ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) FOR THE REHABILITATION WORKS IN STATE TECHNICAL COLLEGES (STCs) IN ABIA STATE.

FEDERAL MINISTRY OF EDUCATION

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

IDEAS

Final Report

Environmental and Social Management Plan (ESMP) for the Rehabilitation Works in State Technical Colleges (STCs) in Abia State.

October 2023

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 ***(refer to Chapter 2: subsection 2.4 for more information).*** 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. Consequent on the above, 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 policies on Environmental Assessment (OP 4.01) and Involuntary Resettlement (OP 4.12). On this basis, part of the funds earmarked for Abia State has been set aside to procure consultancy services for the development of an Environmental and Social Management Plan (ESMP) for the Rehabilitation works in Government Technical College (GTC), Osusu, Aba; Government Technical College (GTC), Ohafia; and Government Technical College, Afara-Ukwu, all in Abia State. 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.

ES 2: Rationale for the ESMP

The IDEAS Rehabilitation/Renovation project has been classified as Category B according to the World Bank (WB) Environmental Assessment (EA) 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 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. 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: Overview of Project Location

The rehabilitation works for Abia State will be carried out across three (3) state technical colleges as provided in table 1 below. The rehabilitation works have been divided into three priorities: Priority 1, 2, and 3, as outlined in the feasibility studies. Additionally, some rehabilitation works are classified as "General Works". Technical workshops, Offices, Classroom Blocks and other structures have been proposed for rehabilitation under each of the priority. The General Works mostly comprise ancillary or supplementary works to enhance newly rehabilitated

structures. These include Solar Powered Borehole Installation, Landscaping, etc. ***Refer to chapter 3 for more details.***

S/N	Name of Technical Colleges	Total No of Rehabilitation	GPS Coordinates	
			Latitude	Longitude
1.	Government Technical College Osusu-Aba	5 structures	N5.117852	E7.352570
2.	Government Technical College Ohafia	5 structures	N5.557621	E7.837717
3.	Government Technical College Afara-Ukwu	5 structures	N5.509994	E7.479779

ES 4: Scope of Intervention Works

Based on the CIPs, the proposed rehabilitation, renovation and expansion of the TCs will generally include the following civil works:

Rehabilitation Activities:

1. **Roofing** – Removal of old and dilapidated roofing sheets and replacement with aluminium roofing.
2. **Ceiling Finishes** – Removal of old, damaged, and dilapidated Polyvinyl Chlorides (PVCs), Asbestos ceilings and Board ceilings.
3. **Floor Finishes** – Removal and rehabilitation of damaged floors along technical workshops, project offices, classrooms, etc.
4. **Doors and Windows** – Replacement of doors and windows with steel types.
5. **Wall Finishing** – Wall filling and smearing and finishing with cement.
6. **Painting** – Wall screeding and painting.
7. **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.
8. **External Works** – This will include cement, sand, gravel and water mixing. It will also include the transport of materials for civil works into college premises.
9. **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 abandoned toilets; including construction of new ones. Toilet rehabilitation and renovation will also include water reticulation to ensure equitable water supply to toilets and sanitary infrastructure such as hand basins.
    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 the technical workshops, offices and classrooms.

Refer to chapter 3 for specific rehabilitations for the TCs in order of priority works.

ES 5: Environmental and Social Baseline Description of the Project Area

Environmental Baseline Studies

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

Sampling Methodology

The air quality within and around the vicinity of the workshops and classrooms proposed for rehabilitation in each college was analyzed using a Testo 350 XL to serve as basis for future air quality monitoring. Measurements were taken at different locations around the project corridors (selected structures and priority rehabilitations) with the same coordinates for noise. Ambient noise levels around these areas were measured using a Testo 815 Noise meter. All samples measurements (air and noise levels) were collected between the 23rd of December, 2022 and 6th to 7th of February, 2023.

Air Quality

Air Quality (AQ) analysis was carried out using a Testo 350 XL. Measurements were taken around the project corridors (priority workshops, classrooms, offices, structures proposed for rehabilitation) for each of the three (3) technical colleges. Locations sampled showed results for the technical colleges, CO, NOx, SOx, NH3, and H2S levels were below 0.01µg/m3, meeting the FMEnv permissible limit of 10µg/m3, 0.04-0.06µg/m3, 0.01µg/m3, 0.2µg/m3, and 11.4-22.8µg/m3 respectively. VOC levels were within limits, ranging from 0.002-0.02µg/m3 across locations. Total Suspended Particulate Matter (SPM) were also within the FMEnv permissible limit (<250µg/m3), with readings ranging from 85µg/m3 to 118µg/m3 across sampled locations at the TCs. ***Refer to Chapter 4, Subsection 4.3.2 Table 13.***

Noise Levels

Noise Levels (NL) were measured using a Testo 815 Noise meter. Noise samples were measured with the corresponding coordinates as those for air samples. Results show that noise levels at GTC Osusu Aba were 31.5dB (workshop clusters), 31.25dB (mechanical engineering workshop), and 30.65dB (Leather Works). Similarly, GTC Ohafia's EIM/BLC and Gas Conversion Workshops had average levels of 25.7dB and 26.65dB respectively. At GTC Afara Ukwu, Instruments Mechanic Workshop, MVM Works, and ICT Hall recorded averages of 36dB, 31dB, and 36.1dB. All readings are within The National Environment (Noise Standard and Control) Regulation Limit (Part I section 2 of NESREA (2009). ***Refer to Chapter 4, Subsection 4.3.3 Table 14.***

Socioeconomic Baseline Studies

Summary of Socioeconomic Baseline Studies

Of the sampled population across the TCs comprising mainly of SPIU Staff, Principal, Vice Principals, Staff and Students of the colleges, approximately 67% (32) in GTC Osusu Aba; 67% (40) in GTC Ohafia; 86% (48) in GTC Afara Ukwu were male, whereas 33% (16) in GTC Osusu Aba; 33% (20) in GTC Ohafia, 14% (8) in GTC Afara Ukwu made up the female respondents. 100 out of the 164 (62.68%) respondents across all three (3) technical colleges fell within the age range of 35-64 years; students and NYSC corps members within the age range of 15-34 comprised the remainder of the respondents 64 (37.32%). 152 (92.7%) of all respondents across the three (3) colleges were found to be predominantly Christians while the remaining 12 (7.3%) respondents were Muslims. The results of the socioeconomic survey revealed that on average the respondents have attained an appreciable level of formal education, with 132 out of 164 respondents completing tertiary education, the others comprised of students of the colleges who participated in the survey. The state colleges were "***Small Sized"*** (<500 students) as at the time of visit. The survey recorded malaria 85.4% (140) as the most prevalent disease associated within the colleges; Typhoid 12.2% (20), and Cough 2.4% (4) was also recorded. The survey results show that access roads leading to GTC Osusu Aba is deteriorated and in a poor state, which was also confirmed during the site visits. Access to healthcare facilities (Osusu 1 Primary Health Centre, Elughu Primary Health Centre, Ohafia, Okwulaga Afara Health Centre Afaraukwu, etc.) and potable water was adjudged fair by the bulk of the respondents across the colleges. Although available, these resources are not readily accessible when needed.

Site-Specific Conditions/Sensitivities

Generally, the site visits across the technical colleges revealed minor environmental and social concerns. Some significant environmental and social baseline conditions identified during the field visits are itemized in the table below.

Technical College	Environmental and Social Conditions/Sensitivities
GTC Osusu Aba	• The ICT building (Priority 1) is located near a waterlogged area. Rainwater remains within the college premises after a rainfall event rather than draining away. To prevent future waterlogging, which occurs largely during the wet season, the college has proposed sand filling and drainage installation in the region. • There is no borehole at the school. As a result, access to and availability of water remains a critical issue facing staff and students at this college. The College currently relies on the weekly supply of water from vendors and tankers. *Note borehole installation is a priority work under the project for this college.* • Consultations with the project manager revealed that the school experiences sporadic burglary by locals and hoodlums especially from Ferguson Street. • Some abandoned workshops in this college may be hideouts for poisonous snakes and reptiles such as monitor lizards, thus presenting health and safety risk to contractor workers. • The structures in the college are situated in clusters, with workshops being rehabilitated near classroom blocks and offices. Effective mitigation strategies are required to manage project-related E&S impacts such as noise and fugitive dust emissions. • Faulks Road is a significant road that connects numerous areas in Aba and leads to the college. Furthermore, because of its proximity to the Ariaria International Market, it is normally highly busy and has traffic during the day. Osusu Road is a detour that leads to the campus from the left wing.
GTC Ohafia[1]	• Overgrown vegetation across most of the abandoned structures to be rehabilitated. • Extreme weather condition around the location has resulted in the dilapidated roofs and structural members of some buildings especially those proposed for rehabilitation. • There are inadequate sanitary facilities and no borehole within the college • Open dumping and burning of waste is regular practice in the college. • Ania-Arochukwu road which leads to the college is narrow and made of earth. It is usually busy and used by commuters during *"**Eke**"* which is their major market day in the community.
GTC Afara Ukwu	• There is no borehole at the school. As a result, access to and availability of water remains a critical issue facing staff and students at this college. The College currently relies on the weekly supply of water from vendors and tankers. *Note borehole installation is a priority work under the project for this college.* • Extreme weather condition around the location has resulted in the dilapidated roofs and structural members of some buildings especially those proposed for rehabilitation. • Some abandoned workshops (e.g. the MVM workshop) in this college may be hideouts for poisonous snakes and reptiles such as monitor lizards, thus presenting health and safety risk to contractor workers. • There is need for the obsolete roof and asbestos ceilings to be removed from the buildings to be collected and temporarily stored safely at a designated point prior to evacuation by ASEPA. • Engineering control works at the school entrance affected by a small gully erosion.

Gender and GBV Statistics (Abia State)

According to records provided on ReportGBV[2] – the National Gender-Based Violence dashboard of the Federal Ministry of Women Affairs to report on violence against women and girls in Nigeria, there are currently 91 reported incidences of GBV in Abia State. Of the reported cases (largely constituting false calls, fatal cases, open and closed cases, etc.), about 26.37% (24) are currently under investigation, with 2.2% (2 cases) successfully closed and 71.43% (65 cases) unresolved.

[1] The management of GTC Ohafia has resolved the issue regarding encroachment into their college land by locals of Nde Edu and Nde Otusi Communities. In a bid to resolve the college boundary dispute, a high-level consultation was undertaken with locals who had encroached into the college as well as key stakeholders in the LGA and community – ***See Annex 8.*** The College's Survey Plan was used during the meeting to reestablish, clarify and delimit the borders of the college lands which covered the areas under dispute. This effectively arrested all external claims to the college land and resulted in a voluntary withdrawal from the case by the plaintiff (Nde Edu and Nde Otusi Compounds). Furthermore, the traditional ruler of the community issued an injunction prohibiting any further encroachment or trespass into College properties– ***Refer to Annex 8 for the Minutes of Engagement with the Communities***.

[2] **Nigeria FMWASD –** ReportGBV

GBV Status at Project Locations

There are currently two (2) open recorded case of GBV in Aba North and Ohafia LGA and ten (10) open recorded cases in Umuahia North. However, no GBV cases were recorded in the project areas. several service providers were identified within the project locations.

Stakeholder engagement with the Principals, Staff, Students and NYSC Corp members across the colleges revealed that there has been no past incidence or records of GBV. All of the colleges have a disciplinary committee saddled with the responsibility of addressing matters pertaining to GBV and imposing adequate penalties to culpable parties and perpetrators. The disciplinary committees of these colleges is also tasked with all follow-up activities as regards GBV including hand-over to the appropriate service providers.

Furthermore, it was suggested that the management of the colleges should establish a Gender Focal Person that will help to escalate GBV issues (SEA/SH) to the recognized GBV service providers in the state. The committees will also be trained to cascade the required GBV sensitization and capacity building among the students

ES 6: Identification and Assessment of Potential E&S Impacts

Identified Positive Impacts

Generally, the positive impacts of the IDEAS project are similar across the three (3) technical colleges. Some of the benefits attributed to the proposed rehabilitation and expansion activities are:

- Increased enrolment of students at across the colleges which will subsequently boost revenue generation for the Colleges.
- A more conducive environment for learning and skills acquisition for the students. The expanded workshops will accommodate more students for practical and technical vocations.
- The rehabilitation and installation of new WASH facilities (solar powered borehole, overhead tanks and toilets) will guarantee the availability of water in the state colleges.
- Construction of WASH facilities in the colleges will promote hygiene and sanitation hereby resulting in improved health.
- The construction phase of the rehabilitations may likely create short-term employment opportunities for unskilled workers most of whom are based within the host communities of the colleges. This will encourage community perception and stakeholder satisfaction of the IDEAS project.
- The upgraded technical workshops will not only serve as a conducive practical space for the students, the proposed rehabilitation and expansion of the facilities will also increase technical and vocational service delivery to the colleges host communities and environs thereby increasing the colleges' Internally Generated Revenue (IGR).
- The proposed rehabilitation works at the three (3) colleges of interventions 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 improved work facilities. Furthermore, staff productivity and quality of service delivery will be enhanced.
- The project will create an avenue for future investment in the technical colleges including Public Private Partnerships (PPPs).

Negative Impacts

The potential adverse impacts and mitigation measures of the proposed rehabilitation/renovation work across the colleges are summarized in the table below.

PRECONSTRUCTION PHASE

Environmental Impacts

- Vehicle movement to and from technical colleges for material supply may lead to carbon emissions, affecting local air quality.
- The mobilization and transportation of tools, machinery, materials, and workers within the colleges may generate fugitive dust, potentially causing respiratory issues or worsening preexisting conditions for students, staff, and NYSC corps members.

- There may be a slight, localized increase in noise levels during mobilization to project sites.
- Workers may also be exposed to OHS risks including risk of falling objects, musculoskeletal disorders, back injuries, etc. resulting from unsafe lifting or offloading of materials; slips, trips and falls due to slippery work areas or weather conditions, etc.

Social Impacts

- Transporting materials to certain colleges (GTC Osusu and GTC Ohafia) could lead to temporary traffic congestion, potentially causing delays for commuters, depending on the duration.
- Teenage and adolescent females in the colleges may be predisposed to Gender Based Violence (GBV) during workers' mobilization to site, offload of supplied materials, etc.

CONSTRUCTION PHASE

Environmental Impacts

- Minor, short-term soil contamination due to improper slurry management (cement mixture), oil, fuel, lubricants, paint, etc.
- Greenhouse gas emissions from the operation of construction vehicles, generators, and equipment.
- Risk of drainage damage at GTC Osusu due to improper backfilling after installation, potentially reducing durability and stability in the face of storm water/runoff.
- Generation of waste streams, including a) construction and demolition wastes (e.g., wood, large stones, cement/POP bags, metal rods, pipes, disused fixtures, ceramics, sinks, etc.); b) stockpiles of electrical waste (sockets, switches, wires, cables, circuit boards, cathode ray/mercury bulbs, etc.); c) food and other biodegradable wastes (food remains, sachet and bottle water, etc.).
- Generation of asbestos waste, such as asbestos ceilings and roofs. Exposure of personnel to asbestos dust/fibrils could lead to asbestosis on the long-term.
- Potential for increased open defecation by contractor workers during rehabilitation works at the colleges.
- Occupational Health and Safety (OHS) risks for workers during a) electrical work (injuries, explosions, electrical fires, falls, release of hazardous energy, accidents, etc.); b) mechanical work (exposure to welding fumes, dust, and paints leading to eye irritation, respiratory issues, Musculoskeletal Disorders, noise); c) work at heights (falls, injuries, death); d) work at abandoned sites (risk of snakebites and scorpion stings).
- Demolition activities may cause localized noise level increases, potentially resulting in hearing impairments, headaches, or disruptions to learning activities, particularly in locations where project sites are near classrooms and staff offices.

Social Impacts

- Temporary electricity supply interruptions in workshops, classrooms, and offices during electrical repairs and fitting may briefly disrupt activities dependent on electricity (e.g., classroom lighting, ceiling fans, computer labs).
- Risks of on-site and off-site social issues, including physical assaults (fights, harassment, vandalism), and substance abuse due to an increased labor force.
- Potential for social conflicts between school staff and some construction workers due to non-compliance with school rules.
- An influx of contractor workers and followers offering additional goods and services on school premises.
- Heightened risk of theft of construction materials by local residents, delinquents, or hoodlums from the project communities.
- The possibility of female teachers, corps members, and male/female students (within the school premises) being exposed to sexual exploitation, abuse, and harassment in interactions with construction workers and their followers.
- Potential injuries to students due to rough play around demolition waste and construction materials stockpiles.
- Anticipated grievances from students and school staff who may need to temporarily vacate their classrooms, workshops, laboratories, etc., during rehabilitation work within the schools.

OPERATION PHASE

Environmental Impacts

- Operation of newly installed electrical fittings and lightbulbs may lead to excessive energy consumption.
- Use of rehabilitated workshops, laboratories, offices, etc. may lead to the generation and indiscriminate disposal of solid wastes.
- Extreme weather conditions may result in wear and tear of newly rehabilitated structures.

ES 7: Mitigation Measures

The table below summarizes some proffered mitigation measures for the identified adverse impacts. ***Refer to Chapter 5; table 19 for the detailed ESMP mitigation and monitoring matrix table.***

Identified Impacts	Mitigation Measures
Environmental Risks	
• Vehicle movement to and from technical colleges for material supply may lead to carbon emissions, affecting local air quality.	• 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.
• Fugitive dust generation during mobilization and transportation of materials.	• Reduce vehicle speed when driving through unpaved roads (20km/hr. in schools and 30km/hr. for Residential Areas) • Vehicles transporting material should be covered with tarpaulin • Ensure watering of access route and project site prior to incoming of vehicles and transporting materials into schools.
• Transport of materials as well as demolition activities may result in localized noise level increase. This may lead to hearing impairments, headaches or disruption of learning activities particularly in locations where demolition sites are close to classrooms, staff offices, etc.	• Where possible, retrofit all hired vehicle exhausts with mufflers/silencers to minimize noise from heavy machineries • Convey materials and reschedule noise intensive activities e.g. demolitions for evenings or night hours when classes are over and schools are closed for the day (weekends, holidays, mid-term breaks, etc.). • Provision and use of PPE for contractor workers.
• 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 Licensed Private waste collector • Tighten loosed equipment oil valves; • Provide stacking points for project equipment
• Sectional ponding or eventual inundation of uneven or non-level areas as an aftermath of the proposed drainage installation at GTC Osusu. Risk of drainage damage at GTC Osusu due to improper backfilling after installation, potentially reducing durability and stability in the face of storm water/runoff.	• Sand filling flood prone area around the ICT Building at GTC Osusu Aba • Installation of line drains to re-channel storm water out of the college.
• Generation of waste streams, including a) construction and demolition wastes (e.g., wood, large stones, cement/POP bags, metal rods, pipes, disused fixtures, ceramics, sinks, etc.); b) stockpiles of electrical waste (sockets, switches, wires, cables, circuit boards, cathode ray/mercury bulbs, etc.); c) food and other biodegradable wastes (food remains, sachet and bottle water, etc.).	• 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. • Designate a temporary site for collecting waste generated prior to sorting and management. • Ensure proper sorting, storage and final disposal by an accredited third-party waste disposal agency • Implement waste management plan (WMP) (See Annex 4).
• Accumulation of stockpiles of asbestos wastes e.g. asbestos ceilings and roofs.	• Implement Asbestos Waste Management Plan (AWMP) *(See Annex 10).*
• Workers may be predisposed to OHS risks during: a) electrical works (including injuries, explosions, electrical fires, falls, release of hazardous energy, accidents, etc.); b) mechanical works (exposure to welding fumes during welding of doors/windows, inhalation of asbestos dust and exposure to paints may result to asbestosis, eye irritations and respiratory issues, Musculoskeletal Disorders (MSDs), Noise); c) works at heights (falls, injuries, death); d) work at abandoned sites (risk of poisonous bites from snakes and scorpion stings).	• Conduct electrical safety trainings; Implement OHS Management Plan (OHSMP). *(See Annex 6)* • 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.

Identified Impacts	Mitigation Measures
• Extreme weather conditions may result in wear and tear of newly rehabilitated structures.	• Enforce the use of PPEs (nose masks, eye googles, etc.) when necessary during rehabilitation activities. • Install lightening conductors/rods on all newly rehabilitated structures to protect against lightening and windstorms.
Social Risks	
• Transporting materials to certain colleges (GTC Osusu and GTC Ohafia) could lead to temporary traffic congestion, potentially causing delays for commuters, depending on the duration.	• Schedule procurement and supply of construction equipment/materials for off peak periods (12:30 – 2:30pm or 6pm – 6am daily) or during weekends. • Implement Traffic Management Plan (TMP). *(See Annex 5)*
• Temporary electricity supply interruptions in workshops, classrooms, and offices during electrical repairs and fitting may briefly disrupt activities dependent on electricity (e.g., classroom lighting, ceiling fans, computer labs).	• 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.
• Risks of on-site and off-site social issues, including physical assaults (fights, harassment, vandalism), and substance abuse due to an increased labor force.	• Ensure workers understand and sign a CoC • Ensure fair wages is paid to Contractor workers. and ensure unskilled labour is sourced within the community. • Establish and maintain a Grievance Redress Mechanism within schools
• Potential for social conflicts between school staff and some construction workers due to non-compliance with school rules. • An influx of contractor workers and followers offering additional goods and services on school premises.	• Continuous trainings and sensitization of students, school staff and corps members. • Reduce labour influx by sourcing required unskilled labour locally.
• Heightened risk of theft of construction materials by local residents, delinquents, or hoodlums from the project communities.	• Employ trained security personnel to guard the construction site. • Establish designated entry and exit points that are monitored by security personnel. • Provide secure storage facilities within the construction site for tools, equipment, and valuable materials.
• The possibility of female teachers, corps members, and male/female students (within the school premises) being exposed to sexual exploitation, abuse, and harassment in interactions with construction workers and their followers.	• Ensure all workers sign the Code of Conduct (CoC). ***See Annex 7*** • 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.
• Potential injuries to students due to rough play around demolition waste and construction materials stockpiles.	• 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.
• Anticipated grievances from students and school staff who may need to temporarily vacate their classrooms, workshops, laboratories, etc., during rehabilitation work 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.

ES 8: 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 Table 31 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 three (3) technical colleges is estimated at **Fifty-Six Thousand, Four Hundred and Eighty-One US Dollars Only** (**$56,481).** This is equivalent to **Forty-Three million, Six Hundred Thirty-Three Thousand, Four Hundred Fifteen Naira Only (N43,633,415).** Specifically, the total estimated cost per technical college is estimated as follows:

- ***GTC Osusu Aba:*** Nineteen Thousand, Five Hundred and Fifty-Eight US Dollars Only ($**19,558**). This is equivalent to Fifteen Million, One hundred and Nine Thousand, Six Hundred Seventy-Nine Naira (**N15,109,679**).

- ***GTC Ohafia:*** Eighteen Thousand, Two Hundred and Eighty-Five US Dollars Only ($**18,285**). This is equivalent to Fourteen Million, One Hundred and Twenty-Five Thousand, Six Hundred and Eighteen Naira Only. (**N14,125,618**).

- ***GTC Afara Ukwu:*** Sixteen Thousand, Six Hundred and Ninety-Five US Dollars Only ($**16,695**). This is equivalent to Twelve Million, Eight Hundred and Ninety-Seven Thousand, Three Hundred and Ninety Naira Only (**N12,897,390**).

Table 1: Overall ESMP Cost Estimate for the Rehabilitations across the three (3) Technical Colleges.

Unit	Mitigation (A)	Monitoring (B)	Capacity Building (C)	Contingency 10% of (A+B+C)	GRM Implementation	Total
GTC Osusu Aba						
NGN	7,718,447	3,471,795	2,091,266	1,328,151	500,020	**15,109,679**
USD	9,991	4,494	2,707	1,719	647	**19,558**
GTC Ohafia						
NGN	7,263,421	3,032,220	2,091,266	1,238,691	500,020	**14,125,618**
USD	9,402	3,925	2,707	1,603	647	**18,285**
GTC Afara Ukwu						
NGN	6,671,580	2,507,490	2,091,266	1,127,034	500,020	**12,897,390**
USD	8,636	3,246	2,707	1,459	647	**16,695**
ESMP Disclosure						
NGN	**Lump Sum**					**1,500,729**
USD						**1,943**
Grand Total NGN						**43,633,415**
Grand Total USD						**56,481**

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

ES 9: 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–**Three (3) technical colleges (N150,000)**. 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**	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 according to the World Bank Disclosure Policy (OP 17.5).

ES 10: Stakeholder Engagement

The consultation process was conducted on the 23rd December 2022 and from 6th to 7th 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) Abia IDEAS SPIU ii) CIU Staff and School Management (Principal, Staff, Students and Youth Corp Members) iii) Abia State Environmental Protection Agency (ASEPA) iv) Federal Road Safety Corps 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 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/Corp Members/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-construction and construction 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 living with disabilities to their office blocks.
- **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.

A summary of the consultation at the technical colleges is presented below.

Date of Consultation	**23/12/2022**
Project Location	GTC Osusu Aba
Name of Stakeholder(s)	*IDEAS SPIU, CIU Team, Project Manager, ESMP Consultant, College Staff, NYSC Youth Corp Members*
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)
• Technical enquiries on the scope of the intervention works at the college and request for the engineering designs.	• The CIU furnished the Consultant with information on the priority works for GTC Osusu Aba. The project manager informed that some of the designs will be sent to the Consultant later in the day.
• Informed them of some perceived negative impacts of the rehabilitation and how best to go about their management. Enquired on traffic situation along the Faulks Road.	• The stakeholders informed the consultants' team that Faulks road is a major road linking several other areas in Aba town, hence rarely less busy. Nonetheless, if traffic were to be avoided Osusu Road, towards the left axis of the college can be used instead.
• On site visits to the ICT building prone to waterlogging during the rainy season. Enquiries on the drainage network and channelling.	• The Project Manager and ESSG Officer described the sand filling activity as well as the channelling route of the drainage. They informed that storm water normally settles at the ICT and hence the location gets flooded. Furthermore, the nature of the terrain within the college allows for runoff from Ferguson community at the rear of the college to flow into the college up to the ICT surrounding. Sand filling the area and installing drainage outlets to take the water out of the college will largely mitigate this issue, hence it was included in their CIP.
• The consultant inquired on the existence of an already established GRM within the colleges or any GRC constituted at the level of the SPIU. The existence of other bodies like a PTA and Guidance and counselling unit was also sought after. Following this the team stressed the need for the college IDEAS team to establish and sensitize relevant stakeholders on the GRC and necessary constituent members to ensure that project grievances are heard and adequately redressed in a timely manner.	• The college has commenced with constituting a GRC whose members will largely comprise selected members of the PTA, G&C, Disciplinary Committee and Staff of the college. The Vice principal will also be part of the committee. Considering that they are currently on Christmas break, students of the college will be sensitized on the project from the new year 2023.
• The consultant also inquired of the colleges if sensitization efforts towards the students on the IDEAS projects have begun.	• There have been no break-ins in the college recently. However, there use to be sporadic burglaries and theft of school facilities by the delinquents around Ferguson street behind the school.
• The consultant inquired about the availability and state of various basic amenities within the colleges such as water, electricity supply, clinic/sickbay etc.	• The college only experiences issues as regards access to water as there are no boreholes. This has been included under the "**General Works**" to be carried out in the college. • 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	**06/02/2023**
Project Location	GTC Ohafia
Name of Stakeholder(s)	*SPIU Staff, CIU, ESSG Officer, ESMP Consultant, NYSC Youth Corp Members*
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.* • *Assessment of significant adverse impacts of the proposed rehabilitations for the college, analysing alternatives to designs and proffering realistic mitigation measures.* • *Institutional Monitoring Roles and Responsibilities*

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.	• The CIU furnished the Consultant with information on the priority works for the college, according to the CIU team, there are 3 major focal areas or priorities for works in the school namely; Gas Conversion Section, Brick/Block Laying and Concreting,
• Management of construction wastes and scraps	• There is a designated storage point in the college where they store waste for uptake by ASEPA. As the quantity of waste increases, they may look out for another location. However, the CIU will liaise with ASEPA to ensure steady evacuation of construction wastes.
• Issue of encroachment into the college grounds.	• The college authority has amicably resolved the issue of encroachment into their land by the Nde Edu and Nde Otusi community, with both parties clear on the boundaries and delimitation of the college land.
• Traffic situation along the Ania-Arochukwu in relation to procurement and supply of construction materials to the college. Possible alternate routes.	• The stakeholders informed the team that Ania-Arochukwu road is only very busy during their major market day ***("Eke")***. There are other market days including "***Orie", "Afor", "Nkwor***". However, the main market is on "***Eke"*** and the road is usually very busy.
• The consultant emphasized the roles and responsibilities of the SPIU Safeguards Unit (ESO & SSO) as well as the ESSG Officer in monitoring ESMP implementation during the rehabilitation 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	**07/02/2023**
Project Location	GTC Afara Ukwu
Name of Stakeholder(s)	*SPIU Staff, CIU, ESSG Officer, 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.* • *Request for engineering designs for the rehabilitation.* • *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. • How does the college intend to manage asbestos wastes such as the obsolete asbestos ceilings to be removed from some of the buildings? • Enquiries on why and how the roof of some buildings were detached. • The team also enquired on past GBV incidences and if the college has established a GRM and constituted GRCs at the level of the school. • General questions on security situation, GBV incidences, GRM and GRC constitution.	• The Consultant was furnished with the CIP and the architectural drawings of some structures to be rehabilitated. They informed that the college has commenced with the installation of a borehole under the general works. This is because the college has no existing borehole and access to water has been a major challenge facing the college for a long time. • The SPIU has already informed them to designate a temporary location for the storage of the asbestos wastes prior to evacuation and safe disposal by ASEPA. The college has reserved the abandoned warehouse/old store for this purpose. • 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. • Afara community is safe and has not experienced any insecurity lately. The last time there was civil unrest in Afara was during the Python Dance operation by Nigerian Army in 2017. • There has been no past incidence of GBV in the college. The management enforces discipline through their disciplinary committee and the G&C that handles matters pertaining to GBV as well as other school related malpractices. • 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.