily (especially mornings/afternoons from 10am–3pm) majorly consisting of motorbikes and heavy-duty trucks which convey sand to nearby construction sites during the daytime. With a land area of approximately 57ha and the entire perimeter (approx. 3.2km) of the college is fenced off from the surrounding community. Technical workshops such as the Electrical Installation and Maintenance, Painting and Decoration, etc. has been earmarked for rehabilitation owing to their dilapidated state. The access route leading to these workshops are generally earth roads (with noticeable rills and groove formation) which occasionally expels dust. A major finding during visits to this college was that most structures in the college are made of asbestos ceiling (including structures to be rehabilitated). Power supply is a chronic issue, and has significantly affected water availability in the college (a solar powered borehole has been proposed by the CIU to this effect). The college sporadically experiences extreme weather conditions (wind, lightning strikes, etc.) which destroys structures and school infrastructures.	 Roof of Painting & Decoration Workshop at FSTC Doma destroyed due to wind.
FSTC Kuta Shiroro, Niger State	**N9.856911 E6.719373**	FSTC Kuta Shiroro was established in 1988, on a landmass of approximately 31 hectares, completely enclosed by a fence, isolating it from the rest of the Kuta community. The Minna – Kuta highway, the primary route leading to the college, experiences significant traffic during mornings and afternoons, particularly between 10am and 3pm. Access routes to the workshops are generally unpaved, leading to occasional dust expulsion. Additionally, some access roads leading to the workshops designated for rehabilitation have pockets of rills and grooves. During the assessment, several scraps of metal waste and disused items were observed scattered around the college premises, particularly in the Welding and Fabrication section. Proper management of	

Technical College	GPS Coordinates	Site-specific E&S Baseline Conditions	Pictures
		construction waste generated during the rehabilitation is essential to address health and safety risks effectively. Additionally, a comprehensive waste management strategy will contribute to maintaining a clean and safe environment throughout the rehabilitation project. Besides the proposed rehabilitation work for the Brick/Block Laying and Concreting (BLC) Workshop, an additional measure involves constructing a mini-fence or barricade to safeguard moulded blocks from theft. While the Shiroro Local Government Area has experienced security challenges such as banditry and kidnapping in recent years, the CIU team assured the consultants' team that there have been no reported cases of insecurity within the Kuta community lately.	 Metal Scraps littered around the Welding & Fabrication Workshop at FSTC Kuta
FSTC Michika, Adamawa State	**N10.597960 E13.352250**	In 2002, FSTC Michika was established as a co-educational day and boarding school, encompassing both junior and senior secondary sections. It is nestled at the base of the Adamawa highlands, situated about 5km away from Michika township, along the Yola-Maiduguri highway. The college's extensive land area spans 3.7km2 and is enclosed by a fence, separating it from the neighbouring communities of Yambule and Madze. Block Bricks and Concreting (BBC), Catering Workshop and Production (CWP), Electrical Works (EW) are among the major trades offered at this college. Unfortunately, the region has been affected by insurgencies, leading to active military operations and the imposition of a curfew from 6pm to 6am, covering the entire town and its surroundings. The Yola-Maiduguri highway leading to the college experiences high traffic flow during the mornings (10am - 12pm) and afternoons (3pm - 5pm). Additionally, ongoing road construction within the college premises has resulted in fugitive dust generation, affecting air quality. Water availability poses a significant challenge as the college currently has two non-functional boreholes and relies on an abandoned well and tanker supply twice daily. This has led to inadequate water supply, impacting students and staff. To address this, a proposed solar-powered borehole will be drilled near the kitchen area and staff block. Furthermore, academic studies face constraints due to limited classroom and workshop spaces, which are insufficient to accommodate all students. The reason behind this shortage is the damage caused by a Bomb blast in 2014 by Boko Haram members to existing workshops, including the BBC, certain parts of the CWPU, and the EW. Michika's culture is highly diverse, with various languages spoken in the town, such as Nkafa, Dakwa, Krghea, Fwea, Humsi, Moi, etc.	 Roof of Classroom Block at FSTC Michika destroyed by Bomb Blast.
FSTC Uromi, Edo State	**N6.732494 E6.346107**	FSTC Uromi is situated in the built up area of Uromi, along the Onewa Road whose condition has significantly deteriorated and almost unmotorable during the rainy season. The college has a large land area of about 18ha approx. and the entire perimeter is fenced off from the community. Within the college, the earth is sandy and occasionally expels dust. The school currently boasts a student's population of 1,217, with 67.4% being male and 32.6% female. The number of Technical Teachers available in the school is 21. This gives a teacher to student ratio of 1:55. Facilities within the school consists of classrooms, workshops for the various trades offered in the college, an ICT building, Toilets, and office buildings. The current state of these facilities and trade equipment are either dilapidated, outdated or insufficient to cater to the student population. Notably, the college is currently experiencing challenges as regards access to water as the existing boreholes have collapsed. This has consequently affected activities requiring the use of water e.g. Catering Craft Practice	

Technical College	GPS Coordinates	Site-specific E&S Baseline Conditions	Pictures
		(CCP) works (Priority 3) and has informed the planned rehabilitation of existing boreholes which the college. The people of Uromi amongst others within the Esan LGA are commonly known as the Esan people	Worn out ceiling at EEE Workshop
FSTC Ohanso, Abia State.	**N4.889429 EE7.357005**	FSTC Ohanso is located in the Ohanso-Ndoki community of Ukwa East LGA in Abia State, along Obehie-Akwete Azumini Road. It is situated about 3 km from the Azummiri Blue River, surrounded by palm plantations in a remote hamlet. The access road (Obehie-Akwete Azumini Road) leading to the school becomes nearly impassable during the rainy season, posing health and safety risks and potential accidents. The college, encompassing a total land area of approximately 10 hectares (1307.08m perimeter), is fenced off from the community. It consists of several bungalow structures with sandy ground surfaces and Bahama grass around key areas like the administrative block and technical workshops. The student population at FSTC Ohanso is around 1,258 (776 Boys and 482 Girls), with about 76 teaching staff. Visual observations and stakeholder engagement with the college's IDEAS project team revealed that most of the classrooms and workshops are infested with termites. As part of the rehabilitation, the college plans to fumigate these facilities. Additionally, uncompleted buildings serving as practical workshops for students are in a dilapidated state with no roofing, ceilings, doors, windows, or sanitary facilities. To improve water availability within the college, a new borehole will be installed near the Catering Craft Practice (CCP) workshop. The majority of locals in Ohanso-Ndoki community are engaged in sand mining, petty trading, fishing, and agriculture, cultivating food crops such as maize, cassava, yam, cocoyam, and vegetables.	 Interior of the CCP Workshop at FSTC Ohanso
FSTC Jalingo, Taraba State.	**N8.903368 E11.356644**	FSTC Jalingo has two locations: temporary and permanent. Currently, all students reside and academic activities take place at the temporary location in Jalingo. The proposed interventions will be implemented at the permanent site, situated along Jalingo – Wuro Sembe Road, approximately 1km from the Wuro Sembe rural community (around 10km from the more developed capital). Traffic along the Jalingo – Wuro Sembe Road is minimal, mainly occurring during school runs in the morning (6am-9am) and late afternoon (2:30pm-4pm). The permanent site already has several ongoing and completed structures and infrastructures, but no students or staff reside or study there. Extreme weather conditions, particularly windstorms, have caused deterioration in some structures, notably the technical workshops (BBC, MVM, and Garment Making/Fashion Design section). The soil within the college premises is sandy loam and susceptible to erosion. A gully divides the driveway at a distance of approximately 100m from the main entrance, leading to the construction of a temporary access road for vehicles entering the school. Additionally, a seasonal stream (a tributary of the Taraba River) runs through the college from east to west, close to some workshops and the IDEAS Office earmarked for rehabilitation. A few farmlands are located at the southern end of the school. The college houses around 699 students, with 564 male and 135 female students. It shares borders with the Kurkaye, Takanaban, and Kanaban communities, whose residents are predominantly engaged in livelihood activities such as farming, cattle rearing, and various trading and petty trading activities.	 Gully Erosion Site Along the Driveway Leading into the College from the Main Entrance at FSTC Jalingo (Perm Site)
FSTC Ahoada, River State.	**N5.076349 E6.649303**	FSTC Ahoada is located in a peri-urban area in Ahoada town. The college is completely fenced and stretches across a land area of approximately 2 hectares (and a perimeter of 560.29m). It is situated along Old GTC road; a major landmark is the Ahoada prison which is less than 1km from the northernmost end of the college. The entire tracks and driveways within this college are either tarred or interlocked. The management of the college is functional and well established. Currently, the college has a total number of 1,255 students (875 boys and 380 girls respectively). The college operates a staff strength of about 177 Staff (96 males and 81 Females). The college has earmarked some structures for priority renovations due to their dilapidated state. These include workshops such as the Auto-mechanic, Brick/Block Laying and Concreting and Catering Craft Practice. The IDEAS Office has also been identified for rehabilitation and upgrade.	

Technical College	GPS Coordinates	Site-specific E&S Baseline Conditions	Pictures
			Classroom proposed for rehabilitation
FSTC Awka, Anambra.	**N6.199615 E7.063851**	FSTC Awka is located at the site of GTC Awka, across from St. Paul University along Zik Avenue in Awka City. Traffic along this access road leading to the school is light (2-3 minutes), but heavy traffic is observed at the Nkpor ring junction connecting this route. Works Road is a detour which could be leveraged during procurement and haulage of construction materials to the college. The college spans an area of 10.96 hectares with a perimeter of 1,408.29 meters and is completely fenced-off from the built-up and densely populated Amikwo-Awka community. The school's terrain is generally sandy and compact, with asphalted driveways in certain areas. Fruit trees like Coconut, Orange, Mango, and Paw-paw are scattered throughout the college grounds. Since its establishment, the student population has doubled (over 100% increase) to about 2,558 students, with approximately 23% (597) being girls. The teaching staff at FSTC Awka comprises over 100 members, 60% of whom are female. Waste generated in the school is open dumped and occasionally burnt at a central dumpsite. Several ongoing civil construction works were observed near the Motor Vehicle Mechanic (MVM) workshop which has been earmarked for structural rehabilitation under the project. The female dormitory is next to the Catering Craft Practice (CCP) workshop, which is also slated for renovation and expansion. The water tank serving this workshop, the female hostel, kitchen, and refectory may be shared by the Contractor during the planned expansion of the CCP workshop. Restabilization with reinforced concrete pillars is needed at the Computer Craft/ICT building (Priority 3), due to its deplorable condition and dilapidated walls and beams which presents health and safety risks to staff and students of the college. The Amikwo-Awka community, bordering the school, mainly comprises petty traders, businessmen, and civil servants.	 Ongoing civil construction works in proximity to the MVM workshop earmarked for rehabilitation at FSTC Awka.
FSTC Dayi, Katsina State.	**N11.963712 E7.688179**	FSTC Dayi is located in Dayi community, along Dayi-Malumfashi highway, Malumfashi LGA, Katsina State. Dayi is a rural community where farming and trading of agricultural produce are the main activities. The surrounding environment is characterized by a semi-arid to arid climate with a distinct dry season and a short rainy season. Vegetation in Dayi and particularly within this college is typically sparse, consisting of drought-resistant grasses, shrubs, teak and acacia trees. The school interior has a level terrain characterized by sandy soil and lacks paved surfaces and drainage. There are over 600 students, with about 80% being male. The project team at the college have identified some existing workshops which are currently dilapidated including other outdoor learning infrastructure such as a demonstrative farm, fish pond, greenhouse, and orchard for priority rehabilitation under the project. Despite being known for banditry, Dayi and nearby towns have experienced relative calmness in recent periods. The college is securely fenced with presence of local vigilante and police, along with a security watchtower.	 ICT Center proposed for rehabilitation at FSTC Dayi
FSTC Ijebu Imushin, Ogun State	**N6.788621 E4.010069**	FSTC Ijebu-Imusin is completely fenced and spans approximately 110 hectares (perimeter: 4,230 meters). It is bordered by two communities (Itamogiri and Isagunsen) and located along the busy Old Benin - Ore road. Adjacent to the college are the Ijebu-Imusin police station and Tulip cocoa processing company. The local economy relies on agriculture and petty trading. The college enrolls over 2000 students (day and boarding) and employs around 270 staff. The soil type is generally sandy, and eastward of the plumbing workshop, tiny rills form due to the absence of proper drainage for rainwater and run-off. The college which has been in operation for over 25 years has seen a significant increase in its student population, hence the need for the extension and upgrade of the technical workshops to cater for the new intakes. Some of the workshops that have been	

Technical College	GPS Coordinates	Site-specific E&S Baseline Conditions	Pictures
		identified include EEE, ICT/Robotics and the Construction section.	Rill formation along the access route leading to the plumbing workshop
FSTC Tungbo, Bayelsa State.	**N5.130305 E6.172133**	FSTC Tungbo is in Tungbo, a riverine community in Sagbama LGA, Bayelsa State. It's located along Tungbogiri road, less than 500km from the River Niger and features rainforest vegetation. Opposite the college entrance are various socioeconomic activities like petty trading, carpentry shops, welding outlets, etc. The CIU team plans to involve some of these local artisans for skilled/unskilled labor during the college's rehabilitation, as they are part of the SBMCs and PTA of the college. The workshops at the college are over 2 decades old and in deteriorating condition (needing repairs to beams, pillars, doors, and windows, etc.). The college currently has over 1000 students and approximately 60 staff. Due to its proximity to the Niger river, Tungbo community experiences seasonal floods, and the college was affected during the Nigerian flood of 2022. Residents of the Tungbo practice agriculture, fishing, lumbering, hunting, carving and petty trading.	 Brick/Block Laying and Concreting Workshop at FSTC Tungbo requiring renovation.
FSTC Yaba, Lagos State.	**N6.522242 E3.378314**	FSTC Yaba is situated in Yaba, a popular peri-urban area regarded as the heartbeat of Lagos Mainland, Lagos State, Nigeria. There are several federal government institutions in the area and in proximity to the college, which include Queen's College, the Nigerian Institute of Medical Research, the Yaba College of Technology, Igbobi College, the University of Lagos and the Federal College of Education (Technical) Akoka. The college has two entrances both of which lie along the Morris and Military roads. Commercial activities are high in this area and has resulted in increased traffic level along both roads, particularly during late morning to afternoon hours. Within the school, the terrain is levelled. The soil within the school premises is generally sandy-clay whereas the driveways from the main entrance of the college to the remaining parts of the college is interlocked and surface dressed. FSTC Yaba has a large student population of about 5,910 students (3,488 boys and 2,422 girls respectively). The college also operates a staff strength of about 531 Staff. There is need for the rehabilitation of the workshops in the colleges due to overstay and deteriorating conditions.	 Furniture Making Workshop earmarked for renovation at FSTC Yaba.
FSTC Zuru, Kebbi State.	**N11.425906 E5.243700**	This college has two sites: the temporary and permanent site. While academic activities are currently ongoing at the temporary site situated along Zuru-Ribah road; the permanent site which is approximately 5km from the temporary site is devoid of any activity or residents. Zuru is prone to banditry and insecurities which may be the reason behind the heavy presence of the military along the road and at strategic locations within the community. The BLC, MVM and Electrical Laboratory will require some makeover owing to their long overstay without being put to use.	
FSTC Ikare Akoko, Ondo State.	**N7.539231 E5.721399**	The college is located in a rural area on the outskirts of Ikare town along the Ado Ekiti – Ikare expressway. It covers approximately 15.5 hectares and is completely fenced off from surrounding communities. The expressway has minimal traffic congestion and is mainly used during festive periods. The college is coeducational and offers full boarding for male and female students. It currently has around 1029 students, with a growing demand for technical education. During site visits, it was observed that most technical and vocational training workshops are in poor condition with detached roofs and dilapidated ceilings, particularly the Carpentry and Joinery Workshop, which will require complete demolition of the existing PVC ceiling. The college plans to construct classroom partitions in existing workshops to accommodate more students during workshop sessions. Waste is openly dumped in the school and burnt in an open pit every two weeks. Surrounding areas outside the	

Technical College	GPS Coordinates	Site-specific E&S Baseline Conditions	Pictures
		school are characterized by palm plantations, and some palm trees within the school may need to be uprooted for proposed workshop expansions. The neighbouring communities (Oke Ila, Ogbagi Akoko, and Oke Egbe) mainly engage in commercial food crop production such as maize, cassava, yam, cocoyam, and tomatoes, as well as cash crops like oil palm and groundnuts.	**Open dumping of waste and open pit where waste is collected and burnt in the college.**
FSTC Ilesha, Osun State.	**N7.635958 E4.754410**	FSTC Ilesha is in Ilerin community, a densely populated and urbanized area of Ilesha East LGA, Osun State, Nigeria. The coeducational college is situated along Oja Oba Ijebu Ijesha – Oke Mesi Road, with Methodist High School Ilesha directly opposite. The college spans around 10 hectares, entirely fenced off from surrounding communities. The road can be congested during peak hours due to school runs and activity of commuters. The terrain inside the school is fairly level, sloping towards the main entrance. The college has various facilities, including staff quarters, a clinic, e-library, laboratories, and technical workshops. There are about 180 staff members and over 1500 students in the college, with 69% male and 31% female students. Access to water is a challenge as all five boreholes are currently dysfunctional. The Plumbing and Pipe Fitting Workshop (Priority 2) and the Motor Vehicle Mechanic Workshop (Priority 3) are surrounded by trees some of which may need to be cleared to give way for planned expansions. Rehabilitation activities will include removing obsolete asbestos boards in the technical drawing studio. The Ilerin community mainly consists of businessmen involved in petty trading, civil servants, and farmers engaged in poultry and livestock production.	 **Open dumping of waste and open pit where waste is collected and burnt in the college.**
FSTC Usi-Ekiti, Ekiti State.	**N7.885698 E5.172193**	FSTC Usi-Ekiti is located along Ido-Ayetoro highway in Usi-Ekiti LGA of Ekiti State. The highway is less often used by commuters and experiences less traffic. Within the college, the access road from the college's main entrance all the way to the workshops that need to be renovated is made of sand and periodically expels dust. There are also several potholes, rills and grooves along this road. Demolitions are currently underway at the Abuja hostel proposed for rehabilitation and conversion into W&F, MVM (Priority 1) and AMW (Priority 2). There is need for the obsolete roof and asbestos ceilings removed from the buildings to be collected and temporarily stored safely at a designated point prior to disposal by EKWAMA. At the fishery section (Priority 2), there is currently no sewer or drainage/outlet for wastewater from the fish pond. Thus the discharge of wastewater to adjacent areas and farms surrounding the fish pond has resulted in odorous conditions in this areas. Noise is high around the SS2E classroom and science laboratory in proximity to the Abuja hostel as some sections the hostel is currently being demolished for conversion into technical workshops. Open dumping of waste is a major practice in the college.	 **Fish Pond at the Fishery Section of FSTC Usi Ekiti**
FSTC Kafanchan, Kaduna State.	**N9.599665 E8.321549**	FSTC Kafanchan is located along Kafanchan-Kagoro road, Kafanchan, Kaduna state. The town lies within the Southern Guinea Zone, consisting of forests and savannah lands, and is located southwest of the Jos Plateau escarpment on the windward region. The college has a land area of about 16 hectares out of which 50% is built up. The soil within the college premises typically comprise of a coarse lateritic earth material. The entirety of the college lands is completely fenced off from the community. Kafanchan and the southern Kaduna as a whole experiences insurgencies and banditry sporadically, particularly in 2022. There are over 1500 students in the school most of which are male students (about 60%), the rest are female. The proposed rehabilitation for the college according to their CIP is to include: rehabilitation of workshops (Carpentry and Joinery, Painting and Decoration, Brick/Block Laying and Concreting, etc.) will involve a total makeover of these structures which are now in a deplorable state due to overstay without structural rehabilitation and maintenance.	
FSTC Uyo, Akwa Ibom State.	**N5.023785 E7.917174**	FSTC Uyo is presently located in Aka Community, along the Ukana Offot Street, off Abak Road, Uyo. The college occupies a land area of approx. 13 hectares and is situated in a densely populated area in Uyo town. Within the school premises, the topography is flat and the driveway within the school is surface dressed and	

Technical College	GPS Coordinates	Site-specific E&S Baseline Conditions	Pictures
		decorated with ornamental trees on both sides. With the exception of a few classroom blocks built for senior secondary students, the majority of the buildings in the school are bungalow houses. It is noteworthy to state that the college operates a robust and functional security system and the entire perimeter of the school is fenced off from the neighbouring community. Remarkably, the school has experienced a surge in demand for technical education and increased students' admission since its relocation from the rural Nsit Atai to the more urbanized Abak LGA (approx. 2500% increase from 55 to 1,400 students). Altogether, the school boasts a teaching and non-teaching staff strength of over 50 employees. Waste is improperly managed within the school as pockets of open dumps can be visibly sighted at different locations within the school. Furthermore, litters of demolition waste can also be seen at various sites in the college. Based on these observations, there is need to ensure and assure the safe management of construction and demolition wastes resulting from the intervention works at the college, (particularly asbestos boards) to foster health and safety of staff and students. Major inhabitants of Abak LGA are mostly Christians who are members of the Annang tribe. The Aka community locals are predominantly farmers and sundry traders. Other economic activities include Palm Wine Tapping Palm Oil Trading, Pottery and Raffia Weaving.	 Disused board ceilings improperly discarded at the surroundings of the IDEAS Office
FSTC Otukpo, Benue State.	**N7.198360 E8.139329**	FSTC Otukpo is located in Akpegede, a rural community at the outskirts of Otukpo LGA, Benue state. The college spans 304.39 hectares and is accessed via the Otukpo–Ikache road. There are schools, a Primary Health Care center, and residential buildings along the dirt road leading to the school, causing air pollution from fugitive dust. The community is sparsely populated, mostly consisting of farmers with a few traders and civil servants. The school is approximately 10km from Otukpo main market, making it a potential location for contractors to obtain rehabilitation materials. The soil within the school is predominantly red/brownish clay. Some areas of the 200m double lane driveway from the main entrance of the college are interlocked while others are under construction which also contributes to the increased fugitive dust especially during harmattan. The school premises feature low cut grasses, flowers, and various trees, used for decoration and aesthetics. The school has a sports complex with a pavilion housing sports facilities. Water scarcity is severe in the Akpegede community due to a low water table. FSTC Otukpo lacks functioning boreholes and relies on a designated water tanker for supply. A new borehole is needed on the school premises to address the water shortage.	 Toilet proposed for rehabilitation

4.3 Environmental Baseline Studies

Baseline data was acquired during field visits within the boundaries of the project locations. This is in order to ensure management of project-related adverse impacts, on the baseline levels.

4.3.1 Sampling Methodology

Groundwater samples were planned to be collected from FSTCs where boreholes are to be installed/rehabilitated (12 FSTCs in total) and water reticulation is proposed. However, nine (9) groundwater samples were collected, which is less than the planned number (twelve (12) samples). The limitation in sample collection arose from dysfunctional boreholes in certain colleges, such as FSTC Uromi and FSTC Otukpo, during the field visits, resulting in a reduced number of samples. Twenty (20) soil samples (Top Soil –TS) were collected from locations where the contractors may likely erect their equipment staging areas at the respective FSTCs (samples were subjected to composite analysis).

Groundwater samples were collected from few functional boreholes and wells currently in use at the colleges. It is noteworthy that the boreholes serve as the only means of potable water supply for the students and staff within these colleges, some colleges have resorted to external water vendors to enhance water supply within their colleges. In boarding schools, the boreholes and wells also serve other domestic purposes for the boarders such as bathing, laundry, etc.

Air quality analysis was carried out using a Testo 350 XL. Measurements were taken in the various school premises. Noise levels were also collected in a similar manner using a Testo 815 Noise meter.

4.3.2 Groundwater Analysis

Groundwater samples were collected from wells and boreholes within the nine (9) technical colleges using sterile dark coloured 100ml bijour bottles. Samples for heavy metals and physiochemical studies were also collected in their respective coded plastic containers and stored in ice-packed coolers. Samples were preserved in refrigerators at 4˚C prior to laboratory analyses. Fast changing physiochemical parameters such as pH, Conductivity, and Total Dissolved Solids (TDS) etc. were measured in-situ using an in-situ water analyzer.

4.3.2.1 Physiochemical Properties of Groundwater Samples

The physiochemical analysis showed that all analyzed samples were mostly within the FMEnv permissible limits, except for FSTC Michika. The values for Turbidity (465mg/l), Total Dissolved Solids (831mg/l), Total Suspended Solids (934), Nitrates (160mg/l), and Phosphate (36mg/l) in samples obtained from FSTC Michika exceeded the FMEnv limits of 100mg/l, 500mg/l, 500mg/l, 50mg/l, and 5mg/l respectively. See Table 13 below for the summary of the physiochemical analysis of groundwater samples obtained from the technical colleges.

Table 13: Results of Physiochemical Analysis of Groundwater Samples.

Technical Colleges	Geocodes of Sampling Point	Date	Time	Parameters									
				pH	Cond. (µs/cm)	Turbidity (NTU)	TDS (mg/l)	TSS (mg/l)	Nitrates (mg/l)	Sulphate (mg/l)	Calcium (mg27.5/l)	Chloride (mg/l)	Phosphate (mg/l)
FSTC Uyo	N5.023536 E7.918873	03/02/23	12:43PM	7.9	401	57	301	412	22.7	203	23	121	3.43
FSTC Kafanchan	N9.600123 E8.321633	21/12/22	02:19PM	7.6	281	32	231	201	13.3	153	34.5	76	2.29
FSTC Ilesha	N7.635770 E4.754508	20/12/22	09:49AM	8.7	197	12	192	391	19	292	17	98	0.70
FSTC Michika	N10.596389 E13.349444	21/12/22	11:35AM	8.4	936	465	831	934	160	3.04	20	81	36.0
FSTC Zuru	N8.898936 E5.243448	03/02/23	03:15PM	8.02	641	49.2	321	436	27	324	6.6	197	3.17
FSTC Orozo	N8.898936 E7.567520	06/12/22	01:32PM	7.4	308	54	412	287	40.1	281	21	23	0.34
FSTC Jalingo	N8.903114 E11.355038	19/12/22	11:21AM	7.57	19	9.5	200.5	344	29	30	33	46	0.21
FSTC Ijebu Imushin	N6.788869 E4.010395	20/12/22	10:53AM	8.7	201	57	184	140	33	197	49	17	2.87
FSTC Doma	N8.401060, E8.325748	19/12/22	01:15PM	7.3	30	2.6	26	200	46.9	14	0.9882	81	1.45

FMEnv Permissible Limit	6.5-9.0	1000	100	500	500	50	500	75	250	5

The samples from FSTC Michika were taken from an abandoned well in the college, which may account for the high Turbidity, TDS, and TSS levels observed. Elevated Nitrate and Phosphate values may have resulted from potential leaching of NPK fertilizers used for soil amendment in nearby school farmlands. The well has dried up and is no longer in use; it has been converted into a dumpsite according to the project manager's update.

4.3.2.1 Heavy Metal Properties of Groundwater Samples

In Table 14 below, the heavy metal properties of groundwater samples (collected from wells, boreholes) were within the FMEnv limits.

Table 14: Heavy Metal Properties of Groundwater Samples.

Technical Colleges	Geocodes of Sampling Point	Date	Time	Parameters			
				Nickel (Ni) mg/l	Zinc (Zn) mg/l	Lead (Pb) mg/l	Iron (Fe) mg/l
FSTC Uyo	N5.023536 E7.918873	03/02/23	12:43PM	0	0.02	0.002	0.01
FSTC Kafanchan	N9.600123 E8.321633	21/12/22	02:19PM	0.04	0.33	0.003	0.1
FSTC Ilesha	N7.635770 E4.754508	20/12/22	09:49AM	0	0.05	0.00	0.02
FSTC Michika	N10.596389 E13.349444	21/12/22	11:35AM	0	0.0423	0.002	0.16
FSTC Zuru	N8.898936 E5.243448	03/02/23	03:15PM	0.01	0.0821	0.003	0.01
FSTC Orozo	N8.898936 E7.567520	06/12/22	01:32PM	0	0.0335	0.001	0.23
FSTC Jalingo	N8.903114 E11.355038	19/12/22	11:21AM	0	0.045	0.001	0.02
FSTC Ijebu Imushin	N6.788869 E4.010395	20/12/22	10:53AM	0	0.0338	0.004	0.01
FSTC Doma	N8.401060 E8.325748	19/12/22	01:15PM	0.00	0.0338	0.00	0.2301
FMEnv Permissible Limit				**0.10**	**3.00**	**0.01**	**0.30**

4.3.3 Soil Analysis

Soil samples were collected using a manual soil auger at locations which may be used as potential staging areas within the technical colleges. Topsoil samples were taken at a depth of 0-15 cm and stored in high UV-resistant containers after wrapping in aluminum foil. Physiochemical and heavy metal samples were placed in coded plastic bags.

4.3.3 Physiochemical and Heavy Metal Properties of Soil Samples

Soil samples obtained from all the FSTCs revealed pH values that are within the FMEnv permissible limits. See Table 15 below.

Table 15: Physiochemical Properties of Soil.

S/N	Technical Colleges	Geocodes of Sampling Point	Date	Time	Parameters				
					pH	Conductivity µs/cm	Total Organic Carbon (TOC)%	Soil Organic Matter (SOM)%	Phosphate mg/kg
1.	FSTC Uyo	N5°1'24.7296" E7°55'7.9428"	03/02/23	12:55PM	7.2	141	4.2	4.312	6.7
2.	FSTC Kafanchan	N9°36'0.4428" E8°19'17.8788"	21/12/22	02:32PM	6.2	113	2.47	3.8	8.9
3.	FSTC Ilesha	N7°38' 8.772" E4°45'16.2288"	20/12/22	10:02AM	7.3	128	3.72	5.67	9.46
4.	FSTC Michika	N10°35'47.0004" E13°20'57.9984"	21/12/22	12:23AM	7.7	125	2.21	3.1517	8.7
5.	FSTC Zuru	N8°53'56.1696" E5°14'36.4128"	03/02/23	03:49PM	6.8	131	2.00	3.241	7.9
6.	FSTC Orozo	N8°53'56.1696" E7°34'3.072"	06/12/22	12:43PM	6.9	123	2.45	2.6713	8.56
7.	FSTC Jalingo	N8° 54' 11.2104"	19/12/22	11:47AM	7.09	134	2.45	5.83	9.1

S/N	Technical Colleges	Geocodes of Sampling Point	Date	Time	Parameters				
					pH	Conductivity µs/cm	Total Organic Carbon (TOC)%	Soil Organic Matter (SOM)%	Phosphate mg/kg
		E11°21'18.1368"							
8.	FSTC Ijebu Imushin	N6.788869 E4.010395	20/12/22	11:23AM	6.5	173	3.21	4.53	8.67
9.	FSTC Doma	N8.401060 E8.325748	19/12/22	01:50PM	7.1	162	3.61	3.46	9.73
10.	FSTC Otukpo	N7°08'13.06" E8°10'06.46"	21/12/23	02:15PM	7.4	149	4.12	3.51	7.83
11.	FSTC Kuta Shiroro.	N 9.858055 E6.7200000	20/12/22	03:00PM	6.07	115.33	2.24	3.167	8.43
12.	FSTC Dayi	N11°57'41.58" E7°41'07.88"	1/2/23	03:30PM	8.23	124	3.11	4.32	9.75
13.	FSTC Ohanso	N7°53'09" E5°10'22"	22/12/2022	01:29PM	6.3	167	3.42	4.65	8.92
14.	FSTC Awka	N6°12'03.49" E7°03'50.95"	6/12/22	2:30PM	6.8	158	3.56	4.72	8.71
15.	FSTC Tungbo	N5°07'35.60" E6°10'04.80"	2/2/23	3:00PM	5.9	164	4.9	4.5	7.24
16.	FSTC Uromi	N6°43'54.90" E6°20'42.10"	3/2/23	2:00PM	6.6	142	4.2	4.234	8.20
17.	FSTC Ahoada	N5.0752 E6.6494	3/2/23	02:00PM	6.67	112	4.11	2.71	7.18
18.	FSTC Usi-Ekiti	N7°53'07" E5°10'20"	21/12/23	01:05PM	6.2	116	5.21	2.51	6.17
19.	FSTC Yaba	N6°30'20.75" E3°21'52.66"	23/12/23	2:30PM	6.74	152	3.54	3.12	7.32
20.	FSTC Ikare Akoko	N7°32'18.13" E5°43'21.46"	3/2/23	12:00PM	7.4	182	3.47	3.74	7.67
FMEnv Maximum Permissible Limit (MPL)					5.5 – 9.0	N/A	N/A	N/A	N/A

Heavy Metal Analysis of Soils at the Colleges

The heavy metal results (mg/kg) of the soil samples as provided in table 16 shows that FMEnv limits were not exceeded.

Table 16: Heavy Metals in Soil

S/N	Technical Colleges	Geocodes of Sampling Point	Date	Time	Parameters					
					Cu (mg/kg)	Zn (mg/kg)	Pb (mg/kg)	Ni (mg/kg)	Cr (mg/kg)	Cd (mg/kg)
1.	FSTC Uyo	N5°1'24.7296" E7°55'7.9428"	03/02/23	12:55PM	5.62	0.3467	0.8367	2.3879	ND	0.0221
2.	FSTC Kafanchan	N9°36'0.4428" E8°19'17.8788"	21/12/22	02:32PM	7.31	0.2561	1.9571	0.7896	13.21	1.8643
3.	FSTC Ilesha	N7°38' 8.772" E4°45'16.2288"	20/12/22	10:02AM	4.32	0.8329	0.5843	1.2475	7.351	0.4159
4.	FSTC Michika	N10°35'47.0004" E13°20'57.9984"	21/12/22	12:23AM	3.667	0.3776	0.8096	0.5286	8.541	0.493
5.	FSTC Zuru	N8°53'56.1696" E5°14'36.4128"	03/02/23	03:49PM	5.37	0.8713	0.8367	0.0221	6.3	0.6567
6.	FSTC Orozo	N8°53'56.1696" E7°34'3.072"	06/12/22	12:43PM	13.6	0.2879	1.9571	1.8643	ND	0.4269
7.	FSTC Jalingo	N8° 54' 11.2104" E11°21'18.1368"	19/12/22	11:47AM	6.59	0.6671	0.5843	0.4159	ND	0.0347
8.	FSTC Ijebu Imushin	N6.788869 E4.010395	20/12/22	11:23AM	7.43	0.4468	0.1432	0.0034	ND	0.6392
9.	FSTC Doma	N8.401060 E8.325748	19/12/22	01:50PM	6.73	0.327	0.818	0.853	ND	0.757
10.	FSTC Otukpo	N7°08'13.06" E8°10'06.46"	21/12/23	02:15PM	8.31	0.8329	1.8852	1.6753	9.2	0.1476
11.	FSTC Kuta Shiroro.	N 9.858055 E6.7200000	20/12/22	03:00PM	7.906	0.017	0.22	0.0467	5.7	0.747
12.	FSTC Dayi	N11°57'41.58" E7°41'07.88"	1/2/23	03:30PM	12.71	0.4435	0.8367	1.1245	11.76	0.6754
13.	FSTC Ohanso	N7°53'09" E5°10'22"	22/12/2022	01:29PM	7.473	0.1782	1.9571	0.0031	ND	0.4078
14.	FSTC Awka	N6°12'03.49"	6/12/22	2:30PM	13.21	0.6542	0.5843	0.7882	ND	0.5902

S/N	Technical Colleges	Geocodes of Sampling Point	Date	Time	Parameters					
					Cu (mg/kg)	Zn (mg/kg)	Pb (mg/kg)	Ni (mg/kg)	Cr (mg/kg)	Cd (mg/kg)
		E7°03'50.95"								
15.	FSTC Tungbo	N5°07'35.60" E6°10'04.80"	2/2/23	3:00PM	7.351	0.3815	0.1432	2.3414	ND	0.3456
16.	FSTC Uromi	N6°43'54.90" E6°20'42.10"	3/2/23	2:00PM	8.541	0.5207	1.4729	0.4137	ND	0.2345
17.	FSTC Ahoada	N5.0752 E6.6494	3/2/23	02:00PM	6.3	0.560	0.678	0.6907	ND	0.6
18.	FSTC Usi-Ekiti	N7°53'07" E5°10'20"	21/12/23	01:05PM	9.21	0.4435	0.9213	0.1025	ND	0.6754
19.	FSTC Yaba	N6°30'20.75" E3°21'52.66"	23/12/23	2:30PM	8.67	0.1782	1.0346	1.9876	ND	0.4078
20.	FSTC Ikare Akoko	N7°32'18.13" E5°43'21.46"	3/2/23	12:00PM	6.56	0.6542	1.7842	0.0954	ND	0.5902
	FMEnv Maximum Permissible Limit				**36**	**50**	**85**	**35**	**100**	**0.8**

4.3.4 Air Quality Measurements

Air quality measurements was carried out using a Testo 350 XL device at technical workshops, classrooms, and offices in technical colleges scheduled for structural rehabilitation, upgrades, and expansion. On average, the measurements yielded results within permissible limits, except for Total Suspended Particulate Matter (SPM) at FSTC Michika, which recorded 305µg/m³, surpassing the FMEnv limit of 250µg/m³ (table 17). This elevated SPM level could be attributed to the ongoing road construction from the college's main entrance to its interior.

Table 17: Results of the Average Air Quality Measurements for the Project Sites at the FSTCs.

S/N	Technical Colleges	Geocodes of Sampling Point	Date	Time	Parameters								
					CO	NOx	Sox	NH4	H2S	VOC	SPM 2.5	SPM10	SPM TOTAL
1.	FSTC Uyo	N5.023536 E7.918873	03/02/23	12:43PM	<0.01	<0.01	<0.01	<0.01	<0.01	0.0452	83.72	42.35	126
2.	FSTC Kafanchan	N9.600123 E8.321633	21/12/22	02:19PM	<0.01	<0.01	<0.01	<0.01	<0.01	0.0736	64	58	122
3.	FSTC Ilesha	N7.635770 E4.754508	20/12/22	09:49AM	<0.01	<0.01	<0.01	<0.01	<0.01	0.0225	115.39	61.72	177
4.	FSTC Michika	N10.596389 E13.349444	21/12/22	11:35AM	<0.01	<0.01	<0.01	<0.01	<0.01	0.006	237	68.33	305
5.	FSTC Zuru	N8.898936 E5.243448	03/02/23	03:15PM	<0.01	<0.01	<0.01	<0.01	<0.01	0.0800	92	38.91	131
6.	FSTC Orozo	N8.898936 E7.567520	06/12/22	01:32PM	<0.01	<0.01	<0.01	<0.01	<0.01	0.0148	42.85	70	113
7.	FSTC Jalingo	N8.903114 E11.355038	19/12/22	11:21AM	<0.01	<0.01	<0.01	<0.01	<0.01	0.0563	103.13	50.14	153
8.	FSTC Ijebu Imushin	N6.788869 E4.010395	20/12/22	10:53AM	<0.01	<0.01	<0.01	<0.01	<0.01	0.0327	78	46.88	125
9.	FSTC Doma	N8.401060 E8.325748	19/12/22	01:15PM	<0.01	<0.01	<0.01	<0.01	<0.01	0.021	41.67	63.67	105
10.	FSTC Otukpo	N7°08'13.06" E8°10'06.46"	21/12/23	02:15PM	<0.01	<0.01	7.0	<0.01	<0.01	0.0019	38.19	40	78
11.	FSTC Kuta Shiroro.	N 9.858055 E6.7200000	20/12/22	03:00PM	<0.01	<0.01	<0.01	<0.01	<0.01	0.006	142.67	70.7	213
12.	FSTC Dayi	N11°57'41.58" E7°41'07.88"	1/2/23	03:30PM	<0.01	<0.01	<0.01	<0.01	<0.01	0.0684	73	68.59	142
13.	FSTC Ohanso	N7°53'09" E5°10'22"	22/12/2022	01:29PM	<0.01	<0.01	<0.01	<0.01	<0.01	0.034	87	35.33	122
14.	FSTC Awka	N6°12'03.49" E7°03'50.95"	6/12/22	2:30PM	<0.01	<0.01	<0.01	<0.01	<0.01	0.0072	55.47	38.91	94
15.	FSTC Tungbo	N5°07'35.60" E6°10'04.80"	2/2/23	3:00PM	<0.01	<0.01	<0.01	<0.01	<0.01	0.0791	47.62	70	118
16.	FSTC Uromi	N6°43'54.90" E6°20'42.10"	3/2/23	2:00PM	<0.01	<0.01	<0.01	<0.01	<0.01	0.0266	120	50.14	170
17.	FSTC Ahoada	N5.0752 E6.6494	3/2/23	02:00PM	<0.01	<0.01	<0.01	<0.01	<0.01	0.006	91.33	25.67	217
18.	FSTC Usi-Ekiti	N7°53'07" E5°10'20"	21/12/23	01:05PM	<0.01	<0.01	<0.01	<0.01	<0.01	0.0203	56.3	35.3	92

S/N	Technical Colleges	Geocodes of Sampling Point	Date	Time	Parameters								
					CO	NOx	Sox	NH4	H2S	VOC	SPM 2.5	SPM10	SPM TOTAL
19.	FSTC Yaba	N6°30'20.75" E3°21'52.66"	23/12/23	2:30PM	<0.01	<0.01	<0.01	<0.01	<0.01	0.0035	104.81	38.91	144
20.	FSTC Ikare Akoko	N7°32'18.13" E5°43'21.46"	3/2/23	12:00PM	<0.01	<0.01	<0.01	<0.01	<0.01	0.0652	89	70	159
21.	FMEnv Permissible Limits				10	0.04 – 0.06	0.01	0.2	-	0.1	<250	73.8	250

4.3.4 Noise Level

Noise Levels (NL) were measured using a Testo 815 Noise meter. Noise levels were measured with the corresponding coordinates as those for air measurements. Locations measured showed results within FMEnv/WHO maximum permissible limits as shown in the Table 18 below.

Table 18: Noise Levels at the Project Sites (Decibels): FMEnv Limit=70dB; WHO Limit=90dB

S/N	Technical Colleges	Noise Levels	
		Max (dB)	Min (dB)
1.	FSTC Uyo	51.76	31
2.	FSTC Kafanchan	37	15.77
3.	FSTC Ilesha	58.32	27
4.	FSTC Michika	31	15
5.	FSTC Zuru	51.76	25.12
6.	FSTC Orozo	37	21
7.	FSTC Jalingo	58.32	39.76
8.	FSTC Ijebu Imushin	51.76	18.34
9.	FSTC Doma	23	14.5
10.	FSTC Otukpo	59.12	32
11.	FSTC Kuta Shiroro.	33	15
12.	FSTC Dayi	39.76	17.89
13.	FSTC Ohanso	34	19.6
14.	FSTC Awka	27.4	20
15.	FSTC Tungbo	50	28.45
16.	FSTC Uromi	62	35
17.	FSTC Ahoada	43	35
18.	FSTC Usi-Ekiti	72.1	47.13
19.	FSTC Yaba	36.22	22.67
20.	FSTC Ikare Akoko	41	19

4.4 Socioeconomic Studies

Primary Data: A random survey was carried out across all schools under study. Semi-structured questionnaires were administered to respondents (Staff, Students, Youth Corp Members) within the project corridors. Twenty (20) technical colleges was surveyed. The planned sample population was 40 respondents for each technical college; however, the actual number varied based on staff and student availability during the field visit (i.e. December 2022). Notwithstanding these constraints, 30 respondents were surveyed at each of the FSTCs whose responses were retrieved and analysed. The survey was designed to understand the socioeconomic conditions within and around the FSTCs and project communities.

Summary of Socioeconomic Studies

The summary of the socioeconomic survey across the twenty (20) FSTCs is provided in the pie charts below.

Gender Disaggregation Population of Girls and Boys at the FSTCs: 100% of the schools are mixed (boys and girls). However, the overall male to female student's population at the technical colleges is in the ratio of 63:37 percent. In general, girls account for 37% and boys 63% of the student population in all schools. See figure 5.

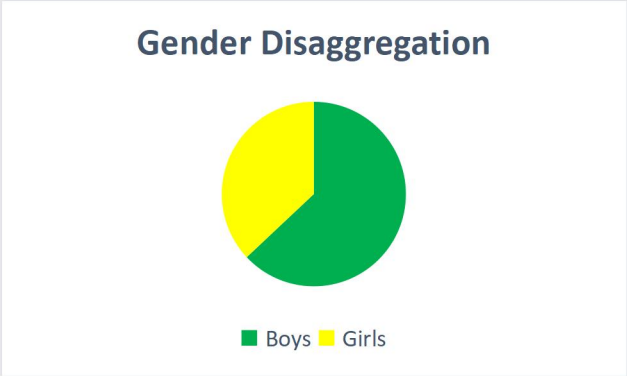

Figure 5: Gender Disaggregation of Girls and Boys at the FSTCs.

Size of the Technical Colleges: Based on the student population at the colleges, the schools were categorized into Large Sized (>1500 students), Medium-Sized (500-1500 Students) and Small-Sized (<500 Students). Based on the results of the socioeconomic survey at the colleges, 30% (180) of the technical colleges were large sized while 70% (420) were medium sized. None of the technical colleges was classified as small. See figure 6.

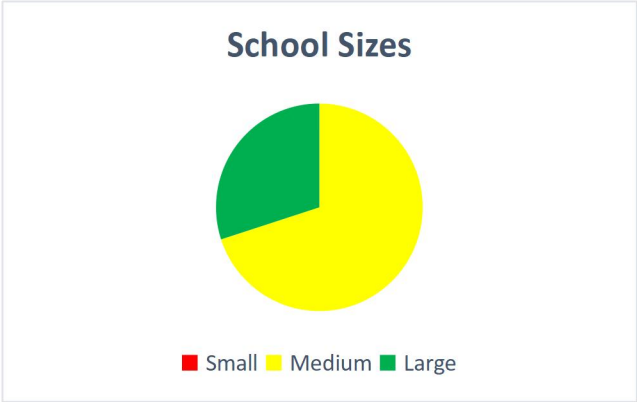

Figure 6: Size of the Technical Colleges.

Percentage of Technical Colleges with Bad Toilet Facility: According to the survey questionnaire and CIPs assessment 95% (570) of the FSTCs will require toilet rehabilitation/renovation at the workshops, classrooms and offices earmarked for structural rehabilitation. Only about 5% (30) of the technical colleges will not require toilet rehabilitation. See figure 7.

Figure 7: Percentage of Technical Colleges with Bad Toilets.

Water Supply Infrastructure: Similarly, only 60% of technical colleges will require the rehabilitation or installation of water supply infrastructures (including solar boreholes, overhead tanks and water reticulation works). Based on stakeholder engagements, these colleges constantly face water challenges due to shallow wells, no or insufficient boreholes, inadequate power source (hence their need for solar boreholes), etc. (figure 8).

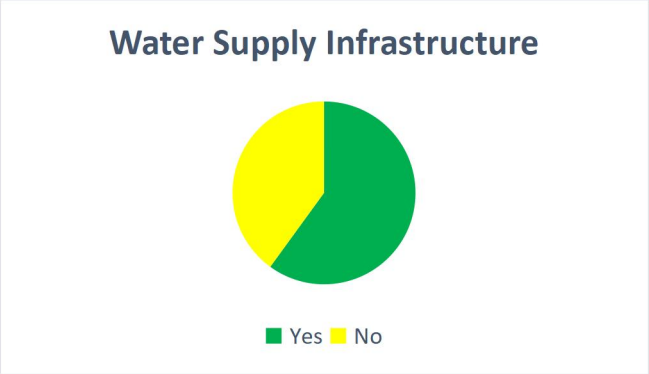

Figure 8: Technical Colleges requiring Rehabilitation Of Water Supply Infrastructure.

Locations Prone to Insecurity: The survey results showed that about 25% (150) of the technical colleges are located in bandit occupied territories or whose LGAs have experienced significant insecurities in the past, while 75% (450) are not located in bandit occupied territories. These locations include FSTC Michika, FSTC Kuta Shiroro, FSTC Zuru, FSTC Dayi and FSTC Kafanchan. See figure 9.

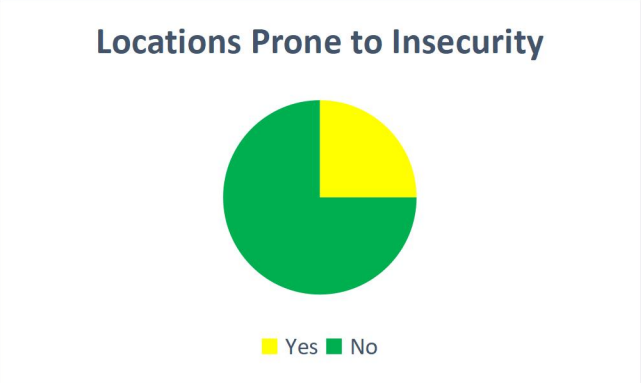

Figure 9: Schools in Bandit Occupied Territory.

Percentage of Schools with Asbestos Ceiling to be Removed: According to the field assessments, only about 20% (120) of the technical colleges require removal of asbestos ceiling while 80% (480) of the schools does not require removal of asbestos ceiling. These colleges include FSTC Ilesha, FSTC Usi-Ekiti, FSTC Uyo and FSTC Doma. See figure 10.

Figure 10: Colleges Requiring the Removal of Asbestos Ceilings.

Assessment of Healthcare Facility Access: Respondents rated access to public healthcare facilities as "Very Good[6]" in 40% of the FSTCs. Notably, colleges like FSTC Yaba, FSTC Uyo, FSTC Awka, FSTC Jalingo, and FSTC Otukpo, located in communities with access to secondary healthcare facilities, fall within this category. On the other hand, approximately 45% of respondents across the colleges considered access to public healthcare facilities as "Good," while the remaining 15% perceived it as "Fair." These areas have operational primary healthcare facilities readily available to address the health requirements of both staff and students. See figure 11.

Figure 11: Access to Public Healthcare Facilities

Access Roads leading to the Colleges: Access roads to the colleges were adjudged "Very Good" by 60% of the respondents, probably because most of the colleges are situated along major roads and highways which are tarred and accessible. Only 15% of the respondents rated the road conditions to their colleges as "Poor". See figure 12.

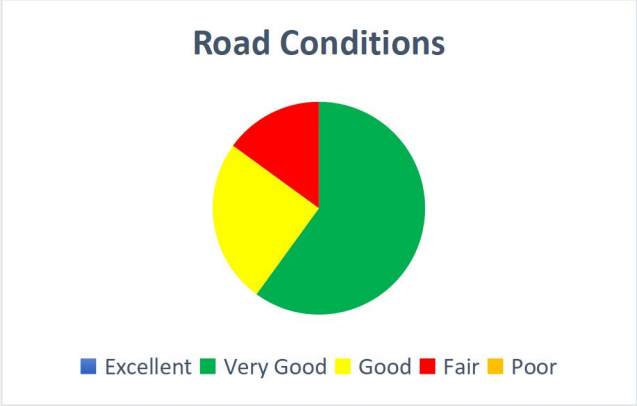

Figure 12: Roads Leading to the Community.

Livelihood in the Project Communities: According to the socioeconomic survey results Farming (35%), Petty Trading (20%), Animal Husbandry (15%) and Artisanship (15%) emerged as the leading engagements by the locals of the communities bordering the TCs. Other livelihoods activities include Fishing, Lumbering and Civil Service. See Figure 13.

Figure 13: Livelihood Activities at the Project Communities.

[6] **Excellent-** Resource is available in its best form, within the community and sufficiently available to locals.
Very Good - Resource is available in its best form but insufficient for local users/community.
Good- Resource is available although not in its most preferred form.
Fair – Resource is unavailable within the immediate community (<2-5km radius;) but may be sought within the LGA or the nearest community.
Poor - Resource is unavailable within and outside the community.

CHAPTER FIVE

IDENTIFICATION AND ASSESSMENT OF POTENTIAL ADVERSE E&S IMPACTS

5.1 Impacts Identification

The proposed project will lead to potential risks and impacts on the environmental and socioeconomic conditions of the project locations. These impacts will be beneficial and some adverse. Specifically, beneficial impacts will include fostering an enabling learning environment for students at the college, improving the structural and aesthetical appearance and integrity of school infrastructure, strengthening demand for admissions and technical education, etc. Nonetheless, some negative consequences are anticipated due to the nature of the intervention/rehabilitation work to be undertaken. The sections that follows provides the positive and adverse impacts of the IDEAS project at the selected FSTCs.

5.2 Identified Potential Environmental and Social Risks and Impacts

The aspects considered when assessing the potential environmental and social risks and impacts of the project are listed below. Potential adverse risks and impacts will be addressed in the ESMP (Chapter 5) of this report.

5.2.1 Positive Impacts

The following are the positive impacts of the rehabilitation, renovation and expansion activities at the colleges.

- Increased enrolment of secondary students at the FSTCs, subsequently boosting revenue generation at the TCs.
- Rehabilitated structures (workshops, classrooms, etc.) will provide more conducive learning environment.
- Construction of toilets and WASH facilities will promote hygiene and sanitation at the technical colleges resulting in improved health.
- The rehabilitation phase of the intervention works may likely create short-term employment opportunities for unskilled workers most of whom are based within proximal communities at the FSTCs. This will foster improved community perception and stakeholder satisfaction of the IDEAS project.
- Considering that the technical workshops do not only serve as a practical space for the students, the proposed rehabilitation and expansion of the facilities will increase technical and vocational service delivery to the project communities thereby increasing the Internally Generated Revenue (IGR) of the technical colleges.
- The proposed rehabilitation at the FSTCs will improve job satisfaction for the teaching staff as well as the technical workshop instructors as a result of the provision of and access to better work facilities. Furthermore, staff productivity and quality of service delivery will be enhanced.
- The general health and safety of the Staff, Students, Youth Corp members and other personnel within the colleges will be improved as a result of the rehabilitations.
- The project will create an avenue for continuity or future investment including Public Private Partnerships (PPPs).

5.2.2 Adverse Impacts

The potential adverse impacts of the proposed rehabilitation/renovation work at the FSTCs are summarized in Tables 19-21 below according to project phases.

Table 19: Identified Potential Adverse E&S Impacts of Proposed Intervention at the FSTCs during the Pre-Rehabilitation Phase.

PRE-REHABILITATION PHASE		
The Pre-Rehabilitation Activities are: • Procurement and transportation of construction materials to the FSTCs and project sites (Including offload and storage of materials). • Site Clearing.		
Variable	**Adverse Impacts**	**Description of Potential Environmental Risks & Impacts**
Environment	**Air Pollution**	• Minimal generation of fugitive dust is foreseeable during site clearing around rehabilitation sites or locations earmarked for expansion, especially during the dry season or harmattan period. • In most of the FSTCs, the access roads leading to the workshops are generally unpaved (earth roads), transport of construction materials to project sites may trigger minor dust generation along untarred roads. Dust generation will also occur in colleges whose access roads are currently undergoing rehabilitation e.g. FSTC Otukpo and FSTC Michika. • Carbon emission from exhaust fumes of vehicles carrying construction materials into school premises may also occur. • Offloading of Cement or Plaster of Paris (POP) bags to be used for the rehabilitation may also lead to short-term dust generation. Although this is foreseeable, it will only be localized to the site where this activity will be undertaken. However, depending on the duration of exposure and the proximity of the location to classrooms, dormitories or offices where staff and students learn, reside or work, prolonged dust inhalation may likely result in short-term respiratory ailments (e.g. sneezing) or exacerbate existing respiratory conditions of workers (e.g. asthma).
	Loss of Vegetation	• Activities such as extension of technical workshops, installation of new boreholes and erection of temporary makeshift structure at the FSTCs for storage of construction equipment may involve site clearing. Depending on the extent of this activity, it may result in the displacement of beneficial flora like Bahama and Carpet grass.
	Noise	• Increase in noise levels above the NESREA National Noise Standard (85dB) is envisaged as work equipment are being conveyed to project sites and during the operation of project vehicles within and around the technical colleges.
Social	**Traffic Congestion**	• Traffic build up is envisaged particularly during peak hours as construction materials are being transported to some FSTCs situated along very busy roads or highways e.g. Nyanya-Karshi Road (FSTC Orozo); Doma-Lafia highway (FSTC Doma); Yola-Maiduguri highway (FSTC Michika), Zik Avenue/Nkpor Junction (FSTC Awka); Morris Road/Military Road (FSTC Yaba); Minna-Kuta highway (FSTC Kuta Shiroro) and Ijeshi-Oke Meshi Road (FSTC Ilesha). Depending on the duration of this congestion, it may result in minor delay in commuters' travel time. ***(For the Traffic Management Plan, see Annex 5).***
	Grievances	• Teachers and students of the technical colleges who may need to reschedule class periods prior to commencement of rehabilitation and renovation works may express displeasure or grievance.
	Road Accidents	• Transportation of procured construction materials to the colleges through roads that are in deplorable or impassable conditions (e.g. Obehie-Akwete Azumini Road – FSTC Ohanso; Onewa Road – FSTC Uromi), may predispose commuters to road accidents possibly as a result of equipment fall from trucks. • Livestock roadkill may occur as trucks move through some project communities where open grazing of livestock is practiced (e.g. communities around FSTC Doma, FSTC Kuta Shiroro) leading to the colleges during haulage of construction materials to the colleges. While this may be envisaged, the chances
	Occupational Health & Safety Incidents	• Likelihood of accident occurring due to Unsafe Conditions *(Improperly stacked and secured materials with potential to collapse or work environment)* and Unsafe Behaviours *(e.g. if the appropriate PPEs are not worn, horseplay, etc.).* Offloading of materials (bricks, cement, paints, wood, iron rods, etc.) from trucks may present significant OHS risks and impacts during the pre-rehabilitation phase of this project.

Table 20: Identified Potential Adverse E&S Impacts of Proposed Intervention at the FSTCs during the Rehabilitation Phase.

REHABILITATION PHASE		
The Rehabilitation Activities are: • Demolition/Overhaul of obsolete roof, board ceilings and asbestos, worn out doors and windows, disused wires and other electrical equipment, obsolete sanitary facilities, etc. • Rehabilitation Works – Installation of roofs, POP and PVC ceilings, steel doors and windows, etc. • Civil Works – Extension of Workshops, foundation digging and general masonry, flooring and wall finishing with cement, other external works such as construction of ramps. • Painting of rehabilitated Structures. • Electrical Installations - New electrical installations and connections; including re-conductoring of existing electrical connections and installation of energy saving Light-Emitting Diode (LED) bulbs, switches, fans, etc. • Mechanical and Plumbing Works: Fittings and Fixtures of WASH Facilities such as Toilets, Septic tanks. • Solar and electrical powered borehole installation, Conversion to Solar boreholes, Installation of overhead tanks and water reticulation. • Installation of drainage channels • Installation of solar panels.		
Variable	**Adverse Impacts**	**Description of Potential Environmental Risks & Impacts**
Environment	**Impact on Groundwater Quality**	• Peradventure the proposed borehole is installed near existing septic tanks within the technical colleges. Vertical infiltration and seepages may occur, potentially contaminating groundwater ***(See ESMP Chapter 6 for mitigation measure).***
	Soil Contamination	• Slurry and spills from civil work activities such as masonry (including cement and POP mixing, plastering, brick work, etc.), painting, etc. may contaminate the soil. • Leakages may occur from stacked equipment containing lubricants, paint containers, wood preservatives, etc. The possibility of seeping through into the soil is likely in areas covered by earth thereby resulting in soil contamination.
	Air Pollution	• Carbon and Greenhouse Gas (GHG) emissions would be generated from operation of work vehicles and construction equipment. • Civil works may alter the baseline atmospheric conditions of the project area and its surroundings. Cement dust, paints, machinery exhaust fumes (nitrogen oxides (NOX), carbon monoxide (CO), sulphur oxides (SOx), hydrocarbons, and suspended particulates), as well as dust from demolition or construction/rehabilitation will all have a negative impact on air quality. Depending on the location and duration of exposure, this may aggravate pre-existing health conditions (respiratory ailments such as asthma) of workers, staff, students, and youth corps members within the schools.
	Sectional Ponding	• Improper backfilling of installed drainages can create voids or air pockets around the drainage channels, hindering the flow of water through the system. Asides from reducing the drainage efficiency, it may also result in standing water, flooding, or waterlogging in the area. This may play out in FSTCs where drainage installation has been proposed e.g. FSTC Ilesha and FSTC Ikare Akoko.
	Poor Environmental Sanitation	• Rehabilitation activities may increase the occurrence of open defecation by construction workers at the technical colleges, leading to poor environmental sanitary conditions. At colleges like FSTC Orozo, where open defecation is already prevalent, these rehabilitation activities could worsen the situation without proper measures in place.
	Waste Generation	• During this phase, significant amounts of Construction and Demolition Wastes will be generated onsite at the technical colleges. These wastes will include roofing sheets, ceiling boards, boulders/bricks, iron fragments, disused windows and doors, plumbing wastes, etc. If not properly managed, these materials may litter the premises and occupy substantial land space within the colleges, potentially creating dumpsites that could serve as hiding places for rodents, snakes, and other poisonous reptiles. • Inadequate management of food wastes may lead to odorous conditions and a decline in the aesthetics of the colleges. • The overhaul and replacement of end-of-life electric wires, switches, and sockets will result in minor stockpiles of E-Waste or Wastes from Electrical and Electronic Equipment (WEEE) at the TCs. Mismanagement of these materials could lead to the release of toxic and cancerous pollutants, such as Lead, Cadmium, Mercury, Dioxins, Furans, and Polycyclic Aromatic Hydrocarbons (PAHs), into the environment. • Asbestos ceilings and roofs at colleges like FSTC Doma, FSTC Usi Ekiti, FSTC Uyo and FSTC Ilesha may require removal. Proper management is crucial due to the hazardous nature of these wastes. Inhaling asbestos dust or fibrils, if not properly handled, can lead to lung damage and

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Variable	**Adverse Impacts**	**Description of Potential Environmental Risks & Impacts**
		inflammation over time, resulting in serious health issues such as breathing difficulties, Cancer, Asbestosis, Mesothelioma, and Pleural Thickening. • Towards the Fishery Section (Priority 2) of FSTC Usi Ekiti, wastewater discharge from the fish pond to the surrounding environment has resulted in odorous conditions around the location. Also, considering its proximity to the Abuja hostel and science laboratory, this could impact on the future ambience and air quality of these areas after rehabilitation activities.
	Noise & Vibrations	• Demolitions and borehole installation drilling at certain FSTCs could cause ground vibrations and elevated ambient noise levels in the work area and nearby school premises. Prolonged exposure to this activity may lead to communication interference (for workers and in classrooms) as well as tinnitus (ringing in the ears). Schools like FSTC Uyo, FSTC Kafanchan, FSTC Ilesha, FSTC Zuru, FSTC Yaba, FSTC Orozo, FSTC Michika, FSTC Jalingo, and FSTC Ijebu Imushin are likely to experience this impact.
	Destruction of Facilities	• The facilities to be rehabilitated may be predisposed to extreme weather conditions in locations such as FSTC Doma, FSTC Jalingo. Furthermore, the roof, doors and ceiling of these facilities may be prone to future attacks by termites during the operation phase, thus resulting in their early deterioration. This may be the case where termite infestation is already a major challenge such as in FSTC Ohanso.
Social	**Open Circuiting[7] (Temporary Power Loss)**	• There may be temporary interruption of power supply to workshops, classrooms and offices where electrical repairs and fitting works will be done to enable safe repairs and installations. This might result in temporary disruption of processes and activities that rely on electricity. Such as classroom lighting, ceiling fan operations, computer laboratory activities, etc.
	Interruption of Water Supply & Access to Toilet.	• Mechanical and plumbing works (including water reticulation) may lead to short-term or temporary interruption of water supply to the toilet, and temporary closure and denial of access to toilet and convenience within the schools.
	Risk of Illicit Behaviour and Crime	• Increased risk of illicit behaviour and crime (such as theft and substance abuse) attributable to labour influx at the colleges. However, labour will be sourced locally.
	Grievances and Disruption of Activities	• Grievance and displeasure from students and staff who may need to temporarily vacate their classrooms, workshops, laboratories etc. during rehabilitation works within the FSTCs.
	Labour Influx	• Risk of social conflict between school staff and construction workers as a result of in-adherence to school rules and regulations. • Risk of illicit behaviour and practices such as theft, physical assault and substance abuse (attributable to the presence of labour).
	Gender Based Violence (GBV)	• Female Teachers, Corps Members and male/female students (within the school premises) may be exposed to sexual exploitation, abuse and harassment as a result of interactions with construction workers and possibly followers.

[7] Open Circuiting – **an electrical circuit in which the continuity is broken so that current does not flow.**

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Variable	**Adverse Impacts**	**Description of Potential Environmental Risks & Impacts**
	Violence Against Children (VAC)	• College students may also be exposed to various forms of harassment or violence by construction workers especially if they are asked by such workers to help carry out a duty such as i) buy food items ii) assist them move materials/equipment, etc.
	Security	• Technical Colleges such as FSTC Michika, FSTC Dayi, FSTC Zuru, FSTC Kafanchan and FSTC Kuta Shiroro are either located in banditry prone territories or have experienced significant insecurities in the past. Rehabilitation works in these colleges may predispose personnel to security risks (e.g. kidnappings, attacks by bandits, theft, etc.).
	Community Health and Safety	• Students may be prone to trips and falls, falls from height, cuts, injuries, abrasions or other forms of hazards possibly from horseplay at the rehabilitation sites. This risk is higher in areas where pitting activities may be carried out, such as technical colleges requiring drainage installations (FSTC Ilesha and FSTC Ikare Akoko), rehabilitation of septic tanks and reticulation works. Additionally, in locations where demolition and construction scraps are improperly managed, personnel may also be exposed to health and safety risks.
Occupational Health and Safety	**OHS Impacts**	In the course of the rehabilitation works, there would be a moderate to severe likelihood of the occurrence of workplace hazards. Most activities could predispose personnel to hazards. "**Unsafe behaviours**" [8]and **"Unsafe conditions[9]"** will pose a serious occupational health and safety risk. Hazardous conditions or practices likely to impact on occupational health and safety will include: • Transport of construction materials and equipment to project sites may result in workers fatigue, road accidents, etc. • Demolition and overhaul of existing obsolete materials may expose personnel to risk of falling objects, dust and elevated noise levels. • General Civil Works (demolition, digging foundation, masonry, roofing, installation of solar panels at heights, etc.). • Works involving removal of obsolete asbestos board ceilings and installation of new ceiling and boards and roofing sheets may predispose workers to asbestos dust/fibrils. Depending on the duration and magnitude of exposure, personnel may be at risk of asbestosis, mesothelioma, lung cancer and plural thickening. • Conveying and lifting of heavy equipment may result in musculoskeletal disorders. • Use and exposure to hazardous energy e.g. Arc welding of iron doors/window frames and electrical works, may expose personnel to toxic fumes.
	Incidents & Accidents	• Risk of falls from works at height (e.g. during installation of roofs, ceilings, and overhead tanks). • Road accidents.

[8] **Unsafe Behaviours** – are behaviours that expose workers or visitors to the workplace, to hazards and risks. These may include, horseplay; not undergoing training before commencing a hazardous activity; not wearing appropriate Personal Protect Equipment (PPEs), not reporting worksite incidents or accidents etc.
[9] **Unsafe Conditions** – represent onsite situations or settings that predispose works or visitors to worksite to hazards and risks such as uncovered ditches, naked energized electric wires or cables, exposed rotatory machinery, leaking poisonous or noxious gases, exposed nail-tip in a wooden floor etc.

Table 21: Identified Potential Adverse Environmental and Social Risks and Impacts of proposed rehabilitation in FSTC Orozo during the Operation Phase.

OPERATION PHASE		
Activities in the Operation Phase Include: • Disengagement of the Contractors and demobilization from sites. • Use of rehabilitated structures.		
Variable	**Adverse Impacts**	**Description of Potential Environmental Risks & Impacts**
Environment	**Excessive Energy Consumption**	• Usage and operation of newly installed electrical fittings and lightbulbs could result in the excessive consumption of energy.
	Waste Generation	• The use of the newly constructed and rehabilitated workshops and classrooms may result in solid waste generation.
Social	**Loss of Employment**	• Workers and personnel engaged in civil works will be relieved of their duties at the commencement of the operational phase.

CHAPTER SIX

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

6.1 Overview

A matrix table format is used to describe the Environmental and Social Management Plan (ESMP) for the mitigation and monitoring of adverse environmental, social, and occupational health and safety risks and impacts associated with the proposed rehabilitation works for the FSTCs. The table has been designed to incorporate corresponding mitigation measures for all associated impacts of the proposed civil works as well as other ancillary activities under the subproject. Monitoring indicators and frequencies during the pre-rehabilitation, rehabilitation and operation phases of the project were also captured in the table. The Environmental and Social Mitigation and Monitoring Plan according to phases is shown in Tables 22-24 below.

IMPORTANT NOTE: *A single ESMP matrix table has been developed to address all adverse E&S risks and impacts associated with the interventions at the FSTCs. While several impacts and mitigation measures apply to all colleges, specific E&S impacts are unique to certain colleges due to the peculiarities of their proposed interventions and project environments. For this reason, a comprehensive unit ESMP table, including mitigation costs for all identified adverse E&S impacts at the project locations, has been prepared. Additionally, a summarized version of the total cost as it applies to the respective FSTCs is provided in Table 25, following the ESMP table. All the mitigation measures specified in the ESMP shall be included in the bid documents for the Contractor to implement. Campaigns on HIV/AIDS, environmental protection and waste management shall also be undertaken. For this purpose, services of experienced NGOs and specialists in the fields would be sought for or procured. The Contractor will not require setting up labour camps; as they will reside outside the college premises. The Contractors will only have onsite materials/equipment staging areas. A minimum average onsite number of 7-10 persons is envisaged. Nonetheless, labour requirements will increase as community participation and work schedules are more defined. Several Management Plans were prepared as guides to facilitate a seamless implementation of the ESMP and these have been attached to this document as annexes. Specific details on the locations of each management plan have also been provided in the ESMP table.*

Note: All conversions were done using the Central Bank of Nigeria (CBN) current exchange rate of 1USD = 772.54 NGN as at October, 2023.

PRE-REHABILITATION PHASE

Table 22: ESMP Mitigation and Monitoring Table for the Intervention Works at the FSTCs (Pre-Rehabilitation Phase).

S/N	Activity	Potential Risks & Impacts	Mitigation Measures	Responsibility for Mitigation	Cost of Mitigation USD/(Naira)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Frequency of Monitoring	Responsibility of Monitoring	Cost of Monitoring USD/(Naira)
A.	**ENVIRONMENTAL RISKS & IMPACTS**											
1.	**Mobilization to Site –** Procurement and transport of equipment and materials into school premises and offloading of materials.	Carbon emission from exhaust fumes of vehicles carrying construction materials into school premises.	Use vehicles, plants and equipment that are in good condition generally less than 5 years old. Ensure Vehicles are serviced regularly, depending on the frequency of use.	Contractors	**390 (301,200)**	Gaseous Pollutants such as SO_2, NO_2, CO_2, CO, VOCs, H2S, TSP	In-situ Air Quality Measurement Visual observation	Air quality parameters are within permissible Limits. Contractors compliance to equipment and vehicle servicing	Within the premise of the TCs and around downwind receptors.	Every 2 Weeks	SPIU; Safeguards Unit; ESSG Officer of all FSTCs; SEPAs.	**195 (150,600)**
2.		Localized air pollution from cement dust during **offloading** of cement bags or Plaster of Paris (POP) which may exacerbate existing respiratory conditions of staff, students, workers, corps members, etc.	Offload cement bags in surroundings with less people. Ensure the distribution of nose masks to all the people offloading the cement bags. Early notification of PAPs (Staff, Students, Corp Members, etc.) If possible, schedule supply and offload of cement during weekends. Cover trucks carrying cement or POP bags with tarpaulin during haulage to project sites at the TCs.	Contractors	**130 (100,149)**	Cement/POP dust.	Visual observation Stakeholder engagement.	Decrease in atmospheric turbidity around impacted areas. Compliance to the use of nose masks. No of complaints received.	Location where cement bags are offloaded at the FSTCs and downwind receptors.	One-off	SPIU; Safeguards Unit; ESSG Officer of all FSTCs	**130 (100,149)**
3.		Increased fugitive dust generation along unpaved tracks leading to workshops or along access roads in the colleges currently undergoing	Reduce vehicle speed when driving through unpaved roads (<40km/hr) Educate drivers and personnel using the access roads about the	Contractors	**195 (150,600)**	Atmospheric turbidity Air Pollutants Majorly Particulate	Visual observation In-Situ Air Quality Measurement	Decrease in atmospheric turbidity around project areas. Air quality parameters are within	Along unpaved tracks leading to workshops in all colleges. Driveways undergoing construction at	Daily	SPIU; Safeguards Unit; ESSG Officer of the FSTCs	**97 (75,300)**

S/N	Activity	Potential Risks & Impacts	Mitigation Measures	Responsibility for Mitigation	Cost of Mitigation USD/(Naira)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Frequency of Monitoring	Responsibility of Monitoring	Cost of Monitoring USD/(Naira)
		rehabilitation *e.g. FSTC Otukpo and FSTC Michika.* Minor dust may also be generated during site clearing especially during the dry season.	importance of dust control. Avoid performing vegetation clearing during periods of high winds or dry weather. Schedule site clearing for times when the weather is calm and less prone to dust dispersion. Encourage Slow and controlled clearing practices.			Matter (PM_{10}, $PM_{2.5}$).		permissible limits	FSTC Otukpo and FSTC Michika			
4.		Site-specific increase in noise level.	Use vehicles that are not older than 5 years Where possible retrofit vehicle exhausts with sound control or sound proofing devices. Plan noise intensive activities to fall within a time period when academic activities are not in progress (off school hours).	Contractors	**634 (489,450)**	Changes in average noise levels 35-50dB Vehicle retrofitting Vehicles movement frequency.	In-Situ Measurement of Noise Level Checks & Validation	Contractor's compliance to vehicle retrofitting. No of vehicles retrofitted with sound proof.	All FSTCs	One-Off	SPIU; Safeguards Unit; ESSG Officer of all FSTCs SMEnv/SEPAs	**130 (100,149)**
7.	**Site Clearing –** For Extension Works, Installation of Borehole and Erection of Staging Area.	Loss of beneficial flora e.g. Bahama and Carpet grass.	Limit land clearing activity to specific zones delineated for construction of facilities	Contractors	**N/A**	Amount of cleared vegetation	Site inspection	Contractor's Compliance	Areas marked for extension of facilities, borehole installation points at the FSTCs.	One-off	SPIU; Safeguards Unit; ESSG Officers of all FSTCs	**97 (75,300)**
Sub-total cost					**1,348 (1,041,399)**							**649 (501,498)**
B.	**SOCIAL RISKS & IMPACTS**											
8.	**Mobilization to Site –** Procurement and transport of equipment and	Short-term traffic build ups along some normally busy roads leading to the colleges. This may	Schedule procurement and supply of construction equipment/materials for off peak periods (See	Contractor at *FSTC Orozo, FSTC Doma, FSTC Michika, FSTC Awka,*	**259 (200,298)**	Level of traffic build-ups	Checks and Validation	Compliance to specified movement time.	100m stretch of Nyanya-Karshi Road; Doma-Lafia highway; Yola-	Time period when construction materials are being procured	FRSC; SPIU; Safeguards Unit; ESSG Officers	**120 (92,619)**

S/N	Activity	Potential Risks & Impacts	Mitigation Measures	Responsibility for Mitigation	Cost of Mitigation USD/(Naira)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Frequency of Monitoring	Responsibility of Monitoring	Cost of Monitoring USD/(Naira)
	materials into school premises and offloading of materials.	result in delayed travel time of commuters.	TMP) or during weekends. Liaise with Federal Road Safety Corps (FRSC) for easy management of traffic. Use identified alternative routes e.g. for FSTC Awka – Works road can be used instead of going through Nkpor junction and Zik Avenue. Implement Traffic Management Plan (TMP). ***(See Annex 5)***	*FSTC Yaba, FSTC Kuta Shiroro, FSTC Ilesha.* FRSC		Compliance to the use of alternative routes		Evidence of liaison with FRSC	Maiduguri highway, Zik Avenue/Nkpor Junction; Morris Road/Military Road; Minna-Kuta highway and Ijeshi-Oke Meshi Road.	and transported to the colleges.	of *FSTC Orozo, FSTC Doma, FSTC Michika, FSTC Awka, FSTC Yaba, FSTC Kuta Shiroro, FSTC Ilesha.*	
9.		Dissatisfaction among teachers and students as a result of change of venue or the rescheduling of class periods at some of the workshops and classrooms.	Early notification; Ensure proper sensitization and awareness is conducted; Consider rescheduling some major works for holidays, weekends or evenings at close of school.	Contractors School Principal; SPIU Safeguards	**130 (100,149)**	Number of received grievances	Number of sensitized teachers and students	Contractor's compliance	All FSTCs	Twice Weekly	SPIU; Safeguards Unit; ESSG Officers of all FSTCs	**65 (50,451)**
		Transport of procured construction materials to the colleges through roads that are in deplorable or impassable conditions *(e.g. Obehie-Akwete Azumini Road – FSTC Ohanso; Onewa Road – FSTC Uromi), may predispose commuters to road accidents possibly as a result of equipment fall from trucks.*	**<u>Secure Equipment Properly</u>**: Use appropriate tie-downs, straps, and restraints to keep the equipment in place during transit. Also, as much as possible cover with tarpaulin and fasten to the truck. **<u>Trip Scheduling:</u>** Schedule procurement and transport of construction materials to these colleges for off peak hours (evenings and during weekends)	Contractors at *FSTC Ohanso and FSTC Uromi.*	**259 (200,298)**	Road Accidents	Checks and verifications.	Zero accidents resulting from equipment falls along the roads during transport of materials.	*Stretch of Obehie-Akwete Azumini Road – FSTC Ohanso; and Onewa Road – FSTC Uromi*	During Equipment Transport	SPIU; Safeguards Unit; ESSG Officers of *FSTC Ohanso and FSTC Uromi*	**163 (125,751)**

S/N	Activity	Potential Risks & Impacts	Mitigation Measures	Responsibility for Mitigation	Cost of Mitigation USD/(Naira)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Frequency of Monitoring	Responsibility of Monitoring	Cost of Monitoring USD/(Naira)
			Train Drivers and Operators: Provide proper training to drivers and equipment operators on safe loading and unloading practices, as well as how to navigate challenging road conditions.									
		Livestock roadkill may occur as trucks move through some project communities where open grazing is practiced *(e.g. FSTC Doma and FSTC Kuta Shiroro)*	Implement and enforce appropriate speed limits for project drivers (<40km/hr). Schedule haulage activities during times when livestock are less likely to be on or near the roads, such as avoiding peak grazing times or herding periods. Better still, plan transport of materials for late evening hours.	Contractors at *FSTC Kuta Shiroro and FSTC Doma*	**97 (75,300)**	Livestock roadkill	Community engagement.	No grievance from PAPs Contractors compliance to proffered mitigation	*1km Stretch of Doma – Lafia highway and Minna – Kuta highway from FSTC Doma and FSTC Kuta Shiroro respectively.*	During Equipment Transport	SPIU; Safeguards Unit; ESSG Officers *of FSTC Doma and FSTC Kuta Shiroro*	**130 (100,149)**
		Gender Based Violence (GBV), Sexual Exploitation and Abuse (SEA)/Sexual Harassment (SH)	Mapping of services for survivors of GBV and prevention from SEA/SH	Independent GBV Specialist	**648 (500,745)**	GBV Risk and Cases	WB GBV Risk Assessment Tool	Ascribe GBV Risk Rating	All FSTCs and proximal communities	Prior to project implementation	TA E&S Safeguards NPCU; SPIU; Safeguards Unit; ESSG Officer of all FSTCs	**259 (200,298)**
Sub-total cost					**1,394 (1,076,790)**							**737 (569,268)**
C.	**OCCUPATIONAL HEALTH AND SAFETY RISKS & IMPACTS**											
10.	**Mobilization to Site –** Procurement and transport of equipment and materials into school premises and offloading of materials. **Site Clearing –** For Extension Works, Installation of	General OHS risks; Exposure of workers, staff and students to fugitive dust, cement/POP dusts, etc. Exposure to toxic substances; students' exposure to hazardous chemicals (lead, silica, carbon	Use of PPEs (Nose masks, safety boots etc) Reduce speed when driving into school premises Ensure proper labelling of hazardous chemicals and provide caution and warning signs at sensitive locations.	Contractors	**453 (350,145)**	Compliance with use of PPEs (Nose masks) Atmospheric turbidity Incidents & Accidents	Visual Observation Air Quality Measuring Techniques Checks & Validations	Decreased turbidity in project areas. Air quality parameters are within MPL	All FSTCs	Weekly Weekly	SPIU; Safeguards Unit; ESSG Officer of all FSTCs	**195 (150,600)**

S/N	Activity	Potential Risks & Impacts	Mitigation Measures	Responsibility for Mitigation	Cost of Mitigation USD/(Naira)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Frequency of Monitoring	Responsibility of Monitoring	Cost of Monitoring USD/(Naira)
	Borehole and Erection of Staging Area.	monoxide, and spray paints, Polymer Bonding Agent, Polymer Modified Mortar). Incidents & Accidents	Conduct OHS training and education; HazCom, routine JHA/PHA									
Sub-total cost					**453 (350,145)**							**195 (150,600)**
Total Cost					**3,195 (2,468,334)**							**1,581 (1,221,366)**

REHABILITATION PHASE

Table 23: ESMP Mitigation and Monitoring Table for the Intervention Works at the FSTCs (Rehabilitation Phase).

S/N	Sub-activity	Potential Risks & Impacts	Mitigation Measures	Responsibility for Mitigation	Cost of Mitigation USD/(Naira)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Frequency of Monitoring	Responsibility of Monitoring	Cost of Monitoring USD/(Naira)
D.	**ENVIRONMENTAL RISKS & IMPACTS**											
1.	**Civil Works;** Installation of Borehole, Rehabilitation of Septic tank and Water Reticulation;	Installation of new boreholes in proximity to existing septic tanks may lead to contamination of groundwater quality in the long-term via vertical infiltration.	Ensure the minimum allowable distance[10] (18m) from septic tanks is maintained at the location where the borehole is to be drilled and installed. Ensure that borehole is retrofitted with Reverse Osmosis (RO) filters.	Contractors at FSTCs[11] requiring borehole installation	**487 (376,500)**	Proximity of installed boreholes to septic tank. Compliance to the installation of RO filters.	Site inspections and validation. Visual observation	Groundwater quality is within permissible limit. Zero faecal matter in drinking water.	Borehole installation site at the FSTCs	One-off	SPIU; Safeguards Unit; ESSG Officer at the FSTCs requiring borehole installation.	**130 (100,149)**
2.	**Civil Works;** General Masonry, digging foundation for extension of workshops, flooring, raising of walls.	Localized, minor and short-term soil contamination from improper management of slurry (mixture of cement), oil, fuel, water, lubricants, paint, etc.	Collect slurry into designated containers; label appropriately before final disposal by the respective SEPAs/SWMAs	Contractors SEPAs/SWMAs	**195 (150,600)**	Number of waste collection containers available at strategic points within the project vicinity	Inspection	Contractor's compliance	Equipment storage points and staging areas.	Weekly	SPIU; Safeguards Unit; ESSG Officer at the FSTCs SEPAs/SWMAs	**130 (100,149)**
3.	Movement of work vehicle to and fro	**GHG emissions** – Carbon emission	Use vehicles, plants and equipment that are	Contractors	**390 (301,200)**	Gaseous Pollutants such	In-situ Air Quality	Air quality parameters are	Within the premise of the	One-off	SPIU; Safeguards Unit;	**195 (150,600)**

[10] The minimum allowable distance between the septic tank and borehole water according to WHO standard is **18 meters** (WHO, 2016). This is to reduce the risk of the potential source of contamination from the septic tank.
[11] FSTCs requiring borehole installation – **FSTC Uyo, FSTC Kafanchan, FSTC Uromi, FSTC Otukpo, FSTC Ilesha, FSTC Michika, FSTC Zuru, FSTC Yaba, FSTC Orozo, FSTC Jalingo, FSTC Ijebu-Imushin, FSTC Doma and FSTC Ohanso.**

S/N	Sub-activity	Potential Risks & Impacts	Mitigation Measures	Responsibility for Mitigation	Cost of Mitigation USD/(Naira)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Frequency of Monitoring	Responsibility of Monitoring	Cost of Monitoring USD/(Naira)
	project site within school;	from exhaust fumes of project vehicles and equipment during operation.	in good condition generally less than 5 years old. Ensure Vehicles are serviced regularly, depending on the frequency of use.			as SO_2, NO_2, CO_2, CO, VOCs, H2S, TSP	Measurement Visual observation	within permissible Limits. Contractors compliance to equipment and vehicle servicing	TCs and around downwind receptors.		ESSG Officer of all FSTCs; SEPAs.	
4.		Increased fugitive dust generation along unpaved tracks leading to workshops or along access roads in the colleges currently undergoing rehabilitation *e.g. FSTC Otukpo and FSTC Michika.*	Reduce vehicle speed when driving through unpaved roads (<40km/hr) Educate drivers and personnel using the access roads about the importance of dust control.	Contractors	**195 (150,600)**	Atmospheric turbidity Air Pollutants Majorly Particulate Matter (PM_{10}, $PM_{2.5}$).	Visual observation In-Situ Air Quality Measurement	Decrease in atmospheric turbidity around project areas. Air quality parameters are within permissible limits	Along unpaved tracks leading to workshops in all colleges. Driveways undergoing construction at *FSTC Otukpo and FSTC Michika*	Daily	SPIU; Safeguards Unit; ESSG Officer of the FSTCs	**97 (75,300)**
5.	**Civil Works;** General masonry, digging new foundation, flooring, raising of walls.	Localized air pollution from cement dust during **mixing** and preparation of mortar.	Ensure the distribution of nose masks to all the workers involved in masonry. Early notification of PAPs (staff, students, corpers, etc.)	Contractors	**130 (100,149)**	Cement dust.	Visual observation Stakeholder engagement.	Decrease in atmospheric turbidity around impacted areas. Compliance to the use of nose masks. No of complaints received.	Work areas	Daily	SPIU; Safeguards Unit; ESSG Officer of the FSTCs	**130 (100,149)**
6.	General civil construction works, operation of project vehicles, borehole drilling, etc.	Site-specific increase in noise level. Nuisance and disturbance to staff and students' administering and attending lectures respectively.	Where possible retrofit vehicle exhausts with sound control or sound proofing devices. Convey materials and schedule noise intensive civil activities for evenings or night hours when classes are over and schools are closed for the day (weekends, holidays, mid-term breaks, etc.).	Contractors	**634 (489,450)**	Changes in average noise levels 35-50dB Vehicle retrofitting Vehicles movement frequency.	In-Situ Measurement of Noise Level Checks & Validation	Contractor's compliance to vehicle retrofitting. No of vehicles retrofitted with sound proof.	All FSTCs	One-Off	SPIU; Safeguards Unit; ESSG Officers of the FSTCs SEPAs	**130 (100,149)**

S/N	Sub-activity	Potential Risks & Impacts	Mitigation Measures	Responsibility for Mitigation	Cost of Mitigation USD/(Naira)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Frequency of Monitoring	Responsibility of Monitoring	Cost of Monitoring USD/(Naira)
		Borehole drilling could generate noise and ground vibrations.	Schedule borehole drilling activity for off school hours (evenings, weekends, holidays, etc.).	Contractors at FSTCs requiring borehole installation.	**N/A**	Noise level & Vibration	Checks and validation	Contractor's compliance	FSTCs where borehole will be installed	One-off	SPIU; Safeguards Unit; ESSG Officer; SEPAs	**97 (75,300)**
7.	Installation of drainage channels to rechannel storm water.	Improper backfilling of installed drainages can create voids or air pockets around the drainage channels, hindering the flow of water through the system. It may also result in standing water, flooding, or waterlogging in the area.	Ensure that the installation of drainages is carried out under proper supervision. Use of suitable backfill materials Ensure compaction of backfill material to eliminate voids and air pockets. Ensure post installation monitoring of the newly installed drainage system to ensure that it functions as intended and there is no signs of ponding or waterlogging.	Contractors at *FSTC Ilesha and FSTC Ikare Akoko.*	**259 (200,298)**	Sectional ponding	Site visits, visual observation, verifications.	Contractor's compliance to proffered mitigation	Newly installed drainage channels at *FSTC Ilesha and FSTC Ikare Akoko*	One-off	SPIU; Safeguards Unit; ESO; CIU ESSG Officers at *FSTC Ilesha and FSTC Ikare Akoko*	**195 (150,600)**
8.	**General Civil, Electrical, Plumbing Works; Demolition Activities;** Priority rehabilitation and expansion activities**,** Removal of obsolete ceilings, doors, windows, roof, etc.),	Bulk generation of Construction & Demolition Wastes. (CD-Waste) (wood, boulders/large stones, cement/POP bags, metal rods, etc.); Accumulation of stockpiles of Electrical Wastes (E-Waste) (sockets, switches, wires/conductors, cables, circuit boards, cathode ray/mercury bulbs, etc.). Accumulation of	Designate a temporary site for collecting waste generated prior to sorting and management. Ensure proper sorting, storage and final disposal by the respective SEPAs/SWMAs or an accredited third-party waste disposal agency Implement waste management plan (WMP) ***(See Annex 6)*** Provision of waste bins.	Contractors	**1,606 (1,240,944)**	Contractor's Compliance to liaising with SEPAs/SWMAs or third-party waste disposal agency Contractor's Compliance to WMP	WMP implementation reviews	Proper collection and sorting; Reduction in quantity of construction waste	Premises of all FSTCs	Weekly	NPCU; ESO SPIU; Safeguards Unit; ESO; CIU ESSG Officers at the FSTCs SEPAs/SWMAs	**858 (662,640)**

S/N	Sub-activity	Potential Risks & Impacts	Mitigation Measures	Responsibility for Mitigation	Cost of Mitigation USD/(Naira)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Frequency of Monitoring	Responsibility of Monitoring	Cost of Monitoring USD/(Naira)
		plumbing wastes (pipes, disused toilets, ceramics, sinks, etc.) Generation of food wastes by Contractor workers.	Food waste and other organic and biodegradable waste should be composted and reused for maintenance of gardens and flowers and flora within the school premises.									
9.		Generation of asbestos dust and likely release of asbestos fibrils which may expose Contractor workers, students and staff to the risk of respiratory diseases such as asbestosis. Likely locations include *FSTC Doma, FSTC Usi Ekiti, FSTC Uyo and FSTC Ilesha*	Implement Asbestos Management Plan (AMP) (See Annex 8); Apply caution in the removal of asbestos; Ensure removed asbestos are carefully cut into conveyable pieces, wetted and carefully transported to a designated storage area within the college premises before eventual evacuation and final disposal.	Contractors for works at *FSTC Doma, FSTC Usi Ekiti, FSTC Uyo and FSTC Ilesha.*	**240 (185,238)**	Compliance to AMP especially ensuring that removed asbestos are temporarily kept at designated storage areas onsite prior to evacuation by the respective SEPAs/SWMAs.	Inspection and compliance checks	Contractors compliance	Priorities/Project Sites at *FSTC Doma, FSTC Usi-Ekiti, FSTC Uyo and FSTC Ilesha*	Monthly	NPCU ESO; SPIU Safeguards Unit; ESO; CIU ESSG Officer at *FSTC Doma, FSTC Usi-Ekiti, FSTC Uyo and FSTC Ilesha* SWMAs	**436 (336,591)**
10.		Use of the rehabilitated fish pond at the fishery section (Priority 2) may lead to the discharge of wastewater from the fish pond to proximal locations (classrooms and new workshops), thus resulting in a decline in air quality within around the locations.	Install sewers and a septic tank at the fishery section for the channelling of wastewater discharged from the fish pond.	Contractor FSTC Usi-Ekiti	**337 (260,538)**	Installation of septic tank and sewers	Inspections and verifications	Wastewater is being properly channelled to septic tank.	Around the fish pond at the Fishery Section (Priority 2) – *FSTC Usi-Ekiti*	One-off	SPIU; Safeguards Unit; ESO; CIU ESSG Officer - *FSTC Usi-Ekiti*	**110 (85,089)**

S/N	Sub-activity	Potential Risks & Impacts	Mitigation Measures	Responsibility for Mitigation	Cost of Mitigation USD/(Naira)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Frequency of Monitoring	Responsibility of Monitoring	Cost of Monitoring USD/(Naira)
		The facilities to be rehabilitated may be predisposed to wind and extreme weather conditions in locations such as FSTC Doma, FSTC Jalingo.	Ensure that the building's roof is designed to withstand the wind loads and extreme weather conditions specific to these locations. **Lightning Protection System:** Install a lightning protection system (lightning rods, conductors, and grounding) to divert lightning strikes away from the building safely dissipating electric charge.	Contractors at *FSTC Doma and FSTC Jalingo*	**97 (75,300)**	Damage to structure due to wind or extreme weather.	Site inspection, checks, verifications.	Contractors compliance	Priorities/ Rehabilitated structures at *FSTC Doma and FSTC Jalingo.*	One-off	SPIU; Safeguards Unit; ESO; CIU ESSG Officer - *FSTC Doma and FSTC Jalingo.*	**97 (75,300)**
11		Woods used for roofing and ceiling of the rehabilitated structures may be prone to infestation and future destruction due to attacks by termites.	Recurrent fumigation of all structures within the college particularly the rehabilitated structures.	Contractor *(FSTC Ohanso)* School Management.	**268 (207,075)**	Fumigation of rehabilitated structures	Site inspection and verification	Structures are less prone to termite infestation.	School structures and priorities (FSTC Ohanso)	Quarterly	School Management; CIU ESSG Officer – *FSTC Ohanso*	**N/A**
12.		Open defecation by construction workers at the technical colleges, leading to a decline in environmental sanitary conditions	Provision of mobile toilets for construction workers.	Contractors	**647 (500,112)**	Contractor's compliance to the provision of mobile toilets.	Site inspection & validation	Provision and use of mobile toilets.	All FSTCs	One-off	SPIU; Safeguards Unit; ESSG Officer at the FSTCs	**60 (46,686)**
	Sub-total cost				**5,486 (4,238,004)**							**2,665 (2,058,702)**
E.	**SOCIAL RISKS & IMPACTS**											
13.	**Electrical works:** Installation of new electrical fittings including sockets, wires, switches, etc.	**Open Circuiting -** Temporary interruption of learning processes and other school activities that rely on electricity e.g. Computer Laboratories, Workshop Practices, etc.	Early and adequate notification of students and teachers of the schools, prior to commencement of works and subsequent power cut offs. Additionally, carry out works at non-operational hours such	School Principal Contractors	**197 (152,106)**	Frequency of power outages Frequency of disruption of learning and laboratory activities due to power outages	Inspection and Surveys	Contractor's Compliance	Affected Workshops, Laboratories, Offices, etc. within the FSTCs	Weekly	SPIU; Safeguards Unit; SSO; CIU ESSG Officers at the FSTCs	**66 (51,204)**

S/N	Sub-activity	Potential Risks & Impacts	Mitigation Measures	Responsibility for Mitigation	Cost of Mitigation USD/(Naira)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Frequency of Monitoring	Responsibility of Monitoring	Cost of Monitoring USD/(Naira)
			as evenings, weekends and public holidays.									
14.	**Plumbing works:** Installation of new borehole, toilets, construction of septic tanks, water reticulation; Removal of obsolete plumbing fittings, etc.	Mechanical and plumbing works like installation of borehole and water reticulations may lead to temporary interruption of water supply within the college. This may also lead to temporary closure and restriction of access to toilets for sanitation purposes.	Early and adequate notification of students and teachers prior to commencement of works and where works must be carried out during operational hours, they shall be done in phases, in a manner that doesn't shutdown water supply completely Alternative water supply sources should be made available prior to commencement of water works e.g. use of water vendors for supply of water.	Contractors at FSTCs requiring borehole installation and water reticulation	**394 (304,212)**	Frequency of water shortages Compliance to alternative water supply sources	Inspection and Surveys	Contractor's compliance	FSTCs requiring borehole installation and water reticulation	Twice weekly	SPIU; Safeguards Unit; SSO; CIU ESSG Officers at the FSTCs requiring borehole installation and water reticulation	**100 (77,559)**
15.	**General Civil Rehabilitation, Electrical, Plumbing Works; Demolition Activities;** (Removal of obsolete ceilings, doors, windows, roof, etc.),	Occurrence of on-site/off-site social vices and risk of illicit behaviour/practices such as physical assaults (fights, rape, harassments, theft, vandalization, etc.) and substance abuse attributable to labour influx.	Enforce and ensure proper orientation on acceptable behaviours for construction personnel on/off-site. Ensure fair wages. Ensure unskilled labour is sourced within the community. Continuous trainings and sensitization of students, school staff and corps members. Adequate collaboration with local law enforcement and provision of security (armed security	Contractors SPIU Safeguards Unit; ESSG Officers at the FSTCs	**648 (500,745)**	Sensitization record sheets No of armed security personnel engaged.	Checks and reviews	Feedback frequencies	All FSTCs	Twice Monthly	SPIU; Safeguards Unit; SSO; CIU ESSG Officer of the FSTCs NGOs, CBOs.	**263 (203,310)**

S/N	Sub-activity	Potential Risks & Impacts	Mitigation Measures	Responsibility for Mitigation	Cost of Mitigation USD/(Naira)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Frequency of Monitoring	Responsibility of Monitoring	Cost of Monitoring USD/(Naira)
			personnel, where possible). Implement Security Management Plan ***(See Annex 10).***									
16.		**Labour Influx:** resulting in increase in Contractor workers/followers who in addition to the labour force, may migrate to the college, in view of rendering goods and services	Reduce labour influx by sourcing required unskilled labour locally (within the host communities).	Contractors	**N/A**	Evidence of engagement of labour	Site visits Contract Verification	College Premises	Project Corridors at the FSTCs	One-off	SPIU; Safeguards Unit; SSO; CIU ESSG Officer of all FSTCs	**66 (51,204)**
17.	**General Civil Rehabilitation, Electrical, Plumbing Works; Demolition Activities;** Removal of obsolete ceilings, doors, windows, roof, etc.),	Temporary disruption of learning and other school activities in classrooms, laboratories and workshops. Grievance and displeasure from students and school staff who may need to temporarily vacate their classrooms, workshops, laboratories etc. during rehabilitation works within the schools.	Early notification of affected classrooms, offices, workshops used for learning. Propose alternative classrooms for temporarily displaced students. Carryout rehabilitation works at a time that is not likely to disrupt learning and training activities such as holidays, weekends, etc. Implement IDEAS GRM	Contractors College Principal; SPIU Safeguards Unit; ESSG Officer	**197 (152,106)**	Frequency of disruption of learning and training activities	Visual Observation & Interviews	Contractor's Compliance	All FSTCs	Weekly	SPIU; Safeguards Unit; SSO; CIU ESSG Officer of the TCs; SPIU Communication Officer; GRC	**100 (77,559)**
18.	**General Civil Rehabilitation, Electrical, Plumbing Works; Demolition Activities;** Removal of obsolete ceilings, doors, windows,	Gender Based Violence, including Sexual Exploitation and Abuse (SEA)/	Ensure all workers sign the Code of Conduct (CoC). Organize trainings and workshops on GBV and SEA/SH and sensitize workers on zero tolerance for	Contractor SPIU Safeguards Unit; ESSG Officer Independent	**N/A** **238 (183,732)**	GBV Including SEA/SH Training Manuals; IEC Materials; Reports.	Consultations GBV Incidence Reports	Signed CoCs Conduct of sensitization campaigns	All FSTCs	One-off Monthly	SPIU Safeguards Unit; ESSG Officers at the FSTCs Independent NGOs	**263 (203,310)**

S/N	Sub-activity	Potential Risks & Impacts	Mitigation Measures	Responsibility for Mitigation	Cost of Mitigation USD/(Naira)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Frequency of Monitoring	Responsibility of Monitoring	Cost of Monitoring USD/(Naira)
	roof, etc.),		sexual integration with students/community ***(to be done after mapping of service providers)*** Guidance and Counseling Unit and Parents Teachers Association (PTA) to sensitize students on safety habits and reporting mechanism for SEA/SH incidents.***(to be done after mapping of service providers)***.	NGOs Guidance & Counselling Unit; College PTA		Attendance Sheets						
19.	**General Civil Rehabilitation, Electrical, Plumbing Works; Demolition Activities;** Removal of obsolete ceilings, doors, windows, roof, etc.),	VAC; Child labour and forced-hawking of food and other items).	Ensure continuous awareness and sensitization of students, staff and corps members of the college to stay away from project sites and avoid contact with contractor workers. Regular stakeholders' meetings.	NGOs, CBOs, Contractor	**268 (207,075)**	VAC sensitization reports	Report reviews	Contractor's compliance	All FSTCs	Weekly	SPIU Safeguards Unit; SSO; ESSG Officer of the FSTCs Independent NGOs	**66 (51,204)**
20.		Possible engagement in sexual activities leading to possible spread of STIs, STDs and unwanted pregnancies.	Ensure continuous awareness and sensitization of students, staff and corps members of the schools on risks of friendly and possibly intimate interactions with Contractor workers.	College Principal; SPIU Safeguards Unit; ESSG Officer	**N/A**	Compliance to Ethical and proper behaviour Number of sensitizations, trainings and awareness exercises conducted.	Visual observation and evaluations	Rate of compliance to Sensitization and trainings	All FSTCs	Twice Monthly	SPIU Safeguards Unit; ESSG Officer Independent NGOs	**66 (51,204)**
21.		Possible social conflict between school staff and some Contractor	Ensure continous training of Contractor workers on ethical and proper behaviour	Contractors	**N/A** *(Cost captured in E15 above)*	Sensitization record sheets	Checks and reviews	Feedback frequencies	All FSTCs	Twice Monthly	SPIU Safeguards Unit; ESSG Officers at the FSTCs	**N/A** *(Cost captured in E15 above)*

S/N	Sub-activity	Potential Risks & Impacts	Mitigation Measures	Responsibility for Mitigation	Cost of Mitigation USD/(Naira)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Frequency of Monitoring	Responsibility of Monitoring	Cost of Monitoring USD/(Naira)
		workers as a result of non-adherence to school rules and regulations.										
22.		**Security:** Work personnel in areas like FSTC Michika, FSTC Dayi, FSTC Zuru, FSTC Kafanchan, and FSTC Kuta Shiroro may face kidnapping, attacks, and theft due to past and present insecurities around the project area.	Carry out a Security Risk Assessment (SRA) to identify potential areas and vulnerabilities in and around the FSTCs. The SRA will be done in collaboration with the SSA to the state governor. Provide personnel with comprehensive security training to educate them about the risks they might encounter and how to respond appropriately Collaborate with local law enforcement and security agencies to enhance security measures **Travel Safety Protocols:** Develop clear protocols for travel to and from work locations. To a minimum, this should include secure transportation, traveling in convoys, and avoiding travel during high-risk times or in poorly lit areas. Avoid travelling during the curfew period (6:00pm – 6:00am) for	Contractors at *FSTC Michika, FSTC Dayi, FSTC Zuru, FSTC Kafanchan, and FSTC Kuta Shiroro*	**1,606 (1,240,944)**	Cases of insecurity	Checks and verifications Evidence of collaboration with local security Compliance to curfew period	Security risk assessment is being carried out. Contractors compliance to proffered mitigation	*FSTC Michika, FSTC Dayi, FSTC Zuru, FSTC Kafanchan, and FSTC Kuta Shiroro*	Monthly	NPCU Environmental and Social Officer SPIU Safeguards Unit; SSO; CIU ESSG Officers of *FSTC Michika, FSTC Dayi, FSTC Zuru, FSTC Kafanchan, and FSTC Kuta Shiroro*	**975 (753,000)**

S/N	Sub-activity	Potential Risks & Impacts	Mitigation Measures	Responsibility for Mitigation	Cost of Mitigation USD/(Naira)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Frequency of Monitoring	Responsibility of Monitoring	Cost of Monitoring USD/(Naira)
			FSTC Michika. **<u>Use of Security Escorts:</u>** Provide personnel with security escorts or guards when transporting materials to the colleges. Implement Security Management Plan ***(Annex 10)***									
23.		**Community Health and Safety:** improperly labelled and stored construction and demolition materials could predispose school students, workers and staff to cuts, injuries, as well as exposure to hazardous chemicals. Also, horseplay around rehabilitation sites e.g. near drainages or septic tanks may result to falls.	Ensure to properly label and store away all construction and demolition materials. Install danger signs and cordon off areas where hazardous materials are stored. After use ensure that all hazardous materials are safely disposed by an approved vendor. Cover and cordon off all open pits.	Contractors	**268 (207,075)**	Injuries/ Incidents/ Accidents to students and staff of schools	Consultations, Enquiries and Validations.	Zero accidents to students and staff of schools resulting from improperly labelled and improperly stored demolished and construction materials.	All FSTCs	Daily	SPIU; Safeguards Unit; SSO; CIU ESSG Officer at the FSTCs	**119 (92,125)**
	Sub-total cost				**3,816 (2,947,995)**							**2,086 (1,611,679)**
F.	**OCCUPATIONAL HEALTH AND SAFETY RISKS & IMPACTS**											

S/N	Sub-activity	Potential Risks & Impacts	Mitigation Measures	Responsibility for Mitigation	Cost of Mitigation USD/(Naira)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Frequency of Monitoring	Responsibility of Monitoring	Cost of Monitoring USD/(Naira)
24.	**Electrical works**	Injuries, explosions, electrical fires, falls, release of hazardous energy, accidents, death etc.	Conduct electrical safety trainings and Implement OHS Management Plan (OHSMP) ***See Annex 7;*** Conduct OHS training and education; Job Hazard Analysis (JHA) Use of PPE;	Contractors SPIU Safeguards Unit Independent Consultant	**263 (203,310)**	OHSMP and OHS training compliance No of workers Trained Compliance to JHA No of accidents & Injuries	Visual Observation Interview Safety documentation review	Contractor's Compliance	Workshops and other project areas requiring electrical installations.	Twice monthly Monthly	SPIU; Safeguards Unit; ESO; CIU ESSG Officers at the FSTCs	**195 (150,600)**
25.	**Mechanical works (plumbing works)**	Exposure to welding fumes during welding of doors/windows, Musculoskeletal Disorders (MSDs), Noise	Implement on-site OHSMP; Conduct OHS training and education; Use ear-muffs	Contractors	**453 (350,145)**	Usage of fall protection equipment	Visual; Documented evidence	Contractor's Compliance	Project corridors	Weekly	SPIU; Safeguards Unit; ESO; CIU ESSG Officers at the FSTCs	**263 (203,310)**
26.	**Roofing/Ceiling Rehabilitation works**	Falls; injuries death	Use fall protection equipment Provide First Aid kits and Conduct trainings on First Aid and Cardiopulmonary Resuscitation (CPR) for contractor workers and project team	Contractors	**263 (203,310)**	Usage of PPEs and safe work practices	Visual; Documented evidence	Contractor's Compliance	Project corridor	Weekly	ESO; CIU ESSG Officers at the FSTCs	**N/A** *(Cost captured in F24 above)*
27.	**Conveying and lifting heavy equipment**	Collapse, injuries, death, MSDs.	JHA/PHA; Safe Work Practices; Use of PPE;	Contractor	**263 (203,310)**	Usage of PPEs and safe work practices	Visual; Documented evidence	Contractor's Compliance	Project corridor	Weekly	ESO; CIU ESSG Officers at the FSTCs	**N/A** *(Cost captured in F24 above)*
28.	**Civil and rehabilitation works.**	Risks of poisonous bites from snakes and scorpion stings from abandoned structures.	Make available polyvalent anti-venin	Contractor	**64 (49,698)**	Anti-venin availability and quantity	Inventory and sighting	Ease of accessibility when required	Project corridor	Weekly	ESO; CIU ESSG Officers at the FSTCs	**N/A** *(Cost captured in F24 above)*
	Sub-total cost				**1,307 (1,009,773)**							**458 (353,910)**
	Total Cost				**10,609 (8,195,772)**							**5,209 (4,024,291)**

OPERATION PHASE

Table 24: ESMP Mitigation and Monitoring Table for the Intervention Works at the FSTCs (Operation Phase).

S/N	Activity	Potential Risks & Impacts	Mitigation Measures	Responsibility for Mitigation	Cost of Mitigation USD/(Naira)	Parameters to be Measured	Method of Measurement	Performance Indicator	Sampling Location	Frequency of Monitoring	Responsibility of Monitoring	Cost of Monitoring USD/(Naira)
G.	**ENVIRONMENTAL RISKS & IMPACTS**											
1.	Use of rehabilitated workshops and laboratories, offices, etc.	Generation and indiscriminate disposal of solid wastes from workshops, laboratories and offices.	Ensure wastes from laboratories, workshops and offices are properly disposed in an ecofriendly manner. Provision of waste bins at the corridors of the workshops, laboratories and offices.	School Management (Principal, Staff, Students) Contractor	**122 (94,125)**	Waste management Provision of waste bins	Site inspection	Compliance	Premises of the FSTCs	Weekly	School Management (Principal, Staff, Students) SPIU Safeguards Unit; ESSG Officers.	**119 (91,866)**
2.	Usage and operation of newly installed electrical fittings and lightbulbs	Excessive energy consumption	Use of energy saving light bulbs which are **"environmental friendly"** Use of solar powered lightings where possible especially for security lighting	Contractor	**33 (25,602)**	Use of Energy efficient bulbs	Site Inspection and Visual Observation	Contractor's compliance	Newly rehabilitated classrooms, workshops and offices.	One-off	SPIU Safeguards Unit; ESSG Officers.	**N/A**
Sub-total cost					**155 (119,727)**							**119 (91,866)**
H.	**SOCIAL RISKS & IMPACTS**											
3.	**Closure of civil works**	Loss of employment for some workers	Inform and document engagement with personnel that employment is short-term prior to their engagement.	Contractor	**N/A**	Information process	Survey	Proper Termination of service documentation	Project corridors	One-off	SPIU Safeguards Unit; ESSG Officers.	**N/A**
Sub-total cost					**N/A**							**N/A**
Total Cost					**155 (119,727)**							**119 (91,866)**

Table 25: Summary of ESMP Mitigation and Monitoring Costs Per Technical Colleges

Technical Colleges	Summary of ESMP Mitigation and Monitoring Costs			
	Mitigation Cost		Monitoring Cost	
	USD	NGN	USD	NGN
FSTC Ahoada	9,658	7,461,191	4,357	3,365,957
FSTC Awka	9,917	7,661,279	4,477	3,458,662
FSTC Dayi	11,264	8,701,891	5,332	4,119,183
FSTC Doma	10,838	8,372,789	5,270	4,071,286
FSTC Ijebu Imushin	10,145	7,837,418	4,487	3,466,387
FSTC Ilesha	10,903	8,423,004	5,238	4,046,565
FSTC Jalingo	10,242	7,912,355	4,584	3,541,323
FSTC Kafanchan	11,751	9,078,118	5,462	4,219,613
FSTC Kuta Shiroro.	11,620	8,976,915	5,582	4,312,318
FSTC Michika	12,400	9,579,496	5,776	4,462,191
FSTC Ohanso	10,672	8,244,547	4,650	3,592,311
FSTC Orozo	10,404	8,037,506	4,607	3,559,092
FSTC Otukpo	10,535	8,138,709	4,681	3,616,260
FSTC Tungbo	9,658	7,461,191	4,357	3,365,957
FSTC Uromi	10,404	8,037,506	4,650	3,592,311
FSTC Uyo	10,385	8,022,828	4,923	3,803,214
FSTC Yaba	10,404	8,037,506	4,607	3,559,092
FSTC Zuru	11,751	9,078,118	5,462	4,219,613
FSTC Ikare Akoko	9,917	7,661,279	4,552	3,516,602
FSTC Usi-Ekiti	10,235	7,906,947	4,903	3,787,764
Total ESMP Cost (For the 20 FSTCs)	**213,103**	**164,630,593**	**97,957**	**75,675,701**

Note: All conversions were done using the Central Bank of Nigeria (CBN) current exchange rate of 1USD = 772.54 NGN at October, 2023.

6.2 Institutional Roles and Responsibilities for ESMP Mitigation and Monitoring.

The successful implementation of the monitoring program will depend on the commitment and capacity of the IDEAS Project Implementation Unit (PIU), environmental and social safeguard consultants in the PIU team and other third parties (institutions) to implement the program effectively. The roles and responsibilities of those that will be involved in the implementation, monitoring and review of this ESMP are discussed in Table 26 below.

Table 26: Institutional Roles and Responsibilities for ESMP Mitigation and Monitoring.

S/N	Category	Roles & Responsibilities
1.	**Federal Ministry of Education**	• Overall monitoring of the IDEAS Project.
2.	**Federal Ministry of Environment**	• Lead role – in the review of draft ESMP report and in the public disclosure of the ESMP report, receiving of comments from stakeholders, monitoring and evaluation process.
3.	**NPCU**	• General oversight and provision of technical support and guidance for ESMP implementation and monitoring for all IDEAS Project States (FSTCs) • Responsible for the provision of (a) General project coordination (b) overall project M&E (c) reporting on project progress to the Bank and aggregating the reporting coming from the SPIUs.
4.	**SPIUs**	• Liaise closely with the CIU in the management of construction and rehabilitation works at the technical colleges and preparing a coordinated response on the environmental and social aspects of project development respectively. • Liaise directly with other MDAs such as NPF, FRSC, respective SEPAs/SWMAs etc. in the management of social and environmental risks and impacts.
5.	**SPIU Safeguard Unit, (Environmental, Social & GBV)**	**Environmental Safeguards** • Collate environmental and social baseline data on relevant environmental characteristics of within and around the FSTCs; • Analyze potential community/individual sub-projects and their environmental risks & impacts; • Ensure that project activities that are implemented will be in accordance to best practices and guidelines set out in the site specific ESMP; • Identify and liaise with all stakeholders involved in environment related issues in the project; and be responsible for the overall monitoring of mitigation measures and the risks & impacts of the project during implementation

S/N	Category	Roles & Responsibilities
		• Monitor safeguards' implementation on sites • Lead the process of Disclosure of the ESMP • Prepare monthly and quarterly environmental safeguards reports . **Social Safeguards** • Develop, coordinate and ensures the implementation of the social aspects of the ESMP • Identify and liaise with all stakeholders involved in social related issues in the project; • Conduct impact evaluation and beneficiary's assessment; and • Establish partnerships and liaise with organizations, Community Based Organizations (CBOs) and Civil Society Organizations (CSOs) • Monitor safeguards' implementation on sites • Supervise the Grievance Redress Committee (GRC) which is in charge of handling and addressing grievances/complaints including maintaining a logbook and monitor GRM implementation. • Prepare periodic social safeguards reports • Plan and implement all GBV related activities for the project • Ensure an effective management of GBV related issues • Prevention, mitigation and management of Sexual Exploitation and Abuse (SEA), Child Abuse, and other forms of GBV related risks identified in the project. • Ensure that all measures outlined in the GBV Action Plans/other GBV Assessments are implemented • Refer survivors to the mapped service provider upon receiving survivors' consent and best interest assessment for minors
6.	**College Implementation Units (CIUs)**	**Environmental and Social Safeguards (ESSG) Officers** *As a ground officer based at the TCs, the ESSG Officers will:* • Assist with routine on-site ESMP monitoring during project implementation at the college. • Work hand-in-hand with the SPIUs to ensure adverse impacts resulting from rehabilitation activities are mitigated before they occur. The ESSG officers will bridge the gap between the SPIUs and the Contractor. • Monitor the activities of the contractor to ensure they are in line with the provisions of the ESMP and report malpractices to the CIU and subsequently to the SPIU Safeguards Unit as soon as they occur. • Prepare monthly safeguards monitoring reports on the progress of the intervention works at the technical colleges. • As a member of the GRC at the level of the college, participate in conflict resolution meetings (when necessary). • Sensitize college administrators, staff and students on the intervention activities.
7.	**Contractors**	• Compliance to CIP specifications in procurement of materials and construction • Implement ESMP during project implementation and budget for this project • Formulation of detailed environmental management plans as specified in the ESMP. • Preparation of work plans for environmental and social management in line with the ESMP. • Ensure any changes during rehabilitation process that may have a significant environmental and social impact are communicated to the ESSG Officer of the technical colleges in time and managed accordingly. • Maintain records of environmental incidents as well as corrective and preventive actions taken. • Supervision of implementation of all the measures and preparation of required Monitoring report.
8.	**State Government MDAs (FME, FRSC, NPF, etc.)**	• Come in when relevant areas or resources under their jurisdiction or management are likely to be affected by the intervention works/projects. • They participate in the EA processes and in project decision-making that helps prevent or minimize risks & impacts and to mitigate them. These institutions may also be required to issue a consent or approval for an aspect of a project; allow an area to be included in a project; or allow impact to a certain extent or impose restrictions or conditions, monitoring responsibility or supervisory oversight.
9.	**State Environmental Protection Agencies (SEPAs)/State Waste Management Agencies (SWMAs)**	• Inspection of project areas in order to ensure strict compliance with sanitation and waste management practices in the state. • Collaboration with other MDAs at the State level, NGOs and Donor Agencies in environmental protection and management especially in areas of waste recycling/management etc. • Uptake of Asbestos Wastes from the colleges and ensure their proper management and disposal. • Collaboration with technical colleges, SPIU and the Contractors for the provision of designated project waste disposal areas; and in final disposal of construction wastes • Ensure proper implementation of Waste Management Plan (WMP) and Asbestos WMP. • Will ensure implementation of measures that concern the biophysical environment.
10.	**Community Leadership, Traditional Rulers, etc.**	• Develop, coordinate and ensure the implementation of the social aspects of the ESMP • Provision of oversight function across project within its jurisdiction for ESMP compliance. • Promote environmental awareness. • Provide comments, advice and/or complaints on issues of non-conformity. • Attend public meetings organized by the SPIU to disseminate information and receive feedback.

S/N	Category	Roles & Responsibilities
11.	**Grievance Redress Committee (GRC)**	• Provision of directives and guidance in monitoring effective and timely handling of grievance as it relates to the IDEAS project
12.	**NGOs/CSOs**	• Assisting in their respective ways to ensure effective response actions, conducting scientific researches alongside government groups to evolve and devise sustainable environmental strategies and techniques. • Overall monitoring of ESMP implementation and its impact in the college.
13.	**World Bank**	• Overall supervision and provision of technical support and guidance. • Recommend additional measures for strengthening the management framework and implementation performance. • Review of monthly/quarterly reports on ESMP implementation and monitoring
14.	**Others/General Public**	•Identify issues that could derail the project and support project risks & impacts and mitigation measures, awareness campaigns.

6.3 Capacity Building

Generally, the SPIUs in synergy with the respective College Implementation Units (CIUs) possess the technical capacity to design, implement and supervise its projects across the participating technical colleges. Nonetheless, for this ESMP it is recommended that the SPIU undergoes training in order to enhance its capacity in Environmental Assessment (EA), Implementation and Monitoring. Training is essential for ensuring that the ESMP provisions are implemented efficiently and effectively. The SPIU shall therefore ensure that all persons that have roles to play in the implementation of the ESMP are competent with appropriate education, training or experience. Similarly, the Contractors shall be required to undertake general OHS awareness training for their project workforce and specific training for those whose work may significantly have adverse impact on the environment. This is to ensure that they are fully aware of the relevant aspects of the ESMP and are able to fulfil their roles and functions. To a minimum, the Contractors shall ensure they provide the following training to their workers:

I. General Awareness in Occupational Health and Safety (OHS) Training;
   - OHS/HSE Induction/Orientation Course for all workers to include (site safety rules, PPE requirements, JHA, Hazard identification and Control);
   - Fire and Life Safety (fire prevention, fire safety regulations, emergency procedures, fire safety equipment, electrical safety).
   - Daily tool box talks for workers at the start of each day's job;
   - Refresher OHS Courses as at when required.

II. Project Specific Occupational Health and Safety (OHS) Training
   - Material Handling Techniques
   - First Aid Training (for Site First Aiders)

Based on the assessment of the institutional capacities of the different agencies that will be involved in the implementation of the ESMP, two broad areas of capacity building have already been identified and recommended for effective implementation of the ESMP. Training costs for ESMP implementation and Monitoring plan are provided in Tables 27-29 respectively.

Table 27: ESMP Mitigation Training Cost for the Technical Colleges.

S/N	Training Module	Responsible Party	Who to Train	Duration	Cost (USD)	Cost (NGN)
1.	**Occupational Health and Safety Management; Fire & Life Safety.**	SPIUs; Independent Consultant.	Contractors	1 day	700	540,778
2.	**Onsite Waste Management**	SPIUs; Independent Consultant.	Contractors		389	300,518
3.	**SH/SEA and VAC Awareness and Application to the rehabilitation works – orientation on acceptable behaviours for construction personnel**	SPIUs; GBV Consultant.	Contractors and other Stakeholders		324	250,303

S/N	Training Module	Responsible Party	Who to Train	Duration	Cost (USD)	Cost (NGN)
	on/off-site					
4.	**Introduction to Operational Safeguard Policies; Environmental and Social Framework (ESF); Environmental and Social Standards (ESSs) applicable to the IDEAS project, training on GBV, GRM, CoC etc.**	WB; IDEAS NPCU; Independent Consultant	Contractors		324	250,303
				Sub-total ESMP Mitigation Training Cost Per FSTC	**1,737**	**1,341,902**
				Total ESMP Mitigation Training Cost for Twenty (20) FSTCs	**34,740**	**26,838,040**

Table 28: ESMP Monitoring Training Cost

S/N	Training Module	Who to Train	Duration	Cost (USD)	Cost (NGN)
1.	**Monitoring and Evaluation Basics - Establishing Monitoring Indicators and Evaluating Performance**	SPIUs; M&E Officer, CIU ESSG Officers.	1 day	324	250,303
2.	**GRM Implementation and Monitoring**	Grievance Redress Committees (GRC)		324	250,303
3.	**Environmental and Social Health and Safety (ESHS) Performance Monitoring**	SPIU Safeguards Unit		324	250,303
			Total ESMP Monitoring Training Cost	**972**	**750,909**
			Total ESMP Mitigation Training Cost for Twenty (20) States	**19,440**	**15,018,180**

Table 29: Overall ESMP Mitigation and Monitoring Training Cost.

S/N	Total Cost	Amount	
		USD	Naira
1.	**Total ESMP Mitigation Training Cost for the 20 FSTCs**	34,740	26,838,040
2.	**Total ESMP Monitoring Training Cost for the 20 States**	19,440	15,018,180
	Grand ESMP Mitigation and Monitoring Training Cost	**54,180**	**41,856,220**

The total cost for capacity building for ESMP Mitigation and Monitoring Program is estimated at **Fifty-Four Thousand, One Hundred and Eighty US Dollars, Only ($54,180)**. This is equivalent to **Forty-One Million, Eight Hundred and Fifty-Six Thousand, Two Hundred and Twenty Naira, Only (NGN 41,856,220).**

6.4 Monitoring and Reporting

The monitoring plan (Internal and External Monitoring) for the ESMP is presented in the Table 30 below. Monitoring results shall be documented with preventive/corrective actions to be implemented.

Table 30: Monitoring Procedures.

Monitoring	Action	Responsibility	When	Deliverables
Internal Monitoring	Regular site visit (to ensure that the mitigation measures and actions specified in the monitoring plan and as bound by the contract is satisfactorily implemented).	CIUs of the respective TCs; Environmental and Social Safeguard Officers from the SPIUs	During Construction Phase	Monitoring Reports and documentation
	Site visit for monitoring and inspection to ensure Contractors adhere strictly to the designs and specifications for the project	SPIUs		Observations and Monitoring Reports to be compiled and presented to the NPCU.
External Monitoring	Regular site visits to ensure project is implemented in an environmentally and socially sustainable manner using the monitoring indicators specified in the monitoring plan and other national and	FMEnv, SEPAs/SWMAs, FRSC, NGOs/CBOs.	During Construction Phase	Inspect monitoring reports from safeguard units and provide feedback and enforce corrective actions where required.

Monitoring	Action	Responsibility	When	Deliverables
	international environmental guidelines/laws			

Reporting Procedures

The reporting procedures presented in Table 31 below, have been developed in order to ensure that the SPIUs are able to receive feedback from the implementation of the ESMP on an ongoing basis and to take rapid corrective actions if there are issues of non-conformance.

Table 31: Reporting Procedures

Phase	Responsibilities	Deliverables	Accountability
Construction	Safeguard Unit CIU ESSG Officers	Two (2) monitoring Reports First to be prepared mid-way into the civil works and the other upon completion of all construction activities.	IDEAS NPCU, SPIUs, FMEnv on request
		Additional Reports according to specific conditions e.g., Accidents, serious environmental/social risks & impacts	
	Contractors	Report on Environmental and Social compliance during civil works	NPCU, SPIUs.
Completion of construction and demobilization of Contractors from site	Safeguard Units CIU ESSG Officers	Final Monitoring Report including all monitoring activities throughout project implementation	NPCU, SPIUs, Report to be archived and made available to the World Bank, & FMEnv on request

Record Keeping and Control

The Contractors are required to keep records providing evidence of ongoing- mitigation activities. Such records may include site monitoring plan, OHS Policy, Site Specific OHS Plan, Emergency response and preparedness procedures, waste inventory and management procedures (type, quantity, transportation and final disposal), site instructions, training records, complaints records, incident report, Inspection, maintenance and equipment calibration records. These documents should be made available to the SPIU Safeguards Unit upon request. The SPIU Safeguard Unit is also required to keep records to provide evidence of monitoring activities and effectiveness of the monitoring plan. The site monitoring plan, identified problems/corrective actions and monitoring reports are to be kept by the Safeguard Unit and be made available to relevant regulators upon request. In addition, all significant communications with FMEnv, the respective SEPAs/SWMAs and other relevant authorities should be documented and kept. These documents are required to track performance to achieve and demonstrate compliance with the monitoring plan and applicable regulatory requirements.

6.5 ESMP Implementation Schedule

The activities related to environmental and social management and monitoring have to be integrated in the overall construction schedule. The project implementation phase for the rehabilitations under the IDEAS project will be completed in Six (6) months period. The implementation schedule is presented in Table 32 below.

Table 32: ESMP Implementation Schedule.

S/N	Activity Description	Responsibility	Preconstruction (Weeks)				Construction (Months)					Operation
			1	2	3	4	1	2	3	4	5	
1.	**Clearance & Disclosure of ESMP**	IDEAS NPCU										
2.	**Environmental and Social Training**	NPCU										
3.	**Finalization of Engineering Designs**	SPIUs, CIUs of the FSTCs, Contractors.										
4.	**Mobilization to site**	Contractors										
5.	**Construction Phase**	Contractors										
6.	**Implementation of Mitigation**	Contractors										

S/N	Activity Description	Responsibility	Preconstruction (Weeks)				Construction (Months)					Operation
			1	2	3	4	1	2	3	4	5	
	Measures											
7.	**Supervising ESMP Implementation**	SPIUs; Safeguards Unit; CIUs of the FSTCs; ESSG Officers										
8.	**Monitoring & Reporting on ESMP Implementation During Construction**	NPCU; SPIUs; Safeguards Unit; M&E Officers; CIUs of the FSTCs; Contractors										
9.	**Monitoring & Reporting on ESMP Implementation Post Construction**	Safeguards Unit; CIUs of the FSTCs;										

6.6 Contractual Measures

Most of the mitigation measures are the obligation of the Contractors during all phases of the project. Consequently, the Contractors will have to prepare their proposals considering the measures as well as the detailed general environmental and social management conditions during civil works. Table 33 below presents the Contractual Measures.

Table 33: Contractual Measures

Action	Remarks
The measures as described in this ESMP should be included in the CIP documents with appropriate flexibility to adjust these measures to site circumstances, and that the Contractors will have to adjust their proposals considering these measures.	The non-inclusion of these measures in the CIP may lead to a disqualification of the technical colleges. The CIPs should contain these environmental and social management measures as firm conditions to be complied with.
Specifically, the measures should be translated into a suite of environmental and social specification that are written in the same language style and format as the rest of the contract document	This approach will ensure that the environmental and social controls integrate seamlessly into the CIP documents and are presented in a familiar form to the Contractors
Cost of applicable mitigation measures only be added to the cost of the CIP document as provisional sum **(See ESMP matrix table for mitigation costs for each project location**)	The Contractor must consider and put the cost for the applicable environmental and social mitigation requirements specified in the ESMP.
Code of Conduct – Preventing GBV and Violence Against Child (VAC): A Code of Conduct should be prepared by the Contractor and signed; and forms part of the engagement agreement. To a minimum, the Code of Conduct should address: Standards of Conduct such as (a) Conflicts of interest (b) Quality of products and services, (c) Health and Safety-reporting injuries and unsafe conditions (d) Workplace violence, labour and human rights, ethics, reporting violations, (e) Sex with any person under 18 is prohibited, etc.	The Code of Conduct indicates the Contractors' commitment to be of best behaviour and comply professionally with the requirements of its engagement and Bank's safeguards.
Individual Code of Conduct Preventing SH/SEA and Violence Against Child (VAC): To a minimum, the individual code of conduct should spell out acceptable behaviour, consequence of violation, the routes for resolution of conflicts in any instance where personal interests conflict general interests regarding to the project work, outside work conduct, due diligence in providing required services, individual commitment to sustainable environmental practice during project implementation activities, etc.	The Individual Code of Conduct indicates the Contractor worker's commitment to be of best behaviour and comply professionally with the requirements of his/her engagement.

6.7 Cost Estimates for ESMP Implementation

To effectively implement the mitigation and monitoring measures recommended in this ESMP, necessary provision will have to be made. The cost of these measures has been estimated and included in the ESMP and presented in Table 34 below. The cost of mitigation to be implemented by the Contractor will be included in the contract as part of the implementation cost by the Contractor. The overall total estimated cost for the ESMP implementation, monitoring and capacity building across the twenty (20) FSTCs is estimated at Four Hundred Thousand and Thirty-Nine US Dollars Only (**USD 400,039).** This is equivalent to Three Hundred and Nine Million, Forty-Six Thousand, One Hundred and Thirty-Four Naira Only **(N309,046,134).**

Table 34: Overall ESMP Cost Estimate for the Rehabilitations across the FSTCs.

S/N	Item	Responsibility	Estimated Cost (USD)	Estimated Cost (NGN)
1	**ESMP Mitigation**	Contractors, SPIU, Communications Officer,	213,103	164,630,593

		CIU ESSG Officer, SEPAs/SWMAs, GBV Consultant, Independent NGOs/CBOs, College Principal/School Mgt.		
2	**Monitoring Cost**	SPIU; Safeguards Unit; SMEnv; SEPAs/SWMAs; FRSC, NGOs, NPF, etc.	97,957	75,675,701
3	**Capacity Building**	NPCU, SPIU; Safeguards Unit; Contractors and Other relevant MDAs	54,180	41,856,220
		Sub-total Cost	**365,240**	**282,162,514**
4	**Contingency**	5% of Sub-total Cost	18,262	14,108,126
5	**Grievance Redress Mechanism**	SPIUs, GRC, NPCU, etc. ***(@ USD665 per TC for 20 FSTCs/States).***	13,300	10,274,782
6	**ESMP Disclosure**	SPIUs (Lump Sum)	3,237	2,500,712
		Total	**400,039**	**309,046,134**

Note: USD to Naira exchange rates as at October, 2023 (1 USD = 772.54 Naira) was applied and figures rounded up.

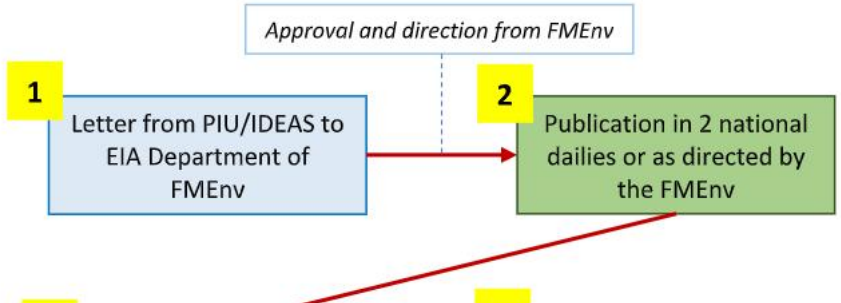
6.8 ESMP Disclosure

After the ESMP review and clearance by the World Bank; the ESMP will be registered with the FMEnv for approval to be granted for its disclosure in-country. Table 33 below describes the process of disclosure.

Table 35: Procedure for Disclosure.

S/N	Action	Remarks
1.	**Registration of ESMP with FMEnv**	Following clearance of the ESMP by the Bank, the SPIU shall proceed with the registration of the ESMP at the FMEnv through its website. A payment of N50,000 will be made via remita per project site–**Twenty (20) technical colleges (N1,000,000)**. Afterwards, two (2) hard copies and one (1) soft copy of the report will be sent together with the receipt of payment and a letter of **"Request for Disclosure"** addressed to the Minister or Permanent Secretary of the FMEnv as the case may be.
2.	**Letter of Approval by the FMEnv**	After all necessary inputs have been incorporated the SPIU will receive an acknowledgement by the FMEnv in form of a letter approving the disclosure of the ESMP.
3.	**Radio advertisement and disclosure of the Cleared ESMP in Two (2) National Dailies or as directed by the FMEnv**	The SPIU will then proceed to advertise at a radio station as directed by the FMEnv and disclose the ESMP in two (2) national dailies as required by the Nigeria EIA public notice and review procedures. The purpose will be to inform stakeholders about the project activities; environmental and social risks and impacts anticipated as well as the proposed mitigation measures for identified impacts.
4.	**Disclosure at the World Bank External Website**	The ESMP will be disclosed on the Bank's External Website upon evidence of in-country disclosure by the Project and according to the World Bank Disclosure Policy (OP 17.50)

The disclosure process is indicated in the Figure 10 below.



CHAPTER SEVEN

STAKEHOLDER IDENTIFICATION AND MAPPING

7.1 Overview

Stakeholder engagement is an inclusive process conducted throughout the project life cycle. Where properly designed and implemented, it supports the development of strong, constructive and responsive relationships that are important for successful management of a project's environmental and social risks. For this reason, stakeholders' engagement must be started early in the project cycle because it guarantees the '**Social License to Operate'** by signalling to communities and other local stakeholders that their views and well-being are considered important.

In this section, consultations with key stakeholders are discussed. A Stakeholder Engagement Process (See Table 36) was developed in order to achieve proper stakeholder identification and mapping. The objectives focused on obtaining the views of relevant stakeholders on subject matter relating to proposed activities.

7.2 Stakeholder Engagement Process

As part of the Stakeholder engagement process, the Consultant embarked on a stakeholder mapping with the SPIU's Safeguards Unit at the FSTCs.

The following steps were taken for the stakeholders' engagement process

a) Identification of Stakeholders
b) Prioritization of Stakeholders
c) Understanding the Identified Stakeholders and their areas of influence/interest
d) Mapping of Stakeholders

See Table 36 below.

Table 36: Stakeholders Engagement Process

Phase According to Consultants Work Plan	Key Stakeholder Engagement Activities	Stakeholders Identified	Level of Influence on the Project
Reconnaissance Survey	✓ Desktop study of project area ✓ Mapping of primary stakeholders in and around the FSTCs (Including communities likely to be influenced by proposed project activities) ✓ Initial identification of stakeholders in synergy with the IDEAS SPIU Safeguards Unit at the participating states. ✓ Introductory meetings with NPCU, PMU, SPIUs, CIU teams at the respective FSTCs, Project Design Consultants, Community Associations, Grievance Redress Committee (GRC), and informants to explain the proposed project and importance of the ESMP, and obtain initial feedback on relevant local issues, including Gender Based Violence and opinions from vulnerable groups. ✓ Building trust and manage expectations	**Direct Project Affected Persons (PAPs)** ✓ Staff and students of the FSTCs proposed for rehabilitation, including National Youth Service Corps (NYSC) Members assigned to the Colleges. ✓ Roadside Petty Traders, Churches, Markets, Mosque, private offices, etc. bordering or in proximity to the FSTCs **Bordering communities** ✓ Residents, artisans and petty traders. Occupy areas which	Work and receive academic classes in the Technical Colleges. Petty Traders, worshippers, and workers Operate business and deliver services within the area Provide some form of Social/Technical assistance for community driven

		are approximately 20m and above around the project corridors. **Indirect Project Affected Persons** **a) Community Leadership Level** ✓ Community leaders ✓ Youth Groups ✓ Women Association ✓ GRC **b) Community Driven-Initiatives** ✓ Community Based Organizations (CBOs) ✓ Faith Based Organizations (FBOs) ✓ Non-Governmental Organizations (NGOs) c) **Government/State Agencies** ✓ IDEAS Project ✓ FRSC ✓ FMEnv ✓ SEPAs/SWMAs ✓ NPF/NSCDC.	initiatives related to livelihood, security, health and gender issues To a certain extent, are leaders at the community level with influence on the behavior of habitants in their domain These have the mandate of the State Government to be critical decision makers, advisory groups and provide technical assistance in terms of general waste management, traffic control, security, etc.
Baseline Studies and Field Works	✓ Complement field activities with input from the public consultation/stakeholder engagement specialist ✓ Detailed mapping of stakeholders and social landscape ✓ Maintain a stakeholder log/minute (meetings, key issues raised, agreed actions, and responsibility) ✓ Plan, liaise and brainstorm with the IDEAS Project NPCU and SPIU on consultations, and outcomes ✓ Ensure inclusion of a formal grievance mechanism as an annex in the ESMP Report	Stakeholder Identification continues	Will be determined once other stakeholders are identified

7.3 Fundamentals of Stakeholder Engagement Approach for Implementation

Consultations: The objectives of consultations for the rehabilitations of the FSTCs included receiving input for improved decision-making about the design and implementation arrangements of the proposed intervention works to contribute to improved results and sustainability.

Collaboration: Collaboration was established with identified stakeholders to allow for effective decision-making processes so as to make decisions which are more responsive to stakeholder needs and improve the sustainability of program and project outcomes through increased ownership by stakeholders.

Collecting, Recording, and Reporting on Inputs from Stakeholders: Stakeholder feedback on various dimensions of public services provided will be collected periodically through the Communication Specialist of the College Implementation Units. These may to a minimum include: inclusiveness in decision-making, resource utilization or engagement processes.

Stakeholders-led Monitoring: Involving stakeholders in monitoring services and products delivery, revenues, budget execution, procurement, contract awards, and reform policies will increase transparency, improve efficiency of service delivery or budget execution, and reduce opportunities for corruption. Additional entry points for stakeholder's engagement in monitoring will include collaboration with local CBOs/NGOs, communities, local academia, or think-tanks in gathering results data and conducting joint evaluations of project results after project completion (including in the preparation of project Implementation Completion Reports).

Capacity Building for Stakeholder Engagement: Capacity building for all relevant stakeholders (CBOs, communities, government officials, and national accountability institutions) is particularly necessary and needs to be systematically integrated into World Bank Group (WBG) supported operations where Stakeholder Engagement (SE) approaches are introduced for the first time at scale at the national, sectoral, program, or project level. A focus on building government capacity is also important to ensure the sustainability of engagement processes beyond the life of a project intervention.

Vulnerable Groups

Vulnerable Groups were identified at the level of consultations**.** The criteria utilized were based on establishing members of the project area of influence likely to be at the most risk of the adverse risks & impacts of the proposed intervention works. This is with regards to: (*i) easy predisposition to SH and SEA, contracting STIs and STDs or unwanted pregnancies (social vulnerability); (ii) individuals likely to suffer temporary effects of renovation of classrooms, toilets, laboratories and on-site infrastructure and may face psycho-social impacts (physical and social vulnerability); (iii) staff and visitors with physical disabilities; and (iv) elderly persons (social and probably, economic vulnerability)*. In line with the criteria above, these include:

- **Female Students/Corpers/Staff within the College:** These stand the risk of suffering SH, SEA, contracting STIs, STDs or unwanted and/or early pregnancies caused by migrant workers, especially at the pre-rehabilitation and rehabilitation phases.
- **Persons with Disabilities:** Negative risks & impacts may be associated to restriction of movement and access to work areas/classrooms during the construction phase especially for teachers, students, corps members with disabilities. Barricaded or waste stacked routes or work areas may restrict and impede movement of staff and students living with disabilities to their office blocks and classrooms respectively.
- **Elderly Persons:** Considering that most schools have administrative personnel and security personal who are above 55years, it's imperative to put them into cognisance, as they might easily be susceptible to adverse environmental and social risks & impacts associated with the intervention works.

7.4 Stakeholders' Engagement Summary

With the outbreak and spread of COVID-19 since 2020, the Government of Nigeria, has provided guidelines through the Nigeria Center for Disease Control (NCDC) to enforce measures that help reduce transmission of the disease, with strict adherence to social distancing. Additionally, due to the intense and widespread insecurity (kidnapping, banditry, terrorism, armed robbery and violent killings by herdsmen and unknown gunmen), the stakeholder consultations for this ESMP Report were conducted partly in view of the **"Public Consultations and Stakeholder Engagement in WB-supported Operations when there are Constraints on Conducting Public Meetings"**. The major steps followed included *i) permitting smaller meetings, and conducting consultations in small-group sessions, such as focus group meetings ii) conducting meetings through GSM phone conference calls, online channels, zoom and skype and iii) creation of online chat groups appropriate for the purpose, based on the type and category of stakeholders;*

A summary of the key discussions, concerns and responses from the consultation at the FSTCs is provided below.

Participants: ESMP Consultant, SPIUs, CIU Team at the FSTCs in all states

The ESMP Consultants requested the CIPs and feasibility studies for the proposed rehabilitation at the colleges. He also explained the purpose of the ESMP and highlighted potential E&S risks and impacts at the colleges, along with suggested mitigation measures to be included in the ESMP report.

Participants: School Management (Principal/Vice Principal, Staff, Students, NYSC Corps Members)

Discussions were similar in most locations, with a few peculiarities as highlighted below:

i. Stakeholders (particularly Principals) enquired to better understand the rationale behind the ESMP study to be undertaken at the colleges and why it was necessary prior to the rehabilitation activities. The ESMP Consultants explained the purpose and rationale for the ESMP and highlighted potential E&S risks and impacts at the colleges, along with suggested mitigation measures to be included in the ESMP report. The opinion of the stakeholders was sought as regards identified E&S risks peculiar to some of the college so as to come up with realistic mitigations which would offset or reduce the impacts as low as reasonably possible. Enquiries was also made about their cultural and socioeconomic activities and they were urged to express their views as regards the project.
ii. They appreciated the idea of the proposed rehabilitation and its numerous benefits for their colleges and expressed their optimism on its potential to stir up an improvement in the TVET subsector.
iii. They assured the team of their full assistance and cooperation. Also, they enquired on the scheduled period when the funds earmarked for the rehabilitation activities will be disbursed to them to enable them commence with implementation. The Consultant further informed that the scheduled period for the commencement of the rehabilitation cannot be ascertained in the meantime; however, the activity will most likely kick start after the current assessment is completed.
iv. The CIU at technical colleges, including FSTC Orozo, FSTC Doma, FSTC Michika, FSTC Awka, FSTC Yaba, FSTC Kuta Shiroro, and FSTC Ilesha, provided the consultant with information about traffic assessment. They informed the consultant that considering that these colleges are located along busy roads and highways, they experience significant traffic build ups, particularly during peak hours. Since there is no alternate route, they helped define off-peak hours that the Contractors could utilize for material procurement and supply/haulage during the proposed rehabilitation at the colleges.
v. Students, NYSC Corps Members, and Staff from various technical colleges expressed that access to water is a significant challenge at their colleges. Particularly, stakeholders at FSTC Michika and FSTC Otukpo informed the Consultant's team that they rely on commercial water vendors (tanker supply), sometimes twice daily, due to inadequate water supply from shallow boreholes which tend to dry quicker. This inadequacy is further exacerbated by unstable and intermittent power supply, leading to some colleges proposing the installation of solar-powered boreholes to address this issue.
vi. The Consultant and the CIU at the colleges jointly identified locations prone to insecurity (banditry, kidnappings, etc.) and proposed realistic mitigation measures to be strictly followed throughout the proposed rehabilitation.
vii. CIU teams at colleges where asbestos ceilings will be removed for new PVC ceilings were educated on best practices and ecologically safe methods for handling, temporarily storing, and disposing of asbestos waste through SWMAs or state-approved waste vendors.
viii. The Consultant provided guidance to SPIUs and CIUs at the respective FSTCs on their monitoring responsibilities for smooth ESMP implementation. Additionally, discussions on grievance mechanisms and redressal processes were held.
ix. Information on existing cultural and socioeconomic practices within the host communities of the colleges was gathered to understand the socioeconomic baseline conditions and how the project may impact these prevailing conditions at the project locations and vice versa.

NOTE: *Initial stakeholder engagement was conducted with the respective SEPAs/SWMAs, FRSC, etc. at the states. The major output was that the MDAs are open to assisting with the implementation of the project as long as the FSTCs or the SPIUs liaise and seek their assistance via a follow up consultation during the rehabilitation phase.*

7.5 Stakeholder Consultation Plan Onwards

Figure 5 below shows the stakeholders' consultation plan onwards.

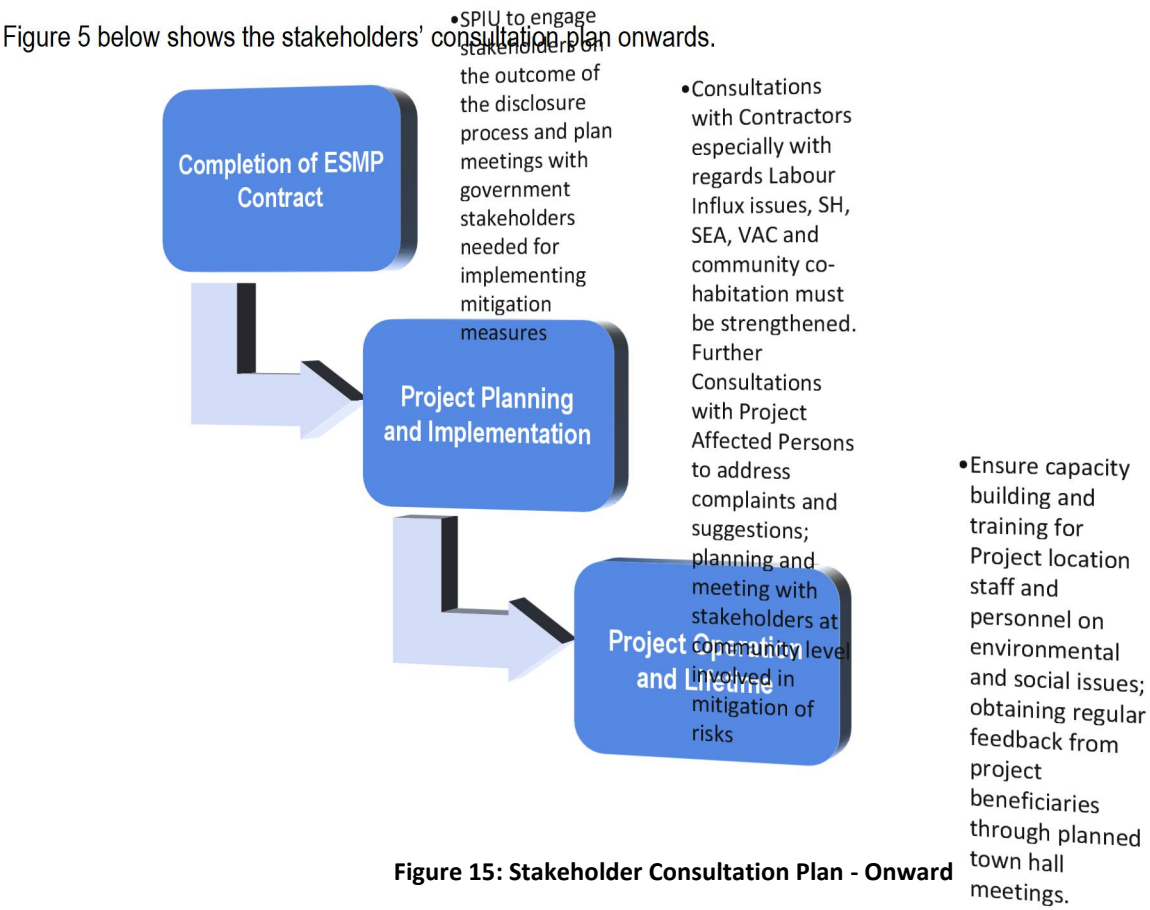


Figure 15: Stakeholder Consultation Plan - Onward

CHAPTER EIGHT

GRIEVANCE REDRESS MECHANISM

8.1 Introduction

This Chapter has been prepared to address the management of grievances arising from the proposed interventions works at the FSTCs therefore, the contents herein are a summary of key areas relevant to the subprojects for this ESMP. The GRM for the sub-projects will be applied at 3 levels namely; **School/Community Level, State Level and National Project Coordination Level**. The structure and composition of these levels have been further discussed in subsequent sections. The GRM will assist the SPIU to ensure that deliberate processes and procedures are put in place to capture, assess and respond to concerns from project beneficiaries, project executors and the general public during the implementation of the project. This will ensure smooth implementation of the projects, timely and effectiveness in addressing problems that may be encountered during implementation.

8.2 Potential Grievances Related to the Rehabilitations Under the IDEAS Project

Under the IDEAS project, the potential areas that grievances may arise from as a result of activities or inactivity include:

- Construction activities due to noise, dust emission, community health and safety, waste management issues;
- Community health and safety issues;
- Disruption of livelihood activities;
- Potential increase in sexual exploitation and abuse/sexual harassment (SEA/SH) due to labour influx, workers, school staff, etc.;
- Potential increase in intimate partner violence (IPV) from the financial incentive component of the project;
- Disagreements and conflicts from community members regarding the procurement of construction materials;
- Procurement process and selection of Contractors;
- Exclusion of persons, communities and LGAs from project benefits;
- Non-compliance of the contractor to the agreement reached with IDEAS or the community;
- Lack of alternative route for movement during construction, etc.

Interest Groups

The key interest groups in this regard are:

- Community based influencers supporting the project who are liable to be accused of benefit capture, exclusion and marginalization
- Touts seeking employment, extortion and robbery opportunities; capable of starting unprovoked conflict
- Local vigilantes, police, sanitation and other enforcement corps
- Federal Road Safety Corps (FRSC)
- Women groups
- Persons whose livelihoods might be impacted by project activities
- Project employed labour
- Youth groups
- Local NGOs focused on Sanitation and Environment

Disadvantaged or Vulnerable Groups

Key disadvantaged or vulnerable groups identified are:

- Teenage and adolescent females
- Women and Children
- Persons living with disabilities
- Elderly people

8.3 Objectives of GRM

The specific objectives of this GRM are as follows;

a. Resolve grievances when they occur, and mitigate their consequences, as well as preventing them from escalating;
b. Achieve resolution of IDEAS Project related grievances and conflicts in a transparent, timely and efficient manner;
c. Achieve improvement, and restore relationships among people and communities arising disputes or displeasure related to the IDEAS Project activities;
d. Provide communication channels for aggrieved persons to express their displeasure and be heard;
e. Improve stakeholder participation and decision making through dialogues and registration of grievances and conflicts;
f. Win the trust and confidence of project beneficiaries and stakeholders to create productive relationships between parties; and
g. Allow schools/communities to express views on negative impacts from construction activities, construction, on Contractor workers, work quality, malpractice, and so on.

8.4 Key Steps and Processes for Handling Complaints at the GRM

When a grievance is received and registered through the GRM, necessary steps will be taken to resolve the issues. The figure below shows the steps for handling complaints:

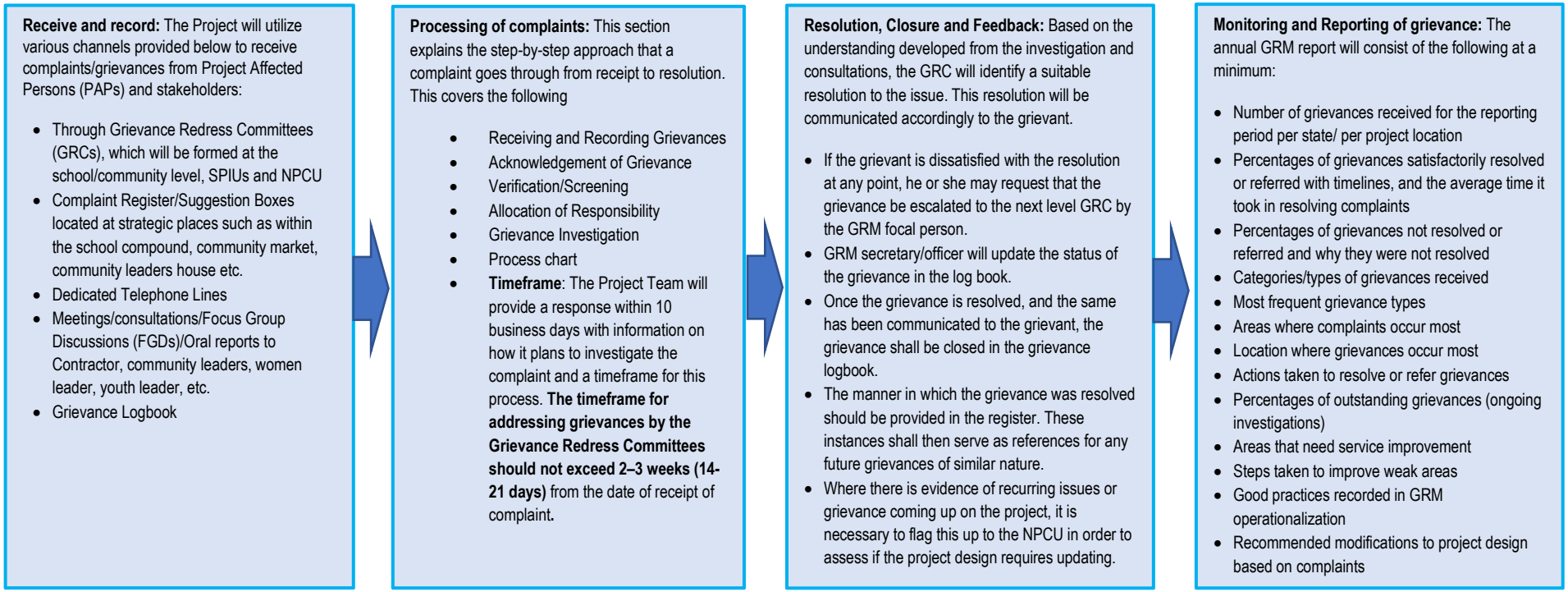


Figure 16: Key Steps for Handling Complaints.

GBV Specific Grievance Redress Mechanism (GRM) for the TCs

For GBV—and particularly SEA and SH—complaints, there are risks of stigmatization, rejection and reprisals against survivors. This creates and reinforces a culture of silence so survivors may be reticent to approach the project directly. The GRM therefore needs to have multiple channels through which complaints can be registered in a safe and confidential manner. Specific GRM considerations for addressing GBV are:

- There should be a GBV specific GRM and GRC established at the level of the colleges with the CIUs as part of the committee. The GRM operators are to be trained on how to collect GBV cases confidentially and empathetically (with no judgement). ***See Annex 14 for further details.***
- The colleges must have multiple complaint channels, and these must be trusted by those who need to use them. Consultations with staff and students may be one mechanism to identify effective channels (e.g. A member of the Guidance and Counselling Unit, a teacher that most students can confide in, etc.).
- No identifiable information on the survivor should be stored in the GRM.
- The GRM should not ask for, or record, information on more than three aspects related to the GBV incident: a) The nature of the complaint (what the complainant says in her/his own words without direct questioning); b) If, to the best of their knowledge, the perpetrator was associated with the project; and, c) If possible, the age and sex of the survivor.
- The GRM should assist GBV survivors by referring them to the nearest adequate GBV Service Provider(s) for support immediately after receiving a complaint directly from a survivor. ***It is advised that the IDEAS project conducts a GBV Mapping prior to commencement of civil rehabilitations at the colleges in order to obtain updated information on service providers available at the project locations, the type of services they offer and their contacts for easy accessibility.***
- The information in the GRM must be confidential—especially when related to the identity of the complainant. For GBV, the GRM should primarily serve to: a) refer complainants to the GBV Services Provider; and b) record resolution of the complaint

7.3 Structure of Grievance Redress for the IDEAS Project

A three-level redress system is planned to address all complaints during IDEAS sub-project implementation. These include:

- School/Community level
- State level, and
- National Project Coordination Unit (NPCU) Level

7.4 First level of Redress: School/Community Level

This level of GRC is easily accessible to complainants in the project area (school/community people), without any costs.

First level GRC constitution shall include:

- GRC Chairman – A Representative of community leadership
- GRC Secretary – School Principal/Vice Principal
- PTA Chairman of the school
- Guidance Counsellor of the TCs
- E&S Officer of the CIU
- Women representative (community women)
- Student representative[12]
- LGEA officers responsible for schools monitoring and inspection (from SME and SUBEB)

With the support of the SPIU Social Officer, the GRC will sensitise students, staff, community members on how to channel complaints to the committee through any of its members or other available channels such as complaint boxes, phone lines etc. This committee will receive complaints through the designated channels (complaints boxes, emails, project website, designated phone numbers, direct complaints lodged with any member, complaints raised at progress review meetings/Focus Group Discussions (FDGs)/public consultations etc., anonymous complaints amongst others). Where complaints are directly related to the IDEAS project, the GRC secretary will lodge it in the grievance logbook and proceed to inform the Chairman to enable the committee meet and take action towards resolving the complaint. Whereas, where complaints are not directly related to the IDEAS project, they should be directed to the appropriate authority to handle such complaints and inform the complainant accordingly. Moreover, if the complaints are connected to Gender-Based Violence (GBV) or Sexual Exploitation, Abuse, and Harassment (SEA/SH), individuals can directly report their concerns to the school's Guidance Counsellor. The Gender and Counselling (G&C) Unit promptly takes action to support the affected person, if applicable. This involves immediate provision of on-site first aid, arranging a temporary secure environment for recovery, and subsequently guiding the individual to a certified GBV service provider for specialized care. Additionally, the Unit initiates an inquiry into the complaint to thoroughly investigate the matter and hold accountable any responsible parties according to the law.

7.5 Second Level of Redress: State Level (SPIU)

This GRC is formed at the SPIU level and can receive complaints from the 1st level GRC or directly from complainants through phone calls or in-person during visit to the communities.

Members of the 2nd level GRC include:

- Project Manager/Coordinator
- Environmental Safeguards Officer
- Social and GBV Officer.
- Communication Officer

At this level, the Project Manager or Coordinator will be the Chairman while the Communications Officer will be the Secretary of the GRC. The Communication Officer will record the complaint in the grievance logbook and ensure the GRC meets timely to discuss the matter.

7.6 Third Level of Redress: NPCU Level

This GRC is formed at the National office level and can receive complaints from the 2nd level GRC or directly from complainants.

Members of the 3rd level GRC include:

[12] Student representative and SME/SUBEB can be extended members of the GRC who may be involved in dispute resolution as required, in order to limit exposure for the former and avoid lengthy processes where unnecessary for the later

- National Project Coordinator
- Social Safeguards Officer
- Environmental Safeguards Officer
- Communication Officer
- GBV Officer

At this level of GRC, The National Coordinator will be the Chairman while the Communication officer will be the Secretary of the GRC. The GRM officer will record the complaint in the grievance logbook and ensure the GRC meets timely to discuss the matter. Where the complaint remains unresolved at this level, or the complainant dissatisfied, the parties can seek court redressal. However, this should be as a last resort as court cases are lengthy, costly and could lead to a total halt of the project pending the resolution of the matter. Concerning incidents of GBV complaints, the survivors is free to pursue judicial redress if they wish. The Project will support them to seek legal and justice services if this is the wish of the survivor. The State Project Coordinator through the National Coordinator will ensure a detailed report including actions taken to resolve the issue is sent to the Task Team Leader (TTL) prior to referring the matter to court.

7.7 Reporting

The Communication officers at the SPIU and the NPCU will ensure that GRM activities are adequately and timely reported to the State Project Coordinators and the National Project Coordinator as required. The State Project Coordinators and the National Project Coordinator will ensure that GRM activities are adequately and timely reported to the World Bank. This process will be coordinated by the NPC. The Communication Officers will prepare monthly reports on all grievances received and resolved in addition to any other GRM activity reports. Such reports can either be included as part of the monthly E&S reports or as standalone as may be requested by the reviewer. Quarterly reports on all grievances received and resolved will be complied at the State levels with the coordination of the National level GRM focal person. The Quarterly reports are then shared with the World Bank team. Annual reports on GRM activities and operationalization will also be prepared at the state levels and the NPCU for the attention of relevant stakeholders and the Bank. It is worth nothing that GBV grievance must not be included in annual report.

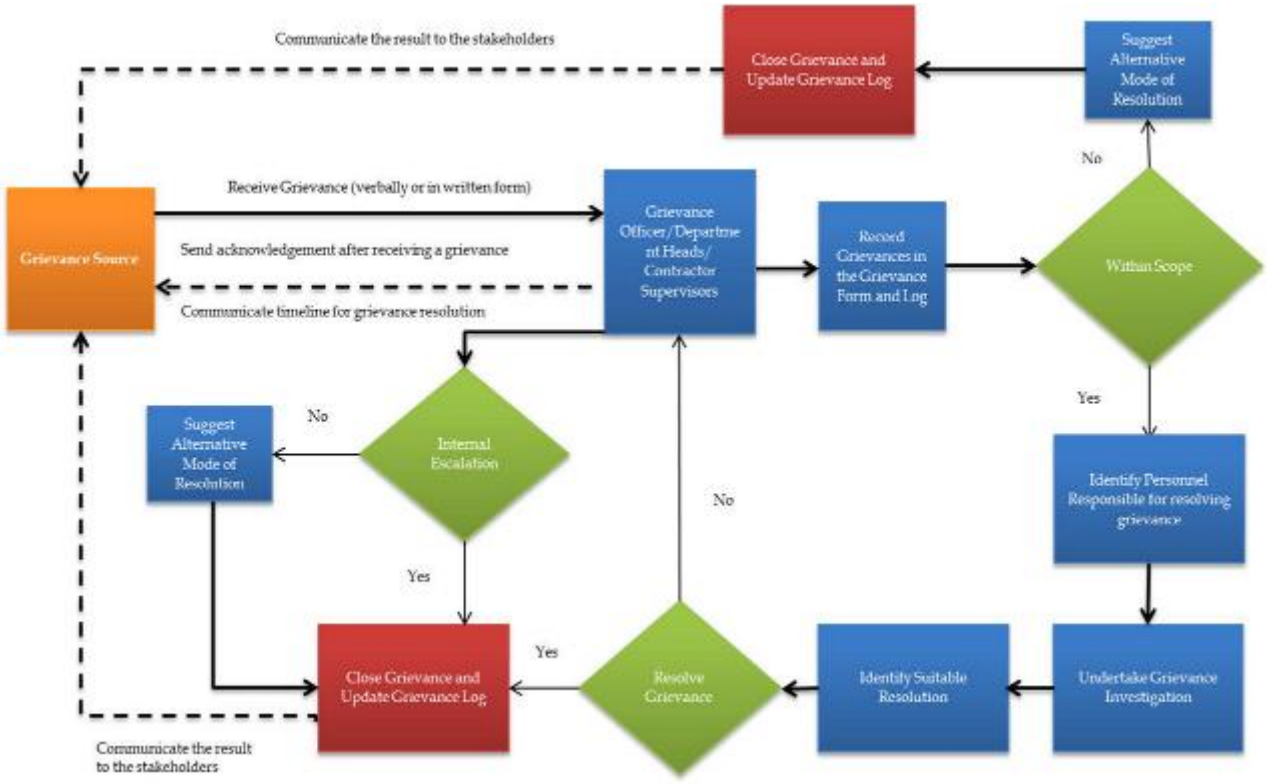


Figure 17: Summary of Schematic Representation of the IDEAS Project Grievance Redressal Process.

CHAPTER NINE

SUMMARY AND RECOMMENDATIONS

The following recommendations are provided:

i. The design of the proposed boreholes at the colleges shall incorporate deeper well in order to extend the borehole's longevity, since several technical colleges have multiple boreholes that are dysfunctional due to the shallow depth of their wells. A geophysical investigation of the environment within the colleges (where borehole installation is proposed) should be undertaken to determine ideal locations for siting boreholes within the college depending on certain criteria (e.g. groundwater availability, topography of the area, aquifer characteristics, water quality, etc.).

ii. Solar boreholes shall be installed in order to maintain a healthy, sustainable, and ecofriendly environment. By doing this, the negative effects of using diesel-powered generators to pump water will be lessened.

iii. In the course of rehabilitation works, there would be a moderate to severe likelihood of the occurrence of workplace hazards. Contractor workers will be predisposed to hazards. "**Unsafe behaviours**" and **"unsafe conditions"** will pose a serious occupational health and safety risk. Occupational disasters happen more due to "unsafe behaviours" compared to "unsafe conditions". Hence, project/site workers shall be trained on unsafe behaviours and be provided with necessary equipment to practice safe behaviours. Furthermore, the necessary facilities to facilitate safe conditions and discourage unsafe behaviours shall be made available to workers;

iv. For effective waste management on-site, the Contractor shall ensure proper collection, segregation, reuse/recycling or subsequent disposal of wastes. Furthermore, in colleges where the generation of hazardous wastes (e.g. Asbestos ceilings and roofs) is envisaged, liaison with a third-party waste vendor for proper evacuation and disposal is critical.

v. Construction Safety sign boards and work area lightening and cordon tapes should be installed to protect workers, students and staff around the construction sites. Furthermore, off peak periods should be leveraged for demolition activities in order to reduce its associated adverse impacts.

vi. The Safeguard Unit of the SPIU including the SPIU M&E Specialist should ensure active monitoring so that the Contractor adhere strictly to the requirements of this ESMP especially in the application of mitigation measures during project implementation.

vii. The SPIU should ensure to conduct trainings and capacity building, as well as sharing of IEC materials to Contractor for mitigation measure during civil works.

viii. Importantly, the Contractor should ensure to treat borehole and stored water in tanks with chlorine and Alum[13]. This will control the heavy metals and micro-organism load in water and reduce the occurrence of heavy metal poisonings, intoxication of water-borne infection in the College, especially during the operation phase.

[13] a type of chemical compound, usually a hydrated double sulphate salt of aluminium

ix. Security measures shall be intensified, especially for technical colleges in areas with a history of insecurity. Mobile security shall be employed during material procurement and supply for structural rehabilitation at these colleges. Contractors in these locations will conduct a Security Risk Assessment (SRA), and late-night movements during curfew periods MUST be avoided.

REFERENCES

1. WB Environmental and Social Framework (2017) – https://thedocs.worldbank.org/en/doc/837721522762050108-0290022018/original/ESFFramework.pdf
2. IDEAS Project Appraisal Document (PAD) – 2020.
3. IDEAS – Environmental and Social Management Framework (ESMF) – 2020.
4. World Bank Group Environmental, Health, and Safety Guidelines (2007)
5. COVID-19 Guidance for WBG/IMF Contractors in Country Offices/Overseas Office (2020)

ANNEX 1: TERMS OF REFERENCE

Innovation Development and Effectiveness in the Acquisition of Skills (IDEAS) Project

TERMS OF REFERENCE (TOR) FOR THE

ENGAGEMENT OF A CONSULTANCY FIRM TO PREPARE ENVIRONMENTAL AND SOCIAL MANAGEMENT PLANS (ESMP) FOR THE REHABILITATION OF WORKSHOP, CLASSROOM ETC IN FSTCs AND STCs

1.0 Introduction

The IDEAS Project

The further development of a globally competitive industry will require Nigeria's formal system of technical and vocational education and training (TVET) to train a cadre of highly-skilled technical personnel. Sectors of the economy that will drive economic growth in Nigeria – such as infrastructure, manufacturing, and services – require good post-basic technical vocational skills, which are currently being produced in small numbers and with poor quality. The emerging digital economy will require workers with new and up-to-date skills to keep Nigeria abreast of global market developments. Moreover, economic transformation towards increased diversification will continue to change skills development requirements.

Against this background, the Government of Nigeria has secured funding from the World Bank for a new project to improve the country's TVET system: the *Innovation Development and Effectiveness in the Acquisition of Skills* (IDEAS) Project. The IDEAS project aims to improve skills acquisition in Nigeria using a comprehensive approach and addressing key aspects of the skills development delivery system. It leverages industry involvement for better labour market fit and crowding in of private resources in the formal training system. Enhancing the quality of informal apprenticeship training represents a pro-poor approach aimed at breaking the vicious cycles of low productivity and low skills development in the informal sector. It unlocks essential drivers of quality and relevance including teaching resources and management capacities and scales up important recent policy and regulatory reforms of the Nigerian government, such as the NSQF and the establishment of Sector Skills Councils.

The IDEAS project is structured into four components:

i. Incentivizing public-private partnerships for enhanced quality and labour-market orientation of skills development in public Technical Colleges.

ii. Improving skills formation for the informal sector.

iii. Increasing the availability of competent and motivated technical teachers and instructors in the Nigerian skills space.

iv. Strengthening the regulatory environment and public management capacities for market-oriented skills development.

2.0 BACKGROUND

The aim of this study is to prepare and Environmental and Social Management Plan (ESMP) for the proposed works to be carried out at the **6 State Project Implementation Units (SPIUs), 20 Federal Science and Technical Colleges (FSTCs) and 18 State Science and Technical Colleges (STCs).** In the process of achieving this, the study will assess the potential environmental and social impacts of the proposed works, put in place a system which will adequately manage these negative impacts, and to prepare a detailed Environmental and Social Management Plan (ESMP). Generally, the ESMP will be carried out to establish modalities of implementing the project in line with World Bank Safeguard Policies, while taking into consideration the environmental and social procedures of the Federal Government of Nigeria.

The ESMP will be utilized by the contractor(s) to be commissioned by 6 State Project Implementation Units (SPIUs), 20 Federal Science and Technical Colleges (FSTCs) and 18 State Science and Technical Colleges (STCs) in the preparation of the required Contractor's ESMP (C-ESMP) which will form the basis of the site-specific management plan prior to the commencement of the proposed civil works. The ESMP will also be used by the contractor to address all Occupational Health and Safety (OHS) issues as well as community health and safety issues associated with the proposed works.

The proposed study will achieve the following objectives:

i) Potentially screen out environmentally unsound activities
ii) Propose modified designs to reduce environmental and social impacts
iii) Identifies feasible alternatives
iv) Predicts significant adverse impacts
v) Identify mitigation measures to reduce, offset, or eliminate adverse impacts
vi) Engage and inform potentially affected communities and individuals
vii) Influence decision-making and the development of terms and conditions

2.1 DESCRIPTION OF PROPOSED INTERVENTIONS

The Consultant will connect with the **6 State Project Implementation Units (SPIUs), 20 Federal Science and Technical Colleges (FSTCs) and 18 State Science and Technical Colleges (STCs) to get the** description of the works activities they intend to carry out e.g. renovation, construction, expansion, rehabilitation etc. What activities would be carried out? What will the FSTC/STC facilities include? Designs and plans could be included here. The PAD quite specific on rehabilitation.

3.0 OBJECTIVE OF THE ASSIGNMENT

The proposed works at these designated centres will includes renovation, minor construction, expansion, rehabilitation etc. and all these would likely cause minor negative environmental and social impacts due to the nature of works. Some of the potential impacts that may arise during the construction works will include: very minor generation of hazardous, non-hazardous waste, noise/air pollution, occupational health & safety risks,

risks associated with labour influx (security threat, gender-based violence (GBV) in particular Sexual Exploitation and Abuse due to labour influx, increase in STIs/STDs), among others.

All these trigger the World Bank's Operational Policy (OP) on Environmental Assessment (OP 4.01) and Involuntary Resettlement (OP 4.12). In addition, the Nigeria EIA Act mandates that any construction that would have significant impact on the environment must be subjected to an environmental assessment prior to commencement of the civil works.

Thus, the IDEAS Project is proposing to engage a professional consultant who would prepare an Environmental and Social Management Plan (ESMP) to identify the environmental and social impacts associated with this project as well as proffer mitigation measures to address identified potential negative impacts.

4.0 SCOPE OF WORKS

The Consultant will work in close collaboration with the engineering design consultants and the SPIU, FSTC/STC. The consultant will consider the technical variants of the proposed activities and in return, inform the technical design consultants of any major constraint or recommendation that may arise due to the social and environmental situation of the project site.

The Consultant will consider the proposed civil, electrical, engineering designs, remodeling, landscaping, drainage construction, alternative power sources provision and other activities that would be carried out within the project location. The consultant will assess natural resources and infrastructure potentially affected during project implementation and operation and select the management strategies needed to ensure that environmental and social risks/impacts are appropriately and adequately mitigated.

Tasks of the Consultant include the following:

i) Review the existing PAD, ESMF, RPF, PIM, and other key project documents prepared for the IDEAS Project

ii) Review of preliminary engineering designs and technical/feasibility studies for the proposed project locations;

iii) Review Nigeria's policy, legal and administrative framework relevant to the sub-project activities.

iv) Review Environmental and Social Safeguards policies of the World Bank triggered on the Project;

v) Analyse the physical, biological and human environment conditions in the study area prior to project implementation. This analysis shall include the interrelations between environmental and social components of the proposed project site and shall include:

- The following biophysical baseline shall include take into consideration; climate, air quality, noise, hydrology and water resources (surface and aquifer characteristics), soil, biological aspects: flora and fauna, endemic and endangered species.
- The following social baseline shall include take into consideration data on socio economics (age, ethnicity, income, etc), culture, economic and social activities within and around the proposed, infrastructural facilities, social organization, and vulnerable groups including PLWD, gender and conflicts involving the FSTC/STC.

vi) Describe the proposed sub-project by providing a description of the Project relevant component and presenting schematic diagrams, maps, figures and tables.

vii) Assess the potential environmental and social impacts related to the sub-project activities.

viii) Define appropriate mitigation/enhancement measures to prevent, minimise, mitigate, or compensate for adverse impacts or to enhance the sub-project environmental and social benefits, including responsibilities and associated costs.

ix) Assess the occupational health and safety issues and community health and safety issues related to the proposed project and recommend mitigation measures.

x) Identify institutional responsibilities and actors for the implementation of proposed mitigation measures and the ESMP.

xi) Develop an Environmental and Social Management Plan (ESMP) for the work. The ESMP should underline:
   (i) the potential environmental and social impacts resulting from proposed expansion and renovation activities
   (ii) the proposed mitigation measures;
   (iii) the institutional responsibilities for implementation;
   (iv) the monitoring indicators;
   (v) the institutional responsibilities for monitoring and implementation of mitigation measures;
   (vi) the estimated costs of activities; and
   (vii) Calendar for implementation.

xii) Assess the capacity available to implement the proposed mitigation measures and identify institutional responsibilities and needs for capacity building if necessary to implement the recommendations of the environmental and social assessment and associated costs.

xiii) Carry out consultations with primary and secondary stakeholders in order to obtain their views about the project. These consultations shall occur during the preparation of the ESMP to identify key environmental and social issues and impacts, and after completion of the draft ESMP to obtain comments from stakeholders on the proposed mitigation/enhancement measures.

3.1 CONSULTATIONS

The Consultant should carry out consultations with identified primary and secondary stakeholders in order to obtain their views about the sub-project/project. These consultations shall occur during the preparation of the ESMP to identify key environmental and social issues and impacts, and after completion of the draft ESMP to obtain comments from stakeholders on the proposed mitigation/enhancement measures.

3.2 ETHICAL REQUIREMENTS

Before undertaking any activity, the Consultant will ensure that s/he understands all ethical considerations related to gender-based violence (GBV) (in particular Sexual Exploitation and Abuse [SEA]). The consultant should not collect any primary data and should NOT conduct interviews or research using the SEA survivors and will only make use of secondary sources and data. The objective of this is to minimize harm to women and children.[14]

5.0 REPORT OUTLINE

[14] "A woman may suffer physical harm and other forms of violence if a partner finds out that she has been talking to others about her relationship with him. Because many violent partners control the actions of their girlfriends' or wives, even the act of speaking to another person without his permission may trigger a beating." For more information on ethical considerations see: VAWG Resource guide, http://www.vawgresourceguide.org/ethics

The ESMP Report shall be presented **College by College** in a concise format containing all studies, processes, analyses, tests and recommendations for the proposed intervention. The report shall focus on the findings, conclusions, and any recommended actions, supported by summaries of the data collected and citations for any references used. The ESMP should follow the outline below:

Preliminary Pages

i) Cover page
ii) Table of contents
iii) List of acronyms
iv) Executive summary

Chapter One: Introduction

i) Background of Project
ii) Scope of planned intervention: renovation/rehabilitation/construction works *(select one)*
iii) World Bank Policies triggered by project and rationale for ESMP

Chapter Two: Project Description

i) Description of Project Area
ii) Description of sub-project works, activities designs and site locations including maps and plans

Chapter Four: Environmental and Social Baseline of the Proposed Project Site

i) Description of Environmental Baseline Conditions
ii) Description of Socio-economic Baseline Conditions
iii) Environmental and Social Sensitivities in the project areas (including map of the hubs showing the locations of all sensitivities)
iv) Gender and Gender Based Violence Statistics (state information and project specific)

Chapter Five: Environmental and Social Management Plan (ESMP)

i) Environmental and Social Impact Mitigation and Monitoring Plan (ESMP table)
ii) Capacity Building table
iii) Implementation Schedule
iv) Contractual Measures
v) Measures for Non-Compliance with the ESMP
vi) Cost Estimates for ESMP Implementation

Chapter Six: Grievance Redress Mechanism

i) Structure and Protocols for Reporting and Managing Grievances

Chapter Seven: Public Consultation

i) Public consultation plan
ii) Presentation of consultations with relevant stakeholders and affected persons

Chapter Eight: Conclusion and Recommendations

Annexes:

Annex 1: Terms of Reference
Annex 2: Sample of Questionnaire for socioeconomics
Annex 3: List of participants in consultations and summaries of consultations
Annex 4: General Environmental and Social Management Conditions for Construction Contracts
Annex 5: Project Occupational Health and Safety (OHS) Plan
Annex 6: Company Code of Conduct on Preventing Gender Based Violence and Violence Against Children
Annex 7: Manager's Code of Conduct on Preventing Gender Based Violence and Violence against Children
Annex 8: Individual Code of Conduct on Preventing Gender Based Violence and Violence against Children
Annex 9: Waste Management Plan
Annex 10: Traffic Management Plan

6.0 QUALIFICATIONS REQUIRED

The consultant should be an experienced and independent consultant with the following expertise:

i. Minimum of eight (8) years' professional experience working in Nigeria;
ii. Availability of required personnel to carry out the assignment;
iii. Basic understanding and command of reading and writing in English language,
iv. Experience with, and a professional/technical background appropriate for understanding both the environmental and social management implications of chemical/reagent /waste disposals, animal and vectors disposals, and infective/toxic materials, including their design, construction, operation and monitoring.
v. At least eight (8) years' experience in practical Safeguards, Social and Environmental Management and HSE with demonstrated proficiency in the preparation, review, and approval of EAs/ESIAs/ESMPs to meet World Bank standards.
vi. Excellent analytical, communication and writing skills.
vii. It is highly desirable that the consultant have experience with working with international development institutions like the World Bank, and on infrastructure related projects.
viii. Be willing to travel extensively in the working areas of the project;
ix. Fluent in English (both reading and writing).

5.1 BACKGROUND CHECK

IDEAS project might carry out background check of the submitted qualification and requirement as submitted by the consultant(s). Moreover, references, web links or electronic copies of two or three examples of similar study reports shall be provided together with the technical proposal. Candidates are also encouraged to submit other references such as research papers or articles that demonstrate their familiarity with the subject under review.

7.0 METHOD OF SELECTION

The selection method for this assignment shall be by **Consultant Qualification**.

8.0 PAYMENT

Apart from the acceptance and approval of final Deliverables/Outputs by the management, payment will be made subject to the submission of the following Report(s) as indicated in the table below:

Sn.	Description	No. of Copies	% Due for Payment
1	**Acceptance of Inception Report**; consisting of: Workplan Timeline & Methodology for the Assignment with review of relevant project documents and preliminary impacts identified shall be submitted within one (1) week after contract signing.	3	15
3	**Acceptance of the Draft Report.** A draft ESMP report shall be submitted for review two (2) weeks from the date of contract completion	3	50
3	**Acceptance of the Final Report**; A Final ESMP report incorporating all comments from the NPCU, Technical Colleges and World Bank shall be submitted within ninety (90) days of the signing of the contract. The Report Consisting of all the output/deliverables of the assignment with empirical evidence and separate ESMP Reports for each 38 Colleges such as all that will be needed for the assignment, recommendation, suggestion and executive summary etc.	3	35
	Total	**9**	**100**

9.0 DURATION OF THE ASSIGNMENT

The assignment shall be conducted within a period of 90 Days

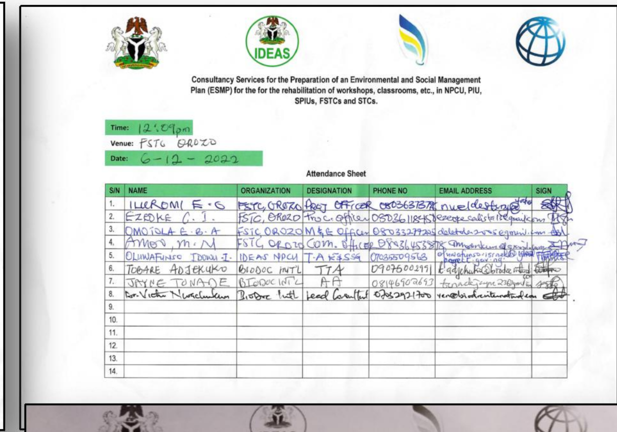
10.0 Eligibility and How to Apply:

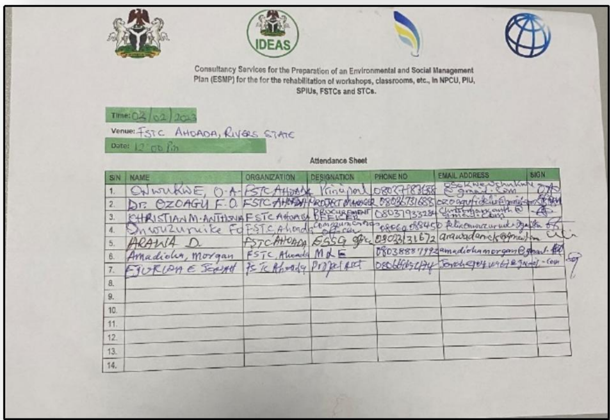
- Firms/Consultants that meet the criteria set in 5 above are eligible to apply
- The selection method of consulting firms for this assignment shall be by ***Consultant Qualification***
- All qualified consultants/firms are hereby invited to submit their intentions to undertake this assignment to:

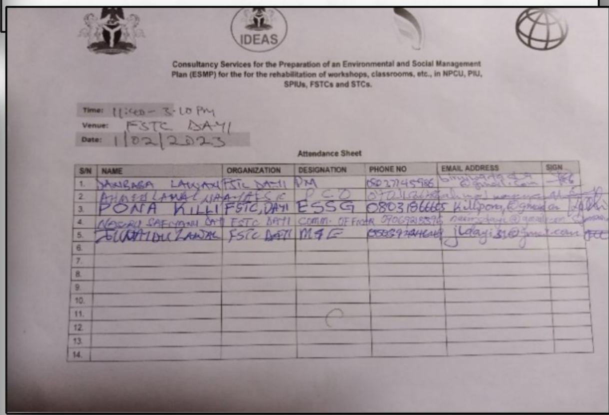
The National Project Coordinator
IDEAS Project
Attention: *Head of Procurement*
IDEAS Project National Project Secretariat,
4th Floor, Federal Ministry of Education, Annex,
245, Samuel Adesujo Ademulegun Street,
Central Business District – Abuja, FCT, Nigeria.
Tel: 234-8027644701
Email: info@ideasproject.gov.ng
Web: www.ideasproject.gov.ng

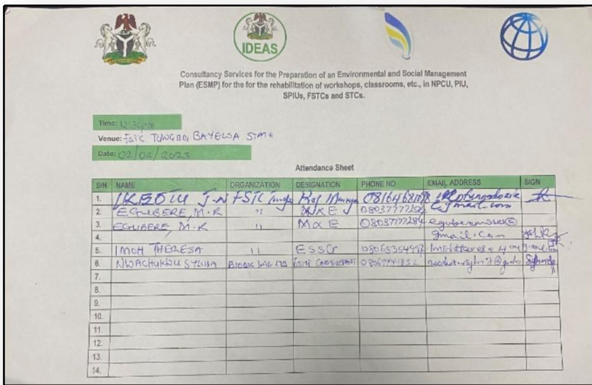
Questions on the terms of reference should be addressed by email to info@ideasproject.gov.ng

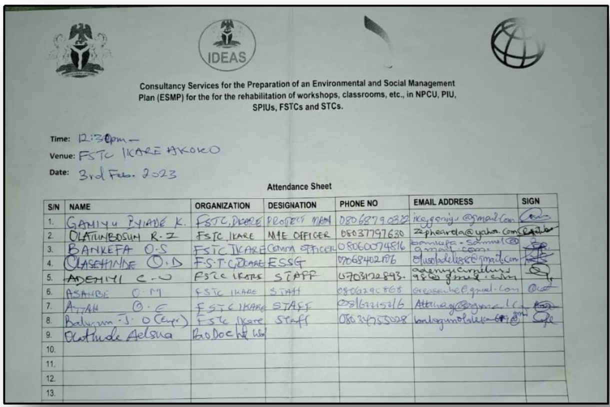
ANNEX 2: ATTENDANCE SHEETS FROM STAKEHOLDER CONSULTATIONS









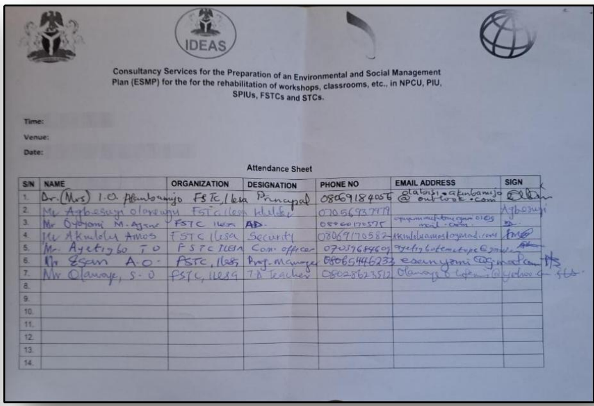


Consultancy Services for the Preparation of an Environmental and Social Management Plan (ESMP) for the for the rehabilitation of workshops, classrooms, etc., in NPCU, PIU, SPIUs, FSTCs and STCs.

Time: 12:30pm –
Venue: FSTC IKARE AKOKO
Date: 3rd Feb. 2023

Attendance Sheet

S/N	NAME	ORGANIZATION	DESIGNATION	PHONE NO	EMAIL ADDRESS	SIGN
1.	GANIYU AYINDE K.	FSTC, IKARE	PROJECT MAN	08068790322	ikaygoniyu@gmail.com	[illegible]
2.	OLATUNBOSUN R. Z	FSTC, IKARE	M&E OFFICER	08037797630	zephearda@yahoo.com	[illegible]
3.	BANKEFA O.S	FSTC IKARE	COMM OFFICER	08060074816	bankefa.samuel@gmail.com	[illegible]
4.	OLASEHINDE O.D	F.S.T.C IKARE	ESSG	07068402106	olusoladeles8@gmail.com	[illegible]
5.	ADEMIYI C.O	FSTC IKARE	STAFF	07031222893	[illegible]	[illegible]
6.	ASANBE O.M	FSTC IKARE	STAFF	[illegible]	[illegible]	[illegible]
7.	ATTAH O.E	FSTC IKARE	STAFF	08167215216	[illegible]	[illegible]
8.	Balogun J. O (Engr)	FSTC Ikare	Staff	08034755028	[illegible]	[illegible]
9.	Olatunde Adesua	BoDoc [illegible]				
10.						
11.						
12.						
13.						



Consultancy Services for the Preparation of an Environmental and Social Management Plan (ESMP) for the for the rehabilitation of workshops, classrooms, etc., in NPCU, PIU, SPIUs, FSTCs and STCs.

Time:
Venue:
Date:

Attendance Sheet

S/N	NAME	ORGANIZATION	DESIGNATION	PHONE NO	EMAIL ADDRESS	SIGN
1.	Dr. (Mrs) I.O. Akinbamijo	FSTC, Ilesa	Principal	08069184056	olabisi.akinbamijo@outlook.com	[illegible]
2.	Mr Agbesuyi Olayewu	FSTC Ilesa	[illegible]	07056937979		Agbesuyi
3.	Mr Oyeyemi M. Ajani	FSTC Ilesa	AD.	[illegible]	[illegible]	[illegible]
4.	Mr Akinlolu Amos	FSTC Ilesa	Security	08069170582	[illegible]	[illegible]
5.	Mr. Ayetigbo T.O	FSTC ILESA	Com. officer	[illegible]	[illegible]	[illegible]
6.	Mr Esan A.O.	FSTC, Ilesa	Proj. Manager	08065446233	esanyomi@gmail.com	[illegible]
7.	Mr Olawoye, S.O	FSTC, ILESA	TA Teacher	[illegible]	[illegible]	[illegible]
8.						
9.						
10.						
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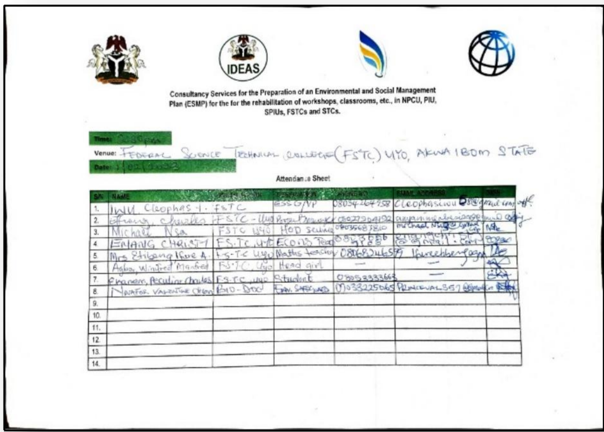

Consultancy Services for the Preparation of an Environmental and Social Management Plan (ESMP) for the for the rehabilitation of workshops, classrooms, etc., in NPCU, PIU, SPIUs, FSTCs and STCs.

Time: [illegible]
Venue: FEDERAL SCIENCE TECHNICAL COLLEGE (FSTC) UYO, AKWA IBOM STATE
Date: [illegible]

Attendance Sheet

S/N	NAME	ORGANIZATION	DESIGNATION	PHONE NO	EMAIL ADDRESS	SIGN
1.	Iwu Cleophas I.	FSTC	ESSG/VP	[illegible]	[illegible]	[illegible]
2.	Effiong, Charles	FSTC - Uyo	Project Manager	[illegible]	[illegible]	[illegible]
3.	Michael Nsa	FSTC Uyo	HOD Sewing	[illegible]	[illegible]	[illegible]
4.	EMANG CHRISTY	FS.TC. UYO	ECONS Teach	[illegible]	[illegible]	[illegible]
5.	Mrs Etibang Ifure A.	F.S.T.C Uyo	Maths teacher	[illegible]	[illegible]	[illegible]
6.	Agbor, Winifred Manfred	F.S.T.C. Uyo	Head girl	—	—	[illegible]
7.	Ekanem, Peculiar Charles	F.S.T.C. Uyo	Student	[illegible]	—	[illegible]
8.	NWAFOR VALENTINE [illegible]	BIO-DOC	Env. Safeguard	[illegible]	[illegible]	[illegible]
9.						
10.						
11.						
12.						
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14.						

ANNEX 3: MINUTES OF FIRST GENERAL STAKEHOLDER ENGAGEMENT WITH FSTCS AND STCS

Minutes of the stakeholders' engagement initiated by the ESMP Consultant with the representatives of the IDEAS NPCU, PMs of the FSTCs (FSTC Otukpo, FSTC Orozo, FSTC Uyo, FSTC Kuta Shiroro, FSTC Ilesa) and STCs (STC Awka), ESGs NBTE, held on the 30th of November, 2022 via a virtual zoom call. The stakeholders' engagement commenced by 9am with a brief Introduction by the representative of the NPC, who gave a brief overview on the IDEAS project. Afterwards, the Consultant explained the importance of the proposed ESMP and the rationale behind the consultation. He further stated that the session will be interactive as there are some information that are required to be obtained from the various representatives of the FSTCs, STCs and Design Engineers. He further encouraged the session to no hesitate to raise questions, concerns and suggestions as well as their general expectations from the project.

The table below shows major points discussed during the consultation.

STAKEHOLDER	QUESTIONS/CONCERNS/SUGGESTIONS	RESPONSE	REMARKS
PM FSTC Otukpo	Appreciated the Consultant for the Consultation and informed that they shall co-operate with the ESMP consultant by providing the necessary information/ assistance needed for the conduct of a successful ESMP.	Consultant appreciates him for his cooperation.	
PM FSTC Orozo	Stated that there is an extension of a workshop which is intended to be constructed in proximity to the gate. This is somewhat impossible because there are farming activities ongoing in the proposed location. He enquired to know how this can be sorted out in terms of compensation of the affected persons.	The NPC stated that the technical colleges are fenced. Hence those farming within the school are staff of the college. He further suggested that if such an issue comes up, the school should be able to manage such issues by having a discussion with the staff of the colleges and coming to a compromise as OP 4.12 was not triggered in the project. Hence, no compensation would be made.	
PM FSTC Orozo	Stated that some staff planted guinea corn and they are not dried/ready to be harvested. In this case, what is to be done?	The NPC stated that if possible, intervention works should be delayed till harvest period. If this is not possible, the PM should have a discussion with the affected persons to figure out the best means.	
ESMP Consultant	Requested for the soft copy of the engineering designs developed for each of the technical colleges in the federal and state levels.	The PM FSTC Uyo stated that the engineering drawings has not been obtained from the Design Consultants. The PMs of other colleges said the same thing too.	
ESSG PMU NBTE	Asked to know if the STCs are part of the stakeholder meeting as he stated that he is to ensure that the STCs are participating in this stakeholder consultation.	The consultant clarified this by saying that the STCs are part of the stakeholder meeting as the mail which contains the link for the zoom meeting was forwarded to the NPCU, FSTC, STCs, NBTE, and Design Consultants. Additionally, he stated that a follow-up call was also put across to all relevant stakeholders to remind them of the stakeholder meeting.	
FSTC Kuta Shiriro	Apologized for joining the zoom meeting late as he attributed it to poor network issues. He stated that they are behind schedule due to the fact that approval of the IDP was granted last week Thursday. He further stated that the college is encountering issues on the workshop for MVW because initially, a mini workshop was scheduled to be constructed by the college but this was not possible. At present, they are sharing the same workshop with W&F. As a	Consultant noted this information	

STAKEHOLDER	QUESTIONS/CONCERNS/SUGGESTIONS	RESPONSE	REMARKS
	result of this, there is a plan in place to make some partition. Due to the late receival of the IDP. Plans are still being put in place to engage the services of a design consultant to partition the workshop to provide individual workspace for both workshops.		
ESMP Consultant	Seeks for clarification on how institutional arrangement at the level of the schools. i.e. who is responsible for the implementation of the renovation/ rehabilitation (civil works).	FSTC Orozo stated that the NPCU provided a list of contractors to the colleges to select based on availability, capacity and experience. When there is a pick by the college, it is sent back to the NPCU for approval.	
ESMP Consultant	Enquired to know if supervisory engineers will be engaged during the construction phase of the project to supervise the implementation process.	The PM FSTC Kuta stated that the services of a resident engineer will be engaged to supervise the construction/renovation of the workshops, classrooms etc.	
ESMP Consultant	Enquired to know if there is an MoU with SEPA or Waste Management Agencies (WMA) at the level of the various implementing states for the evacuation of waste that will be generated in the school premises during the construction phase.	The PM FSTC Doma stated that there would be no need to involve these agencies as the waste generated can be effectively managed by the school. FSTC Otukpo stated that there is no written agreement with the state waste management agency. He further said the waste to be generated during the rehabilitation/extension works to be carried out can be managed by the college. Also, liaising with the state waste management agencies is not contained in the IDPs hence no funding allocated for this sole reason.	Consultant stated that for best practices, if there are intervention works which will result in some level of waste generation, there should be a WMP or a document that addresses how the waste should be managed. He also said that, it is not necessarily about the quantity of waste to be generated but also the nature/type of waste. For e.g. if asbestos ceiling for some colleges will be removed and replaced, the old asbestos ceilings removed if not managed properly, could lead to some social impacts as the asbestos waste could be hazardous.
PM FSTC Ilesa	Stated that management of asbestos ceiling was not captured in the IDPs, and also enquired to know how the cost would be catered for if it is included in the ESMP,	The consultant stated that the ESMP besides identifying impacts and providing mitigation measures also addresses cost implication for managing certain things. The ESMP will have a cost for that if it is required. He further said that when bidding documents are being prepared by the NPCU/SPIU, some of the cost requirements for mitigation is usually included in the contract for the contractor to handle some level of mitigation. For instance, at the level of procurement, if the responsibility is for the contractor to manage waste, (because the contractor is responsible for rehabilitation), the environmental cost will be included as a clause in the contractor's bidding document.	
PM FSTC Ilesa	Enquired to know if it is necessary to capture the cost of the evacuation of the asbestos waste that will be generated during implementation of civil works.	The consultant clarified by saying that the ESMP has a cost allocation, sometimes there might be a cost allocated to an impact, sometimes no cost is allocated. He also explained that for World Bank funded project, sometimes, the cost for mitigation/managing environmental impacts, is included in the contractor bidding documents. When the contractor is bidding, the environmental cost is already provided. For. E.g., if it is the	

STAKEHOLDER	QUESTIONS/CONCERNS/SUGGESTIONS	RESPONSE	REMARKS
		contractor's responsibility to manage the asbestos waste, the cost will be included in the contractor's bidding document before the contract is awarded.	
PM FSTC Ilesa	Complained of the fact that some of the colleges has commenced implementation of the civil works and the ESMP has not been prepared. He enquired to know what these contractors who have commenced implementation of civil works in some colleges will do if the ESMP is prepared and there is cost allocated for management of asbestos waste and other impacts.	The Consultant responded by saying if this information is confirmed during site visits to these colleges, this issue will be discussed with the NPCU and a common ground would be reached and solutions proffered. He further stated that ideally, the ESMP should be prepared before commencement of civil works.	
ESMP Consultant	Enquired to know if any college is located in areas with pre-existing social or security issues.	FSTC Kuta Shiroro stated that the Shiroro LGA is large and some part of the LGA is under an active operation of banditry currently. However, in Kuta where the college is situated, there is no immediate threat.	
ESMP Consultant	Enquired to know the title of the person in charge of the FSTCs, STCs so that this is captured/ referenced properly especially in the ESMP report.	The ESSG PMU NBTE stated that the project (NPCU) is under the FME (national body). The STCs reports to the NBTE through a PM. The PM FSTC Kuta stated that the FSTCs are headed by PMs. TSED directly oversees the FSTCs.	
PM FSTC Orozo	Enquired to know the relationship between the procurement and the ESMP Consultant as regards cost allocation.	The ESMP consultant responded by saying in the IDEAS project, there are separate roles and responsibilities designated to implementing parties. However, some of the roles and responsibilities can overlap/ intertwine. He also said that here are sub-projects under IDEAS and one of them is the rehabilitation/ renovation. He further stated that what the procurement specialist does most times is to prepare the procurement plan on what is to be done which is inclusive of consultancy and contractor services which will involve civil works. These contracts are prepared by the procurement in consultation with other staff of the PMU based on their reviews. Additionally, he said that for the ESMP consultant, we are not changing any budget that has been prepared for any form of rehabilitation/ renovation. The consultant is to take a look at the nature of the rehabilitation and advice accordingly as regards potential E&S impacts. However, the design proposed by the project is vital for this ESMP because for e.g., If an expansion is to be done and the consultant on arrival to the site, realizes that this expansion will encroach on someone's farmland, the Consultant will suggest through the NPC that the design should be changed such that the length or position be readjusted so as not to encroach on the farmland. This could lead to an adjustment of cost. Finally, he said that this is where there might be a relationship between the Procurement/PMU and the Consultant as regards cost. But ideally, the PMU has the responsibility for allocating cost for the consultancy. But for the ESMP core	The PM FSTC Orozo appreciated the Consultant for taking out time to explain this.

STAKEHOLDER	QUESTIONS/CONCERNS/SUGGESTIONS	RESPONSE	REMARKS
		where a budget is created for mitigation and implementation of E&S impacts, it is the ESMP Consultant that allocates cost because the consultant knows the quantity and price for certain levels of mitigation requirements.	

In the absence of any other concerns and remarks, the stakeholders' meeting was concluded at 11:30am with a vote of thanks and exchange of pleasantries between the Consultant and other participants.

ANNEX 4: ENVIRONMENTAL AND SOCIAL SAFEGUARD PERFOMANCE MONITORING CHECKLIST

This form is designed for site inspection use and may not be exhaustive. Modifications and additions may be necessary to suit current/emerging situations on-site to address specific environmental issues and associated mitigation measures.

Project: .....

Site Location: .....

Construction Stage: Pre-Construction ☐ Construction ☐ Operation ☐

Activities: .....

Inspection Date: ..... Inspection Time: .....

Inspected by: .....

Inspection Parameter		Implemented?			Rating (if yes)				Remarks: (specify location, good practices, problem observed, possible cause of non-conformity and/or proposed corrective /preventative actions)
		Yes	No	N/A	1	2	3	4	
1.	**Air Pollution Control**								
1.1.	Are the construction sites watered to minimize dust generated?								
1.2.	Are all vehicles carrying dusty loads to and from site covered?								
1.3.	Are vehicles, plant and equipment well maintained? (any black smoke observed, please indicate the plant/equipment and location)								
1.4.	Are drivers/ workers trained on proper operation of vehicles and equipment especially on fuel efficiency and anti-idling techniques?								
1.5.	Are speed control measures applied to reduce dust generation on unpaved surfaces? (e.g., speed limit sign)								
1.6.	Others (please specify)								
2.	**Water and Soil Pollution Control**								
2.1.	Is any water quality parameter (Mn, Fe, Cu, Zn, Cd, Pb, **PO_4^3**, **NO_3^-**, **SO_4^{2-}**, **TDS, TSS, BOD, DO**) above baseline level?								
2.2.	Is any soil quality parameter (pH, Ca, Mg, K, Na, Mn, Fe, Cu, Zn, P) above baseline level?								
2.3.	Is off-site storm and floodwater controlled before it reaches areas being excavated to prevent run-off of sediment?								
2.4.	Are measures provided to prevent run-off of sediments to surface water? (e.g., silt fences)								
2.5.	Are sedimentation traps free of silt and sediment?								
2.6.	Are there measures to ensure fuel storage tanks are leak proof and installed with a bund?								
2.7.	Others (please specify)								
3.	**Noise Control**								
3.1.	Does construction noise exceed 90dB(A)								
3.2.	Does any haulage and noise generating activity take place outside working hours?								
3.3.	Are idle vehicles/equipment turned off or throttled down?								
3.4.	Are hearing protection devices used (ear plugs/muffs)?								
3.5.	Any noise mitigation measures adopted (e.g., mufflers on engine exhausts, use of noise barrier etc.)?								
3.6.	Are silenced equipment utilized?								

Inspection Parameter		Implemented?			Rating (if yes)				Remarks: (specify location, good practices, problem observed, possible cause of non-conformity and/or proposed corrective /preventative actions)
		Yes	No	N/A	1	2	3	4	
3.7.	Others (please specify)								
4.	**Waste Management**								
4.1.	Is there a site-specific waste management plan being implemented?								
4.2.	Is there site-specific Asbestos waste management plan being implemented?								
4.3.	Are excavated materials reused as fill materials?								
4.4.	Is the site kept clean and tidy? (e.g., litter free, good housekeeping)								
4.5.	Are stockpile & disposal area stable and protected against erosion?								
4.6.	Are separated labelled containers / areas provided for facilitating recycling and waste segregation?								
4.7.	Are construction wastes / recyclable wastes and general refuse removed off site regularly?								
4.8.	Are construction wastes collected and disposed of properly by licensed collectors?								
4.9.	Are chemical wastes, if any, collected and disposed of properly by licensed collectors?								
4.10.	Are oil drums and plants/equipment provided with drip trays/ bunds?								
4.11.	Are drip trays/ bunds free of oil and water?								
4.12.	Is there any oil spillage? Clean-up the contaminated soil immediately?								
4.13.	Others (please specify)								
5.	**Storage of Oils, Chemicals and Hazardous Materials**								
5.1.	Are oils/chemicals/ hazardous materials securely stored and labelled properly?								
5.2.	Is there any spillage or contamination observed on site?								
5.3.	Are there proper measures to control oil/ chemical spillage? (e.g., provide bunds)								
5.4.	Are spill kits / sand / saw dust used for absorbing chemical spillage readily accessible?								
5.5.	Others (please specify)								
6.	**Protection of Flora, Fauna and Historical Heritage**								
6.1.	Are disturbance to terrestrial flora minimized/ limited to area of need?								
6.2.	Are disturbance to terrestrial fauna minimized/ limited to area of need?								
6.3.	Any historical heritage exists on site? If yes, is appropriate measures taken to preserve it?								
6.4.	Others (please specify)								
7.	**Protection of Public Utility/ Community Infrastructure**								
7.1.	Is there any damage to underground public utility cables/pipes?								
7.2.	Is there any disruption to public utility services?								
7.3.	In case of disruption, was service swiftly restored?								
7.4.	Are grievances/ complaints received and documented?								
7.5.	Are aggrieved parties adequately carried along in the Grievance Redress process?								
7.6.	Others (please specify)								
8.	**Protection of Community Culture, Safety and Security**								
8.1.	Does workers' Code of Conduct meet the requirements of ESMP and best practice?								
8.2.	Does the Code of Conduct prohibit VAC, GBV, SEA, prostitution, social vices, use of illegal drugs etc?								
8.3.	Does the Code of Conduct highlights penalties and punishments for offences								
8.4.	Rate the level of awareness of workers to local cultures, traditions and lifestyles								
8.5.	Is there any underage worker on site?								

Inspection Parameter	Implemented?			Rating (if yes)				Remarks: (specify location, good practices, problem observed, possible cause of non-conformity and/or proposed corrective /preventative actions)
	Yes	No	N/A	1	2	3	4	
8.6. Are there local workers on site? What is the percentage of local workforce to the total workforce?								
8.7. Are there competent security personnel on site?								
8.8. Others (please specify)								
9. **Protection of Community Health**								
9.1. Is there any HIV prevention program implemented (peer education, condom distribution etc)?								
9.2. Is there any health awareness and education initiatives on STDs amongst workers and in nearby communities?								
9.3. Are the drivers trained on defensive driving techniques, haulage & pedestrian safety?								
9.4. Are there speed control devises on vehicles?								
9.5. Are there traffic signs on the roads?								
10. **Protection of Workers' Health**								
10.1. Is there a site-specific Occupational Health and Safety (OHS) Plan being implemented?								
10.2. Does the OHS Plan meet the requirements of ESMP and best practice?								
10.3. Is there a trained First Aider and fully equipped First Aid box on site?								
10.4. Are workers using the right Personal Protective Equipment (PPE)?								
10.5. Are workers observing basic safe working practices?								
10.6. Are there illicit drugs or alcohol on site?								
10.7. Others (please specify)								
11. **Emergency Preparedness and Response**								
11.1. Are there emergency contingency plan in place for accident, fire, spillage?								
11.2. Are accidents and incidents reported and reviewed, and corrective & preventive actions identified and recorded?								
11.3. Others (please specify)								

Key	Rating	Definition
N/A	-	Not Applicable
1	Unsatisfactory	Performance consistently fails to meet the minimum requirements or expectation.
2	Moderately Satisfactory	Performance meets some but not all of the requirements or expectation.
3	Satisfactory	Performance is consistent with requirements or expectation.
4	Highly Satisfactory	Performance is consistent and frequently exceeds requirements or expectation.

ANNEX 5: TRAFFIC MANAGEMENT PLAN

In general, a Traffic Management Plan is required for all projects that could have an impact on:

- **MOBILITY** - including interruptions to pedestrians, cyclists and vehicular traffic; and
- **COMMUNITY** - including interruptions to surrounding businesses and residents from construction activity and worker parking needs.

The objective of this TMP is to guide traffic control operations or procedures of the Contractors.

Components of the Traffic Management Plan
The proposed TMP for the rehabilitation works in the technical colleges should to a minimum address the following:

a) **Safety Signage:** Safety signage will be put up at strategic points close to the school gates. This would inform motorists that there might be increase vehicular movement during the pre-construction and construction phase. These signages will indicate that there are **"Men at Work".**
b) **Communication:** The Contractors with support from the SPIUs, will prepare a communication protocol which will be shared with the inhabitants of the host communities of the TCs. The communication protocol will provide a stepwise approach to informing residents about traffic plan alterations 48hrs before they are implemented.
c) **Time of Movement:** Contractor workers should restrict movement of equipment to a defined time. Movement of equipment could be scheduled for off-peaks, before 6am or after 3pm since the colleges are mostly situated along highways that are mostly used during the day.
d) **Liaisons with Government Traffic Agencies.** The TMP will ensure liaisons with the FRSC. In situations where heavy traffic impacts are envisaged, the Contractors will liaise with the FRSC to ensure traffic coordination and mitigate adverse traffic impacts.

Mitigation and Monitoring Costs for Traffic Management
The Table below presents the costs for mitigation and monitoring for traffic along the access roads leading to the TCs. The mitigation and monitoring costs for implementing the TMP is adopted from the ESMP table.

S/N	Recommended Measure	Responsibility	Costs	
			Mitigation	Monitoring
1.	Safety signage will be put up at strategic points. This would inform motorists that there might be increase vehicular movement during the pre-construction phase. These signages will indicate that there are **"Men at Work".**	**Contractors**	NGN 124,245 USD 165	NGN 57,228 USD 76
2.	The Contractor with support from the SPIU, will prepare a communication protocol which will be shared with the inhabitants of the host communities of the TCs	**Contractor and SPIU**	NGN 49,698 USD 66	NGN 23,343 USD 31
3.	In situations where heavy traffic impacts are envisaged, the Contractor will liaise with the FRSC to ensure traffic coordination and mitigate adverse traffic impacts.	**Contractor and SPIU**	NGN 26,355 USD 35	NGN 12,048 USD 16
4.	Contractor workers should restrict movement of equipment to a defined time. Movement of equipment could be scheduled for off-peaks, before 6am or after 3pm.	**Contractors**	N/A	N/A
		Total cost for implementing TMP	**NGN 200,298**	**NGN 92,619**

	USD 266	**USD 123**

ANNEX 6: WASTE MANAGEMENT PLAN

S/N	Potential Source	Waste Streams	Waste Type	Recommended Measures	Responsibility	Costs	
						Mitigation	Monitoring
1.	Food wastes from Onsite food vendors; Plastic wastes and Vegetation Clearing (where necessary)	**General Waste** **Plant Waste**	Municipal Solid Waste / Biodegradable Wastes	• Grossly discourage indiscriminate waste disposal practices such as disposal into drainages • Provide and encourage the use of waste collection bins at specific locations within the schools for proper disposal of wastes. This practice should be continuously encouraged throughout project implementation phase. • Use vegetation clearing methods that ensures minimal dispersal of vegetation during vegetation clearing activities. Careful piling of plant wastes from vegetation clearing for proper collection and management in a manner that will avoid littering the school environment • Proper sorting, temporal onsite storage and stockpiling of all collected wastes including all organic and inorganic wastes for proper management • Encourage the use of food wastes and other organic wastes generated during all phases of the project for domestic composting. • All waste designated "Combustible" shall be gotten rid of in collaboration with the respective SEPAs/SWMAs. Wastes otherwise designated as "Recyclable" shall be disposed off in any designated dumpsite in the State.	**Contractors**	**NGN 189,003** **USD 251**	**NGN 100,902** **USD 134**
2.	Human waste from Mobile Toilets and management of menstrual pads	**Sewage**	**Biodegradable/ Hazardous waste**	• Temporal lease of mobile toilets for schools with completely dilapidated toilet facilities, and ensure Contractor workers strictly adheres to the use of the mobile toilets for defaecation • Wastewater from mobile toilets should be properly disposed of in a manner that does not contaminate the environment • Disposal of menstrual pads in waste bins	**Contractors**	**NGN 441,258** **USD 586**	**NGN 235,689** **USD 313**
3.	Leakages from vehicles and oil containers; Accidental spillage of oil, fuels, chemicals, paints, cement; Construction Wastewater	**Hydrocarbons and Chemical Wastes** **Concrete, stones, mixtures, cement, roofing sheets and rusty nails**	Hazardous Waste	• Tighten loosed oil valves; Ensure regular checks and maintenance of vehicles and equipment; Turn off engine during idling, and ensure use of impermeable membrane to avoid direct contact of oil spillage with the soil, and consequently, groundwater • Collect sludge and other construction wastes into designated containers; label appropriately and decontaminate prior to final disposal. • Ensure that all oil containers are properly trashed in designated waste collection containers after use. • Ensure proper stockpiling of all solid construction waste materials. • Avoid dispersal of cement dust and particles of cement, concrete and sand mixtures during mixing or transportation activities of these solid materials • Proper hipping of sand, concrete and stones that are not in use. Mixtures should be specific to what must be consumed within a given period of construction activities to avoid remnant of such materials, constituting undesired wastes.	**Contractors**	**NGN 314,754** **USD 418**	**NGN 167,919** **USD 223**
4.	Demolition Work	**Disused Asbestos Ceilings** **Popcorn Ceilings**	Hazardous Wastes	• All asbestos waste generated during the project must be wetted before it is double bagged in 6-millimeter plastic bags and enclosed in a plastic, leak-tight container with a lid and proper labelling. • Contractor to liaise with the respective SEPAs/SWMAs or other accredited Waste Management Agency for the safe packaging/onsite evacuation, transportation, and disposal of asbestos wastes in special landfills designated to receive asbestos waste.	**Refer to Annex for Asbestos WMP**		
5.	Electrical Works Mechanical Works	**Waste wires, switches, screws;** **PVC Pipes**	E wastes PVC Pipes	• Conduct onsite inventory of e-wastes • Segregate and store e-wastes separately from other waste streams. Identify e-wastes that can be reused or repaired • Collect and safely dispose off of all PVC pipes and plumbing valves that are removed/replaced • Reuse all PVC pipes and valves that are reusable • Ensure proper final disposal of all e-wastes and PVC pipe wastes in accordance and collaboration with the respective SEPAs/SWMAs.	**Contractors**	**NGN 295,929** **USD 393**	**NGN 158,130** **USD 210**

S/N	Potential Source	Waste Streams	Waste Type	Recommended Measures	Responsibility	Costs	
						Mitigation	Monitoring
6.	Laboratory wastes from Catering Craft Practice workshops, School laboratories etc. during the operation phase of the project.	Food wastes Chemicals wastes such as disused acids, bases, salts, reagents, etc Biological Waste includes cultures, specimens, etc.	**Biodegradable** **Hazardous**	• Proper sorting, temporal onsite storage and stockpiling of all collected wastes including all organic and inorganic wastes for proper management • Collect disused chemicals in containers of suitable types and sizes and properly label according to their class of hazardous waste (toxic, corrosive, reactive and flammable), prior to disposal. Collection containers must be made of stable material, capable of being well sealed and should be stored in a designated area that is well ventilated. • Liase with the respective SEPAs/SWMAs or a state government approved waste vendor for the proper evacuation and disposal of waste.	**School Management** **CIU team**	**TBD**	**TBD**
					Total cost for Implementing WMP	**NGN 1,240,944 USD 1,648**	**NGN 662,640 USD 880**

ANNEX 7: OCCUPATIONAL HEALTH & SAFETY PLAN

S/N	Potential Hazards	Recommended Actions (OHS Measures/Safety Procedures)	Responsibility	Costs	
				Mitigation (Contractors)	Monitoring (SPIUs/CIUs)
1.	"**Unsafe behaviours**" [15]and **"Unsafe conditions[16]"** will pose a serious occupational health and safety risk. Hazardous conditions, activities or practices likely to impact on occupational health and safety will include: a) Electromechanical works b) Works involving asbestos removal and roof repairs /installations c) Conveying and lifting of heavy equipment d) Use and exposure to hazardous energy i.e., Arc welding and electrical works e) Works at height including solar panel installation, installation and rehabilitation of overhead tanks and tank stands, roofing, general civil rehabilitations. f) Demolition works g) Septic tank rehabilitation h) Drainage installation i) Procurement and transport of construction materials to the respective technical colleges, etc.	The SPIUs and CIUs at the respective TCs have a responsibility to ensure the health and safety of all persons working on the IDEAS rehabilitation for the college including, their own employees, Contractors, subcontractors and agency employees. • In this regard, the SPIUs shall: Define systems of work and requirements for Contractor workers, to ensure their health and safety on the site. This means that SPIUs will require Contractors to follow safe systems of work, meet statutory and other requirements (Nigeria and International), and audit their capability to safely manage work performed by project staff • Provide information needed by the Contractors to document and carry out work in a safe manner • SPIUs should provide information on hazards and their associated risks while working on any specific part of the rehabilitation site. This will enable Contractor' document their procedures for managing work around hazardous conditions, and to ensure they are aware of these hazards. SPIUs will do this by providing a set of requirements and safe work procedures through trainings and capacity building for all Contractor. It should also highlight Risk and Control Assessments, Work Control Permit etc. • SPIUs should monitor health and safety during construction works. Pre-start checks, inspections and audits will be conducted while on- site. These checks will look at work practices and methods, equipment conditions and suitability, and competency of people through checking the permits, licenses etc. Individuals are not permitted to bring, use or be under the influence of alcohol or non-prescribed drugs on site.	**SPIU & CIU**	**NGN 1,027,180** **USD 2,233**	**NGN 358,340** **USD 779**
		• Prohibition of drug and alcohol use by workers while on the job. • Provision of adequate first aid, first aiders, PPE, fall protection equipment, signages (English and Hausa languages). • Restriction of unauthorized access to all areas of high-risk activities • Ensure that all Contractor worker have specific personnel training on worksite OHS management • Ensure that staging areas for contractor equipment are adequately delineated and cordoned off with reflective tapes and barriers • Any uncovered work pits should have appropriate signage and protection around them • Workers should get a daily induction/toolbox before going on the site and a refresher of what happened on site a day before • Adequate safety signage on construction sites should be installed to alert students, teachers and staff • Lighting and/or reflective tapes and signages integrated in all worksites for safety at night • Appropriate security measures in place to prevent harassment or kidnapping of workers	**Contractor**		
			Total Cost for Implementing OHSMP	**NGN 1,009,773** **USD 1,341**	**NGN 354,663** **USD 471**

The Contractors are responsible for ensuring their work equipment are safe. This means that Contractor's equipment whether theirs or hired is a) in a serviceable condition with regular maintenance and inspections. b) Suitable for the task it is to perform and c) meets SPIU requirements. The Contractors should also be responsible for ensuring that: i) Caution signs are in place, ii) Dust reduction methods are carried out; and iii) Noise reduction methods are in place

[15] **Unsafe Behaviours** – are behaviours that expose workers or visitors to the work place, to hazards and risks. These may include, horse-play; not undergoing training before commencing a hazardous activity; not wearing appropriate Personal Protect Equipment (PPEs), not reporting worksite incidents or accidents etc

[16] **Unsafe Conditions** – represent onsite situations or settings that predispose works or visitors to worksite to hazards and risks such as uncovered ditches, naked energized electric wires or cables, exposed rotatory machinery, leaking poisonous or noxious gases, exposed nail-tip in a wooden floor etc

ANNEX 8: GENERAL ENVIRONMENTAL AND SOCIAL MANAGEMENT CONDITIONS FOR CONSTRUCTION CONTRACTS

General

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

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

a) Minimize the effect of dust on the surrounding environment resulting from earth mixing sites, vibrating equipment, temporary access roads, etc. to ensure safety, health and the protection of workers and communities living in the vicinity dust producing activities.
b) Ensure that noise levels emanating from machinery, vehicles and noisy construction activities (e.g., excavation, blasting) are kept at a minimum for the safety, health and protection of workers within the vicinity of high noise levels and nearby communities.
c) Ensure that existing water flow regimes in rivers, streams and other natural or irrigation channels is maintained and/or re-established where they are disrupted due to works being carried out.
d) Prevent oils, lubricants and waste water used or produced during the execution of works from entering into rivers, streams, irrigation channels and other natural water bodies/reservoirs, and also ensure that stagnant water in uncovered borrow pits is treated in the best way to avoid creating possible breeding grounds for mosquitoes.
e) Prevent and minimize the impacts of quarrying, earth borrowing, piling and building of temporary construction camps and access roads on the biophysical environment including protected areas and arable lands; local communities and their settlements. In as much as possible restore/rehabilitate all sites to acceptable standards.
f) Upon discovery of ancient heritage, relics or anything that might or believed to be of archaeological or historical importance during the execution of works, immediately report such findings to the SE so that the appropriate authorities may be expeditiously contacted for fulfilment of the measures aimed at protecting such historical or archaeological resources.
g) Discourage construction workers from engaging in the exploitation of natural resources such as hunting, fishing, and collection of forest products or any other activity that might have a negative impact on the social and economic welfare of the local communities.
h) Implement soil erosion control measures in order to avoid surface run off and prevents siltation, etc.
i) Ensure that garbage, sanitation and drinking water facilities are provided in construction workers camps.
j) Ensure that, in as much as possible, local materials are used to avoid importation of foreign material and long-distance transportation.

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

3. The Contractor shall indicate the period within which he/she shall maintain status on site after completion of civil works to ensure that significant adverse impacts arising from such works have been appropriately addressed.
4. The Contractor shall adhere to the proposed activity implementation schedule and the monitoring plan / strategy to ensure effective feedback of monitoring information to project management so that impact management can be implemented properly, and if necessary, adapt to changing and unforeseen conditions.

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

Worksite/Campsite Waste Management

6. All vessels (drums, containers, bags, etc.) containing oil/fuel/construction materials and other hazardous chemicals shall be bonded in order to contain spillage. All waste containers, litter and any other waste generated during the construction shall be collected and disposed off at designated disposal sites in line with applicable government waste management regulations.
7. All drainage and effluent from storage areas, workshops and camp sites shall be captured and treated before being discharged into the drainage system in line with applicable government water pollution control regulations.
8. Used oil from maintenance shall be collected and disposed off appropriately at designated sites or be re-used or sold for re-use locally.
9. Entry of runoff to the site shall be restricted by constructing diversion channels or holding structures such as banks, drains, dams, etc. to reduce the potential of soil erosion and water pollution.
10. Construction waste shall not be left in stockpiles along the road, but removed and reused or disposed of on a daily basis.
11. If disposal sites for clean spoil are necessary, they shall be located in areas, approved by the SE, of low land use value and where they will not result in material being easily washed into drainage channels. Whenever possible, spoil materials should be placed in low-lying areas and should be compacted and planted with species indigenous to the locality.

Material Excavation and Deposit

12. The Contractor shall obtain appropriate licenses/permits from relevant authorities to operate quarries or borrow areas.
13. The location of quarries and borrow areas shall be subject to approval by relevant local and national authorities, including traditional authorities if the land on which the quarry or borrow areas fall in traditional land.
14. New extraction sites:

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

b) Shall not be located adjacent to stream channels wherever possible to avoid siltation of river channels. Where they are located near water sources, borrow pits and perimeter drains shall surround quarry sites.
c) Shall not be located in archaeological areas. Excavations in the vicinity of such areas shall proceed with great care and shall be done in the presence of government authorities having a mandate for their protection.
d) Shall not be located in forest reserves. However, where there are no other alternatives, permission shall be obtained from the appropriate authorities and an environmental impact study shall be conducted.
e) Shall be easily rehabilitated. Areas with minimal vegetation cover such as flat and bare ground, or areas covered with grass only or covered with shrubs less than 1.5m in height, are preferred.
f) Shall have clearly demarcated and marked boundaries to minimize vegetation clearing.

15. Vegetation clearing shall be restricted to the area required for safe operation of construction work. Vegetation clearing shall not be done more than two months in advance of operations.
16. Stockpile areas shall be located in areas where trees can act as buffers to prevent dust pollution. Perimeter drains shall be built around stockpile areas. Sediment and other pollutant traps shall be located at drainage exits from workings.
17. The Contractor shall deposit any excess material in accordance with the principles of these general conditions,

and any applicable ESMP, in areas approved by local authorities and/or the SE.

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

Rehabilitation and Soil Erosion Prevention

19. To the extent practicable, the Contractor shall rehabilitate the site progressively so that the rate of rehabilitation is similar to the rate of construction.
20. Always remove and retain topsoil for subsequent rehabilitation. Soils shall not be stripped when they are wet as this can lead to soil compaction and loss of structure.
21. Re-vegetate stockpiles to protect the soil from erosion, discourage weeds and maintain an active population of beneficial soil microbes.
22. Locate stockpiles where they will not be disturbed by future construction activities.
23. To the extent practicable, reinstate natural drainage patterns where they have been altered or impaired.
24. Remove toxic materials and dispose of them in designated sites. Backfill excavated areas with soils or overburden that is free of foreign material that could pollute groundwater and soil.
25. Identify potentially toxic overburden and screen with suitable material to prevent mobilization of toxins.
26. Ensure reshaped land is formed so as to be inherently stable, adequately drained and suitable for the desired long-term land use, and allow natural regeneration of vegetation.
27. Minimize the long-term visual impact by creating landforms that are compatible with the adjacent landscape.
28. Minimize erosion by wind and water both during and after the process of reinstatement.
29. Compacted surfaces shall be deep ripped to relieve compaction unless subsurface conditions dictate otherwise.
30. Re-vegetate with plant species that will control erosion, provide vegetative diversity and, through succession, contribute to a resilient ecosystem. The choice of plant species for rehabilitation shall be done in consultation with local research institutions, forest department and the local people.

Water Resources Management

31. The Contractor shall at all costs avoid conflicting with water demands of local communities.
32. Abstraction of both surface and underground water shall only be done with the consultation of the local community and after obtaining a permit from the relevant Water Authority.
33. Abstraction of water from wetlands shall be avoided. Where necessary, authority has to be obtained from relevant authorities.
34. Temporary damming of streams and rivers shall be done in such a way avoids disrupting water supplies to communities downstream, and maintains the ecological balance of the river system.
35. No construction water containing spoils or site effluent, especially cement and oil, shall be allowed to flow into natural water drainage courses.
36. Wash water from washing out of equipment shall not be discharged into water courses or road drains.
37. Site spoils and temporary stockpiles shall be located away from the drainage system, and surface run off shall be directed away from stockpiles to prevent erosion.

Traffic Management

38. Location of access roads/detours shall be done in consultation with the local community especially in important or sensitive environments. Access roads shall not traverse wetland areas.
39. Upon the completion of civil works, all access roads shall be ripped and rehabilitated.
40. Access roads shall be sprinkled with water at least five times a day in settled areas, and three times in unsettled areas, to suppress dust emissions.

Blasting

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

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

Disposal of Unusable Elements

44. Unusable materials and construction elements such as electro-mechanical equipment, pipes, accessories and demolished structures will be disposed of in a manner approved by the SE. The Contractor has to agree with the SE which elements are to be surrendered to the Client's premises, which will be recycled or reused, and which will be disposed of at approved landfill sites.
45. As far as possible, abandoned pipelines shall remain in place. Where for any reason no alternative alignment for the new pipeline is possible, the old pipes shall be safely removed and stored at a safe place to be agreed upon with the SE and the local authorities concerned.
46. AC-pipes as well as broken parts thereof have to be treated as hazardous material and disposed of as specified above.
47. Unsuitable and demolished elements shall be dismantled to a size fitting on ordinary trucks for transport.

Health and Safety

48. In advance of the construction work, the Contractor shall mount an awareness and hygiene campaign. Workers and local residents shall be sensitized on health risks particularly of AIDS.
49. Adequate road signs to warn pedestrians and motorists of construction activities, diversions, etc. shall be provided at appropriate points.
50. Construction vehicles shall not exceed maximum speed limit of 40km per hour.

Repair of Private Property

51. Should the Contractor, deliberately or accidentally, damage private property, he shall repair the property to the owner's satisfaction and at his own cost. For each repair, the Contractor shall obtain from the owner a certificate that the damage has been made good satisfactorily in order to indemnify the Client from subsequent claims.
52. In cases where compensation for inconveniences, damage of assets etc. are claimed by the owner, the Client has to be informed by the Contractor through the SE. This compensation is in general settled under the responsibility of the Client before signing the Contract. In unforeseeable cases, the respective administrative entities of the Client will take care of compensation.

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

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

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

54. The Contractor's EHS-MP shall provide at least:

- A description of procedures and methods for complying with these general environmental management conditions, and any specific conditions specified in an ESMP;
- A description of specific mitigation measures that will be implemented in order to minimize adverse impacts;

- A description of all planned monitoring activities (e.g., sediment discharges from borrow areas) and the reporting thereof; and
- The internal organizational, management and reporting mechanisms put in place for such.

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

HSE Reporting

56. The Contractor shall prepare bi-weekly progress reports to the SE on compliance with these general conditions, the project ESMP if any, and his own EHS-MP. An example format for a Contractor HSE report is given below. It is expected that the Contractor's reports will include information on:

- HSE management actions/measures taken, including approvals sought from local or national authorities;
- Problems encountered in relation to HSE aspects (incidents, including delays, cost consequences, etc. as a result thereof);
- Lack of compliance with contract requirements on the part of the Contractor;
- Changes of assumptions, conditions, measures, designs and actual works in relation to HSE aspects; and
- Observations, concerns raised and/or decisions taken with regard to HSE management during site meetings.

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

Training of Contractor's Personnel

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

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

Cost of Compliance

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

Example Format: HSE Report

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

HSE incidents:

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

HSE compliance:

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

Changes:

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

Concerns and observations:

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

Signature (Name, Title Date):

Contractor Representative

Example Format: HSE Incident Notification

Provide within 24 hrs to the Supervising Engineer

Originators Reference No: Date of Incident:

Time:

Location of incident: Name of Person(s) involved:

Employing Company:

Type of Incident:

Description of Incident:

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

Immediate Action:

Immediate remedial action and actions taken to prevent reoccurrence or escalation

Signature (Name, Title, Date):

Contractor Representative

ANNEX 9: WORKER'S CODE OF CONDUCT

IDEAS

INNOVATION DEVELOPMENT AND EFFECTIVENESS IN THE ACQUISITION OF SKILLS (IDEAS) PROJECT.

FEDERAL MINISTRY OF EDUCATION

WORKER'S CODE OF CONDUCT
on
Gender Based Violence (GBV) and Sexual Exploitation & Abuse (SEA)

I, _____ *(name of employee)*, acknowledge that preventing Gender-based Violence (GBV) and Sexual Exploitation & Abuse are important. GBV/SEA activities constitute acts of gross misconduct and are therefore grounds for sanctions, penalties or termination of employment. All forms of GBV or SEA are unacceptable either on the work site, neighbouring project communities, or at worker's camps. Prosecution of those who commit GBV/SEA will be followed as appropriate according to applicable laws. I also acknowledge the need to maintain peaceful relationships and interactions with residents of project areas.

Specifically, I agree that while working on IDEAS rehabilitation activities, I will:

i. Maintain conflict-free relationships with residents of project areas *when such relationships and interactions become necessary.*

ii. Consent to police background check.

iii. Treat women, children (persons under the age of 18), and men with respect regardless of race, colour, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status.

iv. Not use language or behaviour towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.

v. Not participate in sexual activity with children—including grooming or through digital media. Mistaken belief regarding the age of a child and consent from the child is not a defence.

vi. Not engage in sexual favours or other forms of humiliating, degrading or exploitative behaviour.

vii. Not have sexual interactions with members of the communities surrounding the work place and worker's camps that are not agreed to with full consent by all parties involved in the sexual act. This includes relationships involving the withholding or promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex—such sexual activity is considered "non-consensual" within the scope of this Code.

viii. Attend and actively partake in training courses related to HIV/AIDS, GBV and SEA as requested by my employer.

ix. Report through the GRM or to my manager suspected or actual GBV and/or SEA by a fellow worker, whether in my company or not, or any breaches of this code of conduct.

With regard to children under the age of 18:

x. Wherever possible, ensure that another adult is present when working in the proximity of children.

xi. Not invite unaccompanied children into my home, unless they are at immediate risk of injury or in physical danger.

xii. Not sleep close to unsupervised children unless absolutely necessary, in which case I must obtain my supervisor's permission, and ensure that another adult is present if possible.

xiii. Use any computers, mobile phones, or video and digital cameras appropriately, and never to exploit or harass children or to access child pornography through any medium (see also "Use of children's images for work related purposes").

xiv. Refrain from physical punishment or discipline of children.

xv. Refrain from hiring children for domestic or other labor which is inappropriate given their age or developmental stage, which interferes with their time available for education and recreational activities, or which places them at significant risk of injury.

xvi. Comply with all relevant local legislation, including labour laws in relation to child labour.

Use of children's images for work related purposes
When photographing or filming a child for work related purposes, I must:

xvii. Before photographing or filming a child, assess and endeavour to comply with local traditions or restrictions for reproducing personal images.

xviii. Before photographing or filming a child, obtain informed consent from the child and a parent or guardian of the child. As part of this I must explain how the photograph or film will be used.

xix. Ensure photographs, films, videos and DVDs present children in a dignified and respectful manner and not in a vulnerable or submissive manner. Children should be adequately clothed and not in poses that could be seen as sexually suggestive.

xx. Ensure images are honest representations of the context and the facts.

xxi. Ensure file labels do not reveal identifying information about a child when sending images electronically.

I understand that it is my responsibility to use common sense and avoid actions or behaviour that could be construed as GBV or SEA or breach this code of conduct. I do hereby acknowledge that I have read the foregoing Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to GBV and SEA. I understand that any action inconsistent with this Code of Conduct or failure to take action mandated by this Code of Conduct may result in disciplinary action and may affect my ongoing employment.

Signed by _____
(Worker)
Title: _____
Date: _____

Signed by _____
(Employer/Contractor)
Title: _____
Date: _____

ANNEX 10: SECURITY MANAGEMENT PLAN

There are many types of Security Management Plans, from a very general level to very detailed level, depending on the needs identified in the Security Risk Assessment. Most SMPs will have the following sections, which will be reviewed at least annually and after any incident, and updated as needed, throughout the project's life.

A. OBJECTIVES AND APPROACH

1. Objectives of an SMP.
2. Security policy description, including priorities, roles and responsibilities. If applicable, describe the relationship between, and relative responsibilities of, project security and other third-party contractors and affiliated contractors, such as the Engineering, Procurement, and Construction contractors.
3. Summary of security approach that can be shared with local stakeholders, including link to the Stakeholder Engagement Plan (SEP) and project grievance mechanism.

B. STANDARDS and GOOD INTERNATIONAL PRACTICE

Refer to standards, requirements and good international practice reflected in the plan. Include national laws, applicable international laws, World Bank Environmental and Social Standards, and other relevant international good practice.

C. OVERVIEW OF SECURITY SITUATION

1. Project Setting: Relevant demographic information, such as population age, unemployment, poverty, and inequality; crime levels and type; endemic political, social, or labor unrest; terrorism or insurgency; and general attitude toward the project and associated issues.

2. Security Risks: This section should be based on the project SRA and should discuss:
    a. Internal Risks (e.g., illegal, unethical, or inappropriate behavior of project personnel or those directly affiliated with it, such as employee theft, workplace violence, and labor unrest, potentially with associated sabotage).
    b. External Risks, such as those caused by the actions of people outside the project who seek to take advantage of opportunities presented by the development and operation of the project, such as common criminal activity; disruption of the project for economic, political, or social objectives; and other deliberate actions that have a negative impact on the effective, efficient, and safe operation of the project. In extreme cases, these could include terrorism, armed insurgency, coups, or war. The SMP should note that a security response or presence of security forces might result in additional risks to communities or individuals.

3. Security Arrangements: Describe who provides basic project-site protection, such as the project private security force (in-house or contracted) and/or arrangements made with public security. Outline agreed Code of Conduct.

D. PHYSICAL SECURITY

Provide an overall description of the project security approach and systems. Ideally this section includes a description of security barriers, such as fences, gates, locks, guard posts, surveillance/electronic security systems used, and a description of the overall security management system.

E. SECURITY OPERATING PROCEDURES

Provide a brief description of key security operating procedures. Key procedures should include a brief description of the following:

- Boundary Security — how security will maintain control of the project's perimeter and channel people to access-control points.

- Access-Point Operations — the types of checks and screening for both people and vehicles at gates or other access points. Include entry and exit searches and purpose, and who is subject to them.
- Incident Response — how security will respond to an incident and who is responsible for responding. Responses should be based on proper and proportional use of force. Describe the role of public security, including when they are called and by whom, for example, regarding criminal activity.
- Security Patrols — what patrols check and how often.
- Travel Security — (if applicable) any special procedure for off-site travel security.
- Materials Storage and Control — (if applicable) any controls over the transport, inventory, and maintenance of storage areas for raw materials, equipment, etc. Note that these are stored in accordance with appropriate national laws and regulations and relevant good international industry practice, including the World Bank Group Environmental, Health and Safety Guidelines.
- Information and Communication — procedures for categorizing, handling, and controlling sensitive information.
- Firearms Security — project policy regarding firearms on-site, as well as the responsibilities and procedures for issuing and storing any security firearms, ammunition, and non-lethal weapons. This should include: location for storage; how weapons are properly secured during storage; records for issuance; who they may be issued to; safeguarding while in possession of the personnel; and audits.
- Special Situations – There may be instances where large-scale events (e.g., criminal activity, demonstrations, civil disorder) require interventions by public security which is not specifically associated with the project. When planning for such events or emergencies, there should be clarity on how project security (private or public) passes control over to formal public security (for example, police, military, emergency responders).

F. SECURITY SUPERVISION AND CONTROL

1. Management Structure and Responsibility, including overall lines of control, accountability, and supervision for the security effort. Define who supervises daily performance of the security force and who has authority. Describe who has overall responsibility for security information sharing and communication.
2. Responsibility for Conducting Security Risk Assessments: Discuss the responsibilities for conducting risk assessments, who participates in them (e.g., senior management, community relations team, key stakeholders from communities, etc.), and what the assessments cover.
3. Cross-Functional Coordination: Describe interdepartmental coordination, community relations, human resources, and government relations are important partners in project security. Outline any planning/coordination activities between security and other departments, which may range from participation in security risk assessments to weekly meetings.

G. PRIVATE SECURITY MANAGEMENT

Private security's role is to provide preventive and defensive services, protecting workers, facilities, equipment, and operations wherever they are located. Private security personnel have no law enforcement authority and will not encroach on the duties, responsibilities, and prerogatives reserved for public security forces.

1. Provision and Composition of the Private Security Personnel: Describe whether security personnel are direct employees or from a third-party security provider.
2. Contract Provisions: Include any provisions (e.g., for uniforms and equipment).
3. Active Oversight of Contractor Performance: To ensure proper performance, the project will undertake audits, assist with training, inquire into any credible allegations of abuse or wrongdoing, and monitor site performance on an ongoing basis.
4. Security Personnel Background Screening: The project will perform and/or require its security provider to perform valid background checks on potential security personnel to screen for any allegations of past abuses, inappropriate use of force, or other criminal activity and wrongdoing. No individual for whom

there is credible negative information from these checks will serve on the project. These checks will be documented and maintained in individual personnel records, which are subject to review by the project and during project supervision.

5. Security Personnel Equipment: Describe equipment to be provided to personnel, including radios, nonlethal weapons, and any firearms and ammunition. Security personnel should only be armed if it is justified by the SRA is the only viable and effective mitigation measure for a clear threat.
6. Use of Force by Security Personnel: The use of force by private security is only sanctioned when it is clearly for preventive and defensive purposes and in proportion to the nature and extent of the threat. When it is necessary to arm security personnel, the project will ensure that those who are armed exhibit high levels of technical and professional proficiency and clearly understand the rules for the use of force. This means being properly trained on using force effectively, proportionality, and consistent with good international practice, applicable laws and the ESSs.
7. Security Personnel Training:
    - Outline the training responsibilities of either the security provider or the contractor, as applicable. The project will review any third-party security provider's training program and, where necessary, augment the training through the use of qualified third parties or direct instruction.
    - The project will ensure that security personnel receive procedural or knowledge training in: basic guarding skills, guard-post orders and procedures, proper conduct and ethics/human rights, rules of engagement, rules for the use of force, adequate weapons training (as applicable), health, safety, and environment mandatory training, and training on the SEP and relevant public and worker grievance mechanisms.
    - Outline how training completion records will be kept. Training will be open to inspection/audit.

H. PUBLIC SECURITY

1. Document Public Security Personnel Role: Summarize the memorandum of understanding or other agreement with public security, including commitment to the project's Code of Conduct and outlining disciplinary action process. If public security personnel are assigned to the project to provide some aspects of security, then this section should describe provision of any equipment or other support, the role of the public security force, joint contingency planning, and coordination mechanisms.
2. Provision and Composition of the Security Personnel: Clarify the reporting structure of the security detail and management contact points.
3. Summarize the MoU or agreement for services and request a high-level contact point for security.
4. Monitor security performance on an ongoing basis.
5. Security Personnel Background Screening: The project will agree with public security how individuals assigned to the project will be properly vetted, including how any allegations of past abuses, inappropriate use of force, or other criminal activity and wrongdoing will be taken into account prior to allowing an individual to be assigned to the project.
6. Security Personnel Equipment: Describe equipment to be provided to guards, including vehicles, radios, nonlethal weapons, and any firearms and ammunition.
7. Security Use of Force: Agree with public security providers on the project's principles regarding use of force, to be sanctioned only when it is clearly for preventive and defensive purposes in proportion to the nature and extent of the threat. The MoU or other legal agreement should state that those who are armed must exhibit high levels of technical and professional proficiency and clearly understand the rules for the proportional use of force.
8. Security Personnel Training: Provide opportunities for training or observing project training regarding the project Code of Conduct, health and safety requirements that relate to the project, and the public and worker grievance mechanisms. Outline how training completion records will be kept.
9. Allegations of Misconduct: Agree on how investigations into any credible allegations of abuse or wrongdoing will be undertaken and how discipline for violations of the project Code of Conduct or other project requirements by security personnel will be handled.

NB: this SMP is an excerpt from the World Bank's Good Practice Note on Assessing and Managing the Risks and Impacts of the Use of Security Personnel

ANNEX 11: ASBESTOS MANAGEMENT PLAN (AMP)

According to observations from the baseline studies conducted at the technical colleges, some structures identified for rehabilitation had asbestos ceilings. The proposed rehabilitation works will include the removal and replacement of Asbestos with new PVC ceilings at these TCs. The process of removal of asbestos could predispose workers, students, staff and nearby environment to asbestosis from the release of asbestos dust during the removal, transportation and disposal processes. This is grossly undesirable. The Asbestos Management Plan (AMP) has therefore been prepared to serve as a guideline for the removal, temporal onsite storage (where necessary), transportation and final disposal of removed asbestos. It outlines the requirements and procedures for proper management of this material from removal to final disposal, in a manner that poses no threat to human health or the immediate environment. The Contractors engaged for the IDEAS rehabilitation at the TCs shall ensure to collaborate with the respective SEPAs/SWMAs or any other approved independent waste vendor or disposal agency for the final disposal of removed asbestos to designated dumpsite within the state licenced to dispose hazardous waste.

The Table below highlights the various components of the AMP for colleges.

S/N	Activity Description	Measures to be taken	Responsibility	Cost	
				Mitigation	Monitoring
1.	**Removal of asbestos ceiling from structures**	• Training of Contractor workers on asbestos hazard, proper management, and best health and safety practices • Contractor should ensure early notification of staff and students before removal of asbestos ceiling. Better-still, removal of asbestos should be done during the holidays, weekends or close of school periods. • Ensure that all workers always use adequate PPEs (disposable nose mask, gloves, overall, boot, eye goggles) to avoid exposure to asbestos dust. • Provide staff and students of the hostels, classrooms and structures closest to the structure being rehabilitated, and who are likely to be at risk, with basic PPEs (disposable nose masks) to protect themselves.	**Contractor/SPIU**	**NGN185,238 USD246**	**NGN 336,591 USD 893**
2.	**Handling and temporal onsite storage (where necessary) of removed asbestos ceiling**	• Workers should completely avoid dropping off removed asbestos ceiling from the ceiling position to the floor. Rather, they should carefully drop the asbestos ceiling when removed, to avoid breaking them into pieces, and releasing asbestos dust. • Upon removal, asbestos ceiling should be carefully wet with fine moist to reduce discharge of asbestos dusts; then cut into smaller, manageable sizes for safe handling and transportation to designated dumpsite. • Where the respective SEPA/SWMA is not currently available for immediate evacuation from the College, the asbestos should be neatly and carefully stacked in a designated temporal onsite storage area before final evacuation. • Cover ground surface of temporal onsite storage area with impermeable surface to avoid deposits into the soil. • Where SEPAs/SWMAs won't be available for evacuation within 24 hours, the stacked asbestos should be covered with impermeable membrane to avoid transportation of smaller pieces from the temporal storage area. • Encourage hygiene practice among all worker such as washing of their hands and faces with soap and water immediately after removal of asbestos ceiling, and proper disposal of used disposable PPEs into designated waste bags provided.	**Contractor**		
3.	**Evacuation and transportation of asbestos waste from site**	• Contractor should collaborate with the respective SEPAs/SWMAs for the evacuation and transportation of Asbestos waste from project site to designated dumpsite. • Prior to implementation works, personnel of the respective SEPAs/SWMAs to be responsible for the removal of asbestos waste from the College should be retrained on asbestos hazards, and safe handling practices for hazardous waste disposal (including waste truck driver/s) • Evacuation into and from waste truck should be done carefully. • Provision and use of appropriate PPEs	**SWMAs/SEPAs and Contractor**		
4.	**Management of disposed asbestos**	• Immobilize the waste by encapsulation with cement or other acceptable material • Subsequently, it can be used as interlocking blocks or incinerated at an appropriate incinerating facility	**SWMAs/SEPAs**	**N/A**	**N/A**
5.	**Record keeping**	• Records to track the lifecycle of the asbestos waste must be kept by every institution involved • Issue certificate of disposal to the Contractor/SPIU	**SWMAs/SEPAs /SPIU**	**N/A**	**N/A**
		Total Cost for Implementing AMP		**NGN185,238 USD246**	**NGN 336,591 USD 893**

ANNEX 12: SOME PICTURES FROM SITE VISITS AND CONSULTATIONS

Stakeholder Engagement at FSTC Usi-Ekiti, Ekiti State.

CCP Workshop at FSTC Ahoada

Stakeholder Consultation at FSTC Ahoada

Technical Workshops earmarked for structural rehabilitation at FSTC Doma, Nasarawa State.

Stakeholder Engagement at FSTC Uyo

Workshops earmarked for rehabilitation at FSTC Uyo

Stakeholder Engagement at FSTC Yaba

Stakeholder Engagement at FSTC Ikare Akoko

Old Part Time Technical Vocational Program Building to be renovated and converted into IDEAS Project Office Workshop at FSTC Yaba

ANNEX 13: STAKEHOLDER ENGAGEMENT SUMMARY FOR THE FSTCs

This section therefore provides a summary table of the stakeholders' engagement or consultation process at the FSTCs. The table below shows the summary of stakeholders' engagement.

Date of Consultation	**21/12/2022**
Project Location	FSTC Usi Ekiti
Name of Stakeholder(s)	*SPIU Staff, CIU, ESSG Officer, NPCU TA, ESMP Consultant*
Language of Communication	English and Yoruba
Subject Matter	***Brief Overview of the ESMP in relation to the proposed rehabilitation works for the college.*** • *Understanding the proposed rehabilitation works as specified in the CIP prepared for the college.* • *Review of the engineering designs for the rehabilitation.* • *Implications of the intervention works which has commenced prior to preparation of safeguards instruments.* • *Assessment of significant adverse impacts of the proposed rehabilitations for the college, analysing alternatives to designs and proffering realistic mitigation measures.*
Questions/Concerns/Complaints/Suggestions from Consultant	**Response/Suggestions (By the Consultant)**
• Technical enquiries on the scope of the intervention works at the college and request for the engineering designs. • Informed them of some perceived negative impacts of the rehabilitation and how best to go about their management. Enquired on traffic situation along the Ido-Ayetoro highway. • On site visits to the fishery section, the Consultant enquired on how wastewater from the fish pond in the fishery section (Priority 2) is discharged. • Is there a plan to add a septic tank or drainage installation as part of the fishery section interventions? Given the proximity of the wastewater discharge point to the Abuja hostel, which is now undergoing renovation and conversion into priorities 1 and 2a, the future air quality around the workshops may be unpleasant owing to the odour from the wastewater. • Asides from mitigating adverse impacts of the proposed rehabilitation, the ESMP also aims to improve existing practices so that the E&S performance of the project is improved. The consultant further informed the stakeholders that a drainage/septic tank will be recommended in the ESMP to manage this issue. • General questions on security situation, GBV incidences, GRM and GRC constitution.	• The CIU furnished the Consultant with information on the priority works for FSTC Usi-Ekiti. According to the CIU, a design team has been engaged for the preparation of the designs for the rehabilitation, so the cannot be provided at the time. • The stakeholders informed the consultants' team that the highway is less travelled and not normally busy except during the day and or during peak hours (school runs, etc.). If materials can be supplied in the evening or during weekends, traffic build up will be largely mitigated. • Currently, there is no existing drainage or septic tank to serve as an outlet for wastewater from the fish pond. The effluent is discharged into a surrounding woody area near the pond. • There have been no break-ins in the college. Also, there are no records of GBV since the inception of the college. The college operates a strict management which ensures students are being sensitized on issues pertaining to GBV and perpetrators punished. • The college is currently in the process of constituting GRC members at the school which will include the same disciplinary committee and some stakeholders of the college such as members of the PTA. • They appreciated the consultant for their time and informed that they will follow through with the provisions of the ESMP prepared to ensure a smooth implementation.
Date of Consultation	**22/12/2022**
Project Location	FSTC Ohanso
Name of Stakeholder(s)	*College Principal, IDEAS SPIU; CIU Team, Project Manager, M&E officer, ESSG Officer, College Staff, ESMP Consultant*
Language of Communication	English
Subject Matter	***Brief Overview of the ESMP in relation to the proposed rehabilitation works for the college.*** • *Understanding the proposed rehabilitation works as specified in the CIP prepared for the college.*

	• *Assessment of significant adverse impacts of the proposed rehabilitations for the college, analysing alternatives to designs and proffering realistic mitigation measures.*
Questions/Concerns/Complaints/Suggestions from Consultant	**Response/Suggestions (By the Consultant)**
• The Consultant gave a brief overview on the ESMP for the proposed rehabilitation of workshops and sensitized the stakeholders on some envisaged potential adverse E&S risks & impacts including beneficial impacts likely to occur during the pre-construction, construction and operation phases of project implementation; and how the project aims to redress these issues; • The consultant informed the CIU and the school management that generally, minor E&S impacts are envisaged such as increase in noise level around classrooms, dust generation, temporary interruptions to the use of water or sanitary facilities due to the borehole installation and reticulation to be carried out, etc. He further informed the principal that an ESMP is currently being prepared to target and address these impacts specifically for the college. • Technical enquiries and deliberations on the scope of the intervention works at the college and request for the engineering designs. • Enquiries on past incidences of social conflict and security status of the project community. • Past cases or incidences of sexual assault and GBV and how it was handled.	The principals appreciated the Consultant and the IDEAS Project for engaging with the College and SPIU on the proposed rehabilitation works. The project manager explained the scope of the proposed rehabilitation for the colleges to the Consultant in order of priority. • The college principal inquired for more details on the nature of some of these perceived impacts. • Project manager assured he would make the documents available to the team at a later time. • The stakeholders informed the Consultant's team that there has been no security issue at their community recently. • The principal informed the team that there has been no case of GBV in the college since inception. The college has a disciplinary committee saddled with the responsibility of managing issues pertaining to GBV as well as other malpractices. • Further, the college is currently in the process of constituting GRC members at the school which will include the same disciplinary committee and some stakeholders of the college such as members of the PTA. • Other issues facing the college include access to water and termite infestation. These are parts of the proposed works. • They appreciated the consultant for their time and informed that they will follow through with the provisions of the ESMP prepared to ensure a smooth implementation.

Date of Consultation	5th -6th February, 2023
Project Location	**FSTC UROMI, EDO STATE.**
Name of Stakeholder(s)	College Principal, IDEAS SPIU; Project Manager, M&E officer, Procurement Officer ESG Officer, Staff, and Students.
Language of communication	**English**
Subject Matter	***Brief overview on the ESMP for the proposed rehabilitation and renovation of Workshops, Classrooms and Offices in the colleges; envisaged potential environmental and social concerns during implementation of intervention works.***
Questions/Concerns/Complaints/ Suggestions (From Stakeholders)	• The Consultant provided an overview of the ESMP for the proposed workshop rehabilitation and discussed potential adverse E&S risks and beneficial impacts during project implementation. • The principals appreciated the engagement and the project manager explained the scope of the proposed rehabilitation for each college in order of priority. However, the engineering designs are not available yet. • The Consultant sought information about the college's history, administrative structure, social conflicts, and security issues. • The existence of a Grievance Redress Mechanism (GRM), PTA, and Guidance and Counselling unit was inquired. The importance of establishing and sensitizing stakeholders on GRM was emphasized. • Sensitization efforts for students on the IDEAS projects were discussed, and some colleges had started while others had not yet informed their students. • The availability and state of basic amenities such as water, electricity, and clinics were inquired, and waste management practices were discussed. • The SPIU assured that appropriate measures would be taken to reduce E&S risks during project implementation in the colleges.
Questions/Suggestions/feedback from Uromi	• The Project Manager inquired about when the IDEAS project commences? • The students confirmed that they lacked information regarding the IDEAS project.

Response/Suggestions (By the Consultant)	The consultant informed the stakeholders that at the completion of all safeguard assessments and requirements, funds will be disbursed for the project to commence. He also gave the students present a brief overview and benefits and possible impacts of the project.
Date of Consultation	Thursday 22/12/2022
Project Location	**FSTC Jalingo**
Name of Stakeholder(s)	FSTC Management, Teachers
Language of communication	**English**
Subject Matter	Environmental and Social Impact of the project, mitigation measures and management plan
Questions/Concerns/Complaints/ Suggestions (From Stakeholders)	During the stakeholder meeting, the importance of the ESMP field work for successful project implementation was emphasized. Stakeholders appreciated the approach and made the following submissions: • The current academic activities are operating at the temporary site (old) while interventions will take place at the permanent site, ensuring no interference with teaching and learning activities. • Since their students are not yet at the permanent site, there will be minimal or no issues regarding social misconduct. • The absence of students at the site will also reduce traffic and accidents. • The school authority has improvised an alternative route to address erosion and cut off of the entrance road. • Stakeholders inquired about the deadline for project commencement and whether all interventions would start simultaneously. • They hope the contractors will hire local youth with skills for casual labor, citing a past project (not IDEAS) where laborers were brought from far away, causing concerns.
Response / Suggestions (By the Consultant)	• The absence of students at the permanent site will minimize negative social impact during the project. • All workers will sign a code of conduct before starting work. • The ESMP is necessary before commencing the project, and the team will expedite the report submission as planned. • The ESMP report includes mitigation measures to address social conflict and labor-related issues
Date of Consultation	**Thursday 22/12/2022**
Project Location	**Jalingo**
Name of Stakeholder(s)	Sector Commandant FRSC Jalingo, Taraba State
Language of communication	**English/Hausa**
Subject Matter	***Accident Prevention and Safety during Rehabilitation Activities.***
Questions/Concerns/Complaints/ Suggestions (From Stakeholders)	• The Sector Commandant was briefed about the mission, including the ESMP for the projects and safety considerations. The commandant expressed happiness about being recognized as an important stakeholder, acknowledging their recent efforts in raising awareness of their responsibilities. He raised the following concerns and suggestions: • For schools located along highways like FSTC Jalingo, highway control measures should be implemented to enhance safety. • Improvements to the college's security system are necessary since it is situated at the outskirt. • Creating awareness among teachers, students, and road users about safety measures is crucial. • To enhance security, lone boarding of tricycles should be discouraged, especially in the evening or at night. Boarding in the afternoon should only be done with registered tricycles. • Construction vehicles must display caution signs and reflective stickers. • Drivers need to adhere to speed limits, especially within the school premises. • The Sector Commandant is ready to offer support with traffic control when needed.
Response / Suggestions (By the Consultant)	• All suggestions provided will be incorporated and the ESMP will surely address them and assign all responsibilities to their appropriate quotas
Date of Consultation	**6th December, 2022** **12:18PM – 02:07PM**

Project Location	**FSTC Orozo, Abuja, FCT.**
Name of Stakeholder(s)	*College Principal, IDEAS SPIU (FSTC Orozo), Project Manager, ESSG Officer, Staff, Youth Corp Members and Students.*
Language of communication	**English**
Subject Matter	***Brief overview on the ESMP for the proposed rehabilitation and renovation of Workshops, Classrooms and Offices in FSTC Orozo; envisaged potential environmental and social concerns during implementation of intervention works.***
Questions/Concerns/Complaints/ Suggestions (From Stakeholders)	*The Consultant provided an overview of the Environmental and Social Management Plan (ESMP) for the proposed workshops' rehabilitation and sensitized stakeholders on potential adverse and beneficial impacts during project phases (i.e pre-rehabilitation, rehabilitation and operation)* • The stakeholders appreciated the engagement and expressed concerns about unresolved financial issues affecting the engineering designs for the college's rehabilitation. • The project manager explained the priority works identified for the college. The SPIU assured that appropriate measures would be taken to reduce E&S risks during implementation. • The CIU informed the consultant that access to water is a major challenge facing the college as the existing 6 boreholes are shallow and dry faster • Regarding traffic congestion concerns, stakeholders informed the Consultants that the school's access road is crowded only during specific hours (mornings and nights between 7am-10am, and 5pm-10pm). Deliveries would be scheduled accordingly, considering weekends to minimize disruptions. • Stakeholders sought information on funding distribution for timely commencement of school renovations.
Response / Suggestions (By the Consultant)	• The Consultant acknowledged the stakeholders' valuable opinions and suggestions, assuring them that their concerns will be incorporated into the final report. • The IDEAS Technical Assistant addressed the concerns about engineering designs with the project manager and other stakeholders, ensuring that the designs will be provided as soon as possible. • The Consultant explained that a crucial aspect of the ESMP consultancy involves a capacity building program on ESMP implementation for all parties involved in monitoring and implementing mitigation measures. This training will take place after the submission of the Draft ESMP report. • The Consultant further advised that for the challenge of shallow wells to be resolved a good geophysical survey of the proposed borehole **MUST** be done, which should incorporate a hydrogeological investigation and vertical electrical sounding to identify ideal locations for siting of boreholes at the college. • Lastly, the TA clarified that project funds will be disbursed for commencement once all safeguard assessments and requirements are completed.
Date of Consultation	**3rd February, 2023** **12:00PM – 1:30PM**
Project Location	**FSTC Ahoada, Rivers State**
Name of Stakeholder(s)	College Principal, Project Manager (PM), Procurement Officer, Communication Officer, ESSG Officer, M&E Officer, Project Accountant
Language of communication	**English**
Subject Matter	Brief overview on the ESMP for envisaged potential environmental and social concerns during implementation of intervention works.
Questions/Concerns/Complaints/ Suggestions	*The Consultant provided an overview of the ESMP for the proposed intervention works, discussing potential adverse E&S risks & impacts, as well as beneficial impacts during project phases.* • The PM welcomed the Consultant's team and offered their assistance. The M&E Officer asked if the Consultant team were IDEAS NPCU staff. • The ESSG inquired about the ESMP's completion date for college preparation. • The Consultant requested priority works and engineering designs for FSTC Ahoada, and also asked about expected labor size and material sourcing for renovations.
Response / Suggestions	• The Consultant thanked the IDEAS Ahoada Project team for their presence. • The Consultant clarified that their firm's staff are not NPCU employees. They were hired to provide Consultancy Services for an ESMP to rehabilitate workshops and classrooms in FSTCs and STCs nationwide.

	• The Consultant explained that they signed an agreement with IDEAS Project NPCU and are not authorized to share the ESMP with the college directly. The final report will be delivered to IDEAS NPCU/PMU, who will then share it with the respective FSTCs and STCs. • The M&E Officer stated that they currently lack information on the labor size and materials sourcing from Ahoada town in Rivers State. • The PM outlined the priority scope of rehabilitation for FSTC Ahoada. He also informed the Consultant's team that they may not receive engineering designs for the college's rehabilitation at the moment due to unresolved financial concerns.
Date of Consultation	6th December, 2022 12:18PM – 02:07PM
Project Location	**FSTC Awka, Anambra State.**
Name of Stakeholder(s)	College Principal, IDEAS SPIU (FSTC Awka), Project Manager, ESSG Officer, Staff, Youth Corp Members and Students.
Language of communication	**English**
Subject Matter	***Brief overview on the ESMP for the proposed rehabilitation and renovation of Workshops, Classrooms and Offices in FSTC Awka; envisaged potential environmental and social concerns during implementation of intervention works.***
Questions/Concerns/Complaints/ Suggestions (From Stakeholders)	• The principals appreciated the Consultant and IDEAS Project for engaging with the College and SPIU on proposed rehabilitation works in each school's CIP. • The project manager explained FSTC Awka's rehabilitation scope and mentioned a possible delay in providing engineering designs due to a conflict of interest. • The SPIU assured measures would be taken to reduce E&S risks during project implementation. • Stakeholders informed the Consultant's team about traffic congestion concerns during peak hours (in the mornings and afternoons between 7am-10am, and 2pm-5pm) and suggested a detour which leads to the college from its rear end. According to the CIU team, this route could be leveraged during haulage of procured construction materials to the college. • The SPIU emphasized considering weekends for material procurement to avoid weekday traffic disruptions caused by school runs and work commutes. • The SPIU further suggested Eke Oka as a proximal Building Materials Market where the Contractor could seek for material resources for the rehabilitation. • Stakeholders requested information on funding distribution to commence school renovations.
Response / Suggestions (By the Consultant)	• The Consultant thanked stakeholders for their input and assured them that their opinions and suggestions would be considered in the report. • The Consultant highlighted that a key aspect of the ESMP consultancy is conducting a capacity building program on ESMP implementation for all involved in monitoring and implementing mitigation measures. This training will begin after submitting the Draft ESMP report. • The Consultant also informed stakeholders that once all safeguard assessments and requirements are met, funds will be released to start the project.
Date of Consultation	1st February, 2023 11:10PM – 03:20PM
Project Location	**FSTC Dayi, Katsina.**
Name of Stakeholder(s)	College Principal, IDEAS SPIU (FSTC Dayi), Project Manager, ESG Officer, Staff, and Students.
Language of communication	**English**
Subject Matter	***Brief overview on the ESMP for the proposed rehabilitation and renovation of Workshops, Classrooms and Offices in FSTC Dayi; envisaged potential environmental and social concerns during implementation of intervention works.***
Questions/Concerns/Complaints/ Suggestions (From Stakeholders)	• The project manager explained FSTC Dayi's rehabilitation scope in order of priority. He also mentioned that the Consultant might not receive engineering designs for the college's rehabilitation currently due to unresolved financial concerns. • The SPIU assured that appropriate measures would be taken to reduce E&S risks during the project's implementation phase in the college. • The ESSG expressed frustration in carrying out tasks without the ESMP document's availability. • Regarding traffic congestion concerns raised by the Consultant, stakeholders informed the Consultants' team that the school's access road, the Dayi-Malumfashi express road, experiences congestion only on Fridays (market day). Thus, deliveries to the school will be scheduled on other

	weekdays except Fridays.
Response/Suggestions (By the Consultant)	• The Consultant expressed appreciation to stakeholders for sharing their opinions and suggestions, assuring them that their concerns will be considered in the report. • The project manager confirmed that available engineering designs will be provided, and complete designs for all intervention works will follow as soon as possible. • The Consultant highlighted the importance of a capacity building program on ESMP implementation for all involved in mitigation measures. • The Consultant reassured the ESS officer that the ESMP will be expedited and delivered promptly, and they are welcome to ask questions or seek clarifications on ESMP matters anytime.
Date of Consultation	19th December, 2022 1:00PM – 02:30PM
Project Location	**FSTC Doma, Nasarawa State.**
Name of Stakeholder(s)	IDEAS SPIU (FSTC Doma), Project Manager, ESG Officer, M&E officer, Staff, Youth Corp Members and Students.
Language of communication	**English**
Subject Matter	***Brief overview on the ESMP for the proposed rehabilitation and renovation of Workshops, Classrooms and Offices in FSTC Doma; envisaged potential environmental and social concerns during implementation of intervention works.***
Questions/Concerns/Complaints/ Suggestions (From Stakeholders)	The Consultant provided an overview of the ESMP for workshop rehabilitation, addressing potential adverse E&S risks & impacts, as well as beneficial impacts during different project phases. The PM expressed gratitude to the Consultant and IDEAS Project for engaging with the College and SPIU on proposed rehabilitation works in each school's CIP. • The PM explained the priority scope of FSTC Doma's rehabilitation, mentioning that engineering drawings and designs are currently unavailable and a design consultant will be engaged. • The PM also shared details about the planned rehabilitation/expansion/construction works for priority projects in the college, including classrooms, workshops, borehole, and septic tanks. • The SPIU assured measures would be taken to reduce E&S risks during the college's project implementation phase. • • Lastly, stakeholders inquired about the distribution of funding to commence their school's renovations.
Response/Suggestions (By the Consultant)	• The Consultant thanked stakeholders for their input and assured them that their opinions and suggestions would be taken into account in the report. • The IDEAS TA addressed concerns regarding engineering designs with the project manager and other stakeholders, assuring the Consultant that the designs will be provided as soon as possible. • The Consultant emphasized the importance of a capacity building program on ESMP implementation for all involved in mitigation measures. This training will start after submitting the Draft ESMP report.
Date of Consultation	**22nd December, 2022** **2:00PM – 3:30PM**
Project Location	**FSTC Ijebu-Imusin, Ogun State**
Name of Stakeholder(s)	IDEAS PM, ESSG Officer, Communication Officer, M&E Officer, Auditor, Youth Corps Members and Students
Language of communication	**English**
Subject Matter	Brief overview on the ESMP for envisaged potential environmental and social concerns during implementation of intervention works.
Questions/Concerns/Complaints/ Suggestions (From Stakeholders)	The Consultant provided a concise overview of the ESMP for proposed intervention works, discussing potential adverse E&S risks & impacts, and how the project aims • The PM of FSTC Ijebu-Imusin welcomed the ESMP Consultant and questioned the timing of the E&S assessment during a non-school session and festive season. • The Auditor asked about the funding source for mitigation measures, stating that allocated funds are strictly for priority and general works

	under the IDEAS project. • The Consultant inquired about the student demographics, specifically if only children of FSTC Ijebu-Imusin staff attend the school. • The Consultant asked about security threats, whether the college has experienced or is currently facing any security/banditry concerns. • The Consultant requested information on significant cultural practices specific to the community/college. • The Consultant also inquired about the expected labor size and the source of materials for the renovation.
Response / Suggestions (By the Consultant)	• The ESMP Consultant apologized for the short notice for the field visit, explaining that the contract spans three months, necessitating a prompt deployment to meet delivery expectations. • The Consultant confirmed that the cost allocated in the ESMP will be provided by the NPCU/PMU. Some mitigation costs will be included in the Contractors BOQ under the E&S clause. • The M&E Officer clarified that children from neighboring communities (Itamogiri and Isagunsen) also attend SNAPS, not just the children of FSTC Ijebu-Imusin staff. • The Communication Officer assured that Ijebu-Imusin is a peaceful community with no security threats. • The Communication Specialist confirmed that there are no culturally significant practices within the college/community. • The ESSG Officer stated that the labor size is unknown, but materials will be sourced from Ijebu-Ode, which is about 2km from FSTC Ijebu-Imusin..
Date of Consultation	20th December, 2022 1:35PM – 03:20PM
Project Location	**FSTC Kuta Shiroro, Niger State**
Name of Stakeholder(s)	College Principal, IDEAS SPIU (FSTC Kuta Shiroro), Project Manager, ESG Officer, Staff, Youth Corp Members and Students.
Language of communication	**English**
Subject Matter	***Brief overview on the ESMP for the proposed rehabilitation and renovation of Workshops, Classrooms and Offices in FSTC Kuta Shiroro; envisaged potential environmental and social concerns during implementation of intervention works.***
Questions/Concerns/Complaints/ Suggestions (From Stakeholders)	The Consultant provided an overview of the ESMP for workshop rehabilitation, addressing potential adverse E&S risks & impacts, as well as beneficial impacts during project phases. • The Principal appreciated the Consultant and IDEAS Project for engaging with the College and SPIU on the proposed rehabilitation works as per each school's CIP. • The project manager explained the priority scope of FSTC Kuta Shiroro's rehabilitation. • In response to the Consultant's question about security, the PM stated that Shiroro LGA is notorious and has experienced banditry and kidnappings since the past two years, although Kuta community has not been affected as much. • Regarding labor size and material sourcing, the ESSG Officer mentioned materials would be from outlets in Shiroro LGA and, if necessary, major markets within Minna township, but the labor size remains unknown and will depend on the contractor.
Response / Suggestions (By the Consultant)	• The Consultant thanked stakeholders for their input and assured them that their opinions and suggestions would be considered in the report. • The Consultant highlighted the importance of a capacity building program on ESMP implementation for all involved in monitoring and implementing mitigation measures. This training will begin after submitting the Draft ESMP report.
Date of Consultation	**2nd February, 2023** **12:30PM – 2:45PM**
Project Location	**FSTC Tungbo, Bayelsa State**
Name of Stakeholder(s)	IDEAS PM, ESSG Officer, M&E Officer, Youth Corps Members and Students
Language of communication	**English**
Subject Matter	Brief overview on the ESMP for envisaged potential E&S concerns during implementation of intervention works.

Questions/Concerns/Complaints/ Suggestions (From Stakeholders)	• The PM of FSTC Tungbo welcomed the ESMP Consultant and offered assistance with any available information. • The Consultant asked for priority works and engineering designs for FSTC Tungbo. • The Consultant inquired about security/banditry threats experienced by the college or Tungbo Community. • The Consultant asked if there are any significant cultural practices specific to the community/college. • The M&E Officer asked if the ESMP will be prepared only for FSTC Tungbo or all FSTCs in Nigeria. • The ESSG inquired about the distribution of the completed ESMP to the IDEAS team in FSTC Tungbo.
Response / Suggestions (By the Consultant)	• The PM explained the priority scope of FSTC Tungbo's rehabilitation to the Consultant. He mentioned that due to unresolved financial concerns, engineering designs for the college's rehabilitation might not be available at the moment. • The M&E Officer confirmed that Tungbo is a peaceful community with no security threats. • The M&E Officer also stated that there are no culturally significant practices practiced within the college or Tungbo community. • The Consultant clarified that 22 ESMPs will be prepared for the 38 FSTCs and STCs across the federation. • The Consultant explained that the ESMP will be shared with the NPCU, as they signed an agreement with them, and not directly with the college. • The Consultant expressed appreciation to the IDEAS Project team for their presence and providing relevant information.
Date of Consultation	**23rd December, 2022** **12:00PM – 2PM**
Project Location	**FSTC Yaba, Lagos State**
Name of Stakeholder(s)	Communication Officer, M&E Officer
Language of communication	**English**
Subject Matter	Brief overview on the ESMP for envisaged potential environmental and social concerns during implementation of intervention works.
Questions/Concerns/Complaints/ Suggestions	The Consultant provided an overview of the ESMP for proposed intervention works, addressing potential adverse E&S risks & impacts, as well as beneficial impacts during project phases. • The Communication Officer welcomed the ESMP Consultant and apologized for the absence of the PM and other IDEAS officers due to the festive season and staff traveling to be with their families. • The Communication Officer asked about the number of TCs under the IDEAS Project. • The M&E Officer inquired whether civil works would commence before or after the preparation of the ESMP. • The M&E Officer also asked if a copy of the ESMP would be shared with IDEAS Officers in FSTC Yaba for compliance with the suggested mitigation measures. • The Consultant requested information on the expected labor size and the source of materials for the renovation.
Response / Suggestions	• The Consultant thanked the two present officers for their cooperation and apologized for the sudden field visit, understanding that the school is not in session. She emphasized the importance of the visit. • The Consultant stated that there is a total of thirty-eight (38) TCs, twenty (20) FSTCs, and eighteen (18) STCs spread across twenty (20) states. • The Consultant explained that E&S assessment is conducted before commencing civil works for projects like IDEAS and other WB-funded projects. This assessment identifies risks and impacts, proposes mitigation measures, assigns monitoring responsibilities, and sometimes includes training for responsible parties. • The Consultant clarified that upon completion, the ESMP Final report will be given to the IDEAS NPCU/PMU, who will then share it with the respective FSTCs and STCs. • The Communication Officer mentioned that there are currently five contractors, but the exact number of contractor workers is unknown. Materials will be sourced from Ebutte-Metta/Oyigbo in Lagos.
Date of Consultation	1st February, 2023 11:10PM – 03:20PM
Project Location	**FSTC Zuru, Kebbi State.**
Name of Stakeholder(s)	College Principal, IDEAS SPIU (FSTC Zuru), Project Manager, ESG Officer, Staff, and Students.
Language of communication	**English**

Subject Matter	***Brief overview on the ESMP for the proposed rehabilitation and renovation of Workshops, Classrooms and Offices in FSTC Zuru; envisaged potential environmental and social concerns during implementation of intervention works.***
Questions/Concerns/Complaints/ Suggestions (From Stakeholders)	The Consultant provided an overview of the ESMP for proposed workshop rehabilitation, addressing potential adverse E&S risks & impacts, as well as beneficial impacts during project phases. The principals appreciated the Consultant and IDEAS Project for engaging with the College and SPIU regarding the proposed rehabilitation works in each school's CIP. • The project manager explained the priority scope of FSTC Zuru's rehabilitation to the Consultant. He mentioned that engineering designs might not be available at the moment due to unresolved financial concerns. • The SPIU assured that appropriate measures would be taken to reduce E&S risks during the project's implementation phase in the college. • Regarding traffic congestion concerns, stakeholders informed the Consultants' team that the school's access road, the Zuru-Ribah express road, has very low traffic.
Response / Suggestions (By the Consultant)	• The Consultant appreciated stakeholders for their valuable input, assuring them that their concerns would be considered in the report. • The project manager confirmed that he will provide available engineering designs and assured that complete designs for all interventions will be made available as soon as possible. • The Consultant highlighted the importance of a capacity building program on ESMP implementation for all parties involved in monitoring and implementing mitigation measures. • The Consultant assured the ESS officer that the ESMP would be expedited and delivered promptly, and they are open to addressing any questions or clarifications related to the ESMP.

***Note:** Asides the Technical Colleges, various implementing MDAs, such as SEPAs, SWMAs, FRSC, NPF, etc., were also consulted to seek their input on managing the identified adverse E&S impacts from the proposed rehabilitations in the TCs. They expressed their commitment to support as long as the SPIUs coordinate with them when needed.*

ANNEX 14: WB Good Practice in the Collection of Information on Gender Based Violence

It is generally unnecessary to undertake new surveys to determine GBV risks as key information is likely already available from country-level Demographic and Health Surveys or nationally representative standalone surveys on violence against women and girls. Eliminating various forms of violence faced by women and girls is also part of several of the Sustainable Development Goals and has led to an increase in data collection and reporting on GBV.

There should be absolutely no data collection related to GBV with anyone who may be a survivor without making referral services available to support them. If data collection is necessary, Task Teams should confirm that protocols are in place to enable referral of participants disclosing experiences of violence before data collection commences to avoid retraumatizing survivors. Training of researchers must cover all safety and ethical guidelines related to GBV. No focus group discussions with community members asking about personal experiences of GBV should be undertaken. Given that prevalence of IPV and/or non- partner sexual assault affects 35 percent of women aged 15-49, focus groups are likely to have women who are survivors of an incident of GBV. For more information on how to discuss GBV ethically see:

- The Violence Against Women and Girls Resource Guide Ethics page
- Ellsberg M, and Heise L. (2005). Researching Violence Against Women: A Practical Guide for Researchers and Activists. Washington DC, United States: World Health Organization, PATH.
- World Health Organization (2001). Putting women first: Ethical and safety recommendations for research on domestic violence against women.
- World Health Organization (2007). WHO Ethical and safety recommendations for researching, documenting and monitoring sexual violence in emergencies.

When data is unavailable, however, and data collection on topics related to GBV, such as help-seeking behaviors, perceptions of quality of GBV Services Providers, or safety mapping of communities is undertaken, the following guiding principles are to be followed and the ethical issues concerning GBV data collection are to be carefully considered. Only if these can be properly implemented, should data collection be done.

- The benefits to respondents or communities of documenting GBV must be greater than the risks to them.
- The safety and security of all those involved in information gathering about GBV is of paramount concern and should be continuously monitored.
- Information gathering and documentation must be done in a manner that presents the least risk to respondents, is methodologically sound, and builds on current experience and good practice.
- Basic care and support for survivors must be available locally before commencing any activity that may involve individuals disclosing information about experiences of GBV.
- The confidentiality of individuals who provide information about GBV must be protected at all times.
- Anyone providing information about GBV must give informed consent before participating in the data gathering activity.
- All members of the data collection team must be carefully selected and receive relevant and sufficient specialized training and ongoing support.
- Additional safeguards must be put into place if children (i.e., those under 18 years) are to be the subject of information gathering.