THE MINISTRY OF EDUCATION AND VOCATIONAL TRAINING (MOEVT)

THE SKILLS DEVELOPMENT AND YOUTH EMPLOYMENT IN THE BLUE ECONOMY PROJECT (SEBEP) IN ZANZIBAR

REVIEWED AND UPDATED ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

FOR

A SWIMMING POOL AND A MODERN BUILDING - ZANZIBAR TECHNOLOGY AND BUSINESS INCUBATION CENTRE

AT

THE STATE UNIVERSITY OF ZANZIBAR (SUZA), BEIT EL RAS CAMPUS

JANUARY, 2026

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1. Introduction and Background

The Revolutionary Government of Zanzibar (RGoZ), through the Ministry of Education and Vocational Training (MoEVT), is implementing the *Skills Development and Youth Employment in the Blue Economy Project (SEBEP)* in Zanzibar. The project is being implemented with financial support from the African Development Bank (AfDB) Group and aims to enhance skills development, promote innovation, and create employment opportunities for youth, particularly in sectors linked to the blue economy. As part of the SEBEP investment package, funding has been allocated for the construction of a **Swimming Pool and a Modern Building to host the Zanzibar Technology and Business Incubation Centre (ZT-BIC)** at the State University of Zanzibar (SUZA), Beit El Ras Campus. These facilities are intended to strengthen technical training, innovation, entrepreneurship, and research capacities, while also supporting student welfare and institutional development.

Given the nature, scale, and potential environmental and social impacts associated with the proposed construction and operation of the facilities, the project is required to comply with the **Zanzibar Environmental Management Act No. 3 of 2015**, as well as the **African Development Bank's Integrated Safeguards System (ISS)** and related environmental and social policies. In accordance with these regulatory and policy requirements, an **Environmental and Social Impact Assessment (ESIA)** was conducted for the project in 2022. The ESIA identified potential environmental and social risks and impacts that may arise during the construction and operational phases of the project and proposed appropriate mitigation and enhancement measures.

Based on the findings of the ESIA, this **Reviewed and Updated Environmental and Social Management Plan (ESMP)** has been prepared to provide a practical framework for managing identified impacts, ensuring regulatory compliance, and promoting environmentally sound, socially responsible, and sustainable project implementation. This ESMP outlines specific mitigation measures, institutional responsibilities, monitoring requirements, and reporting arrangements to be implemented throughout the project lifecycle, thereby ensuring that the construction and operation of the Swimming Pool and the Zanzibar Technology and Business Incubation Centre are carried out in a manner that safeguards the environment, protects community and worker health and safety, and enhances positive social outcomes.

2. Rationale for the Review of the Environmental and Social Management Plan

The Environmental and Social Management Plan (ESMP) was originally developed based on the project design, implementation arrangements, and baseline information available at the time of preparation of the Environmental and Social Impact Assessment (ESIA). Since the ESMP is derived from the ESIA, its effectiveness depends on the accuracy and completeness of the project information available during the assessment phase. As the project has progressed from the planning stage to the commencement of implementation, further details have emerged regarding construction methodologies, scheduling, site-specific conditions, contractor arrangements, and operational requirements. In addition, some aspects of the project design and implementation timeline have been refined or adjusted to reflect practical considerations on the ground. These

developments necessitate a review and update of the ESMP to ensure that it remains relevant, responsive, and effective in managing environmental and social risks and impacts.

The ESMP is therefore considered a **living document**, which must be reviewed and updated periodically to incorporate new information, address emerging risks, respond to changes in project scope or schedule, and align with applicable regulatory and lender requirements. Failure to update the ESMP could result in unaddressed environmental and social issues, reduced effectiveness of mitigation measures, and potential non-compliance with the Zanzibar Environmental Management Act No. 3 of 2015 and the African Development Bank's Integrated Safeguards System. The review of the ESMP was undertaken to:

i. Integrate updated project implementation plans, construction methods, and timelines;
ii. Address site-specific environmental and social conditions identified after project commencement;
iii. Incorporate lessons learned and observations from early-stage project activities;
iv. Strengthen mitigation, monitoring, and reporting measures where gaps were identified; and
v. Ensure continued compliance with national legislation, institutional requirements, and AfDB safeguard policies.

3. Objective of the Environmental and Social Management Plan (ESMP)

3.1 Main Objective

The main objective of this Environmental and Social Management Plan (ESMP) is to provide a comprehensive framework for the implementation of effective mitigation, monitoring, and management measures to be applied by the Contractor, the Project Management Team (PMT), and other implementing partners throughout the project lifecycle. These measures are intended to eliminate, or where elimination is not feasible, reduce potential environmental, social, occupational health and safety, and community health and safety impacts associated with the construction and operation of the project to acceptable levels.

The ESMP aims to ensure that all project activities are planned and implemented in a manner that avoids, minimises, and manages adverse impacts on the biophysical environment, social conditions, cultural heritage resources, and human health, while maximising positive environmental and social outcomes wherever feasible. Impact avoidance through sound project planning, good engineering design, and the preparation and implementation of detailed, site-specific Contractor Environmental and Social Management Plans (C-ESMPs) is considered fundamental to the successful implementation of this ESMP. Where impacts cannot be fully avoided, appropriate mitigation and control measures shall be applied in accordance with the established mitigation hierarchy.

3.2 Specific Objectives

The specific objectives of the ESMP are to:

i. Ensure full compliance of the project with applicable national environmental and social legislation and regulations of the Government of Zanzibar, including the Zanzibar Environmental Management Act No. 3 of 2015, as well as with the African Development Bank's environmental and social operational safeguard requirements;
ii. Identify, define, and operationalise appropriate mitigation, monitoring, consultation, and institutional measures required to prevent, minimise, mitigate, or compensate for potential adverse environmental, social, occupational health and safety, and cultural heritage impacts arising from project activities;
iii. Provide a clear and practical operational framework and management tool for effective environmental and social risk management during both the construction and operational phases of the project;
iv. Clearly define roles, responsibilities, and lines of accountability for ESMP implementation among the Contractor, Sub-contractors, the PMT, and other relevant stakeholders;
v. Promote effective environmental and social performance monitoring, reporting, and adaptive management to enable the timely identification, correction, and prevention of non-compliance and emerging environmental and social risks.

4. Institutional Capacity and Implementation Arrangements

The Project Management Team (PMT) has overall responsibility for the implementation of this Environmental and Social Management Plan (ESMP). The PMT, in collaboration with the Ministry of Education and Vocational Training (MoEVT), shall oversee, supervise, and monitor all project components implemented by the Contractor and facility operators to ensure full compliance with the ESMP requirements. The PMT shall provide the necessary technical and administrative oversight to ensure that all prescribed mitigation, monitoring, and reporting measures are effectively implemented throughout the construction and operational phases of the project. To ensure effective and coordinated ESMP implementation, clear roles, responsibilities, and lines of authority among the various institutions and stakeholders involved in the project have been identified and defined.

The following entities shall be involved in the implementation of this ESMP, with their respective roles and responsibilities described below:

a) Ministry of Education and Vocational Training (MoEVT)

The Ministry of Education and Vocational Training shall serve as the lead executing agency for the project and shall provide overall policy guidance and strategic oversight. MoEVT shall ensure that the project is implemented in accordance with national development objectives, applicable environmental and social legislation, and the commitments made under the African Development Bank financing arrangements. The Ministry shall also facilitate inter-agency coordination and ensure that adequate institutional support is provided for effective ESMP implementation.

b) State University of Zanzibar (SUZA) – Project Owner

The State University of Zanzibar (SUZA), as the project owner and host institution, is responsible for providing the project site and ensuring that the construction and operation of the Swimming

Pool and the Zanzibar Technology and Business Incubation Centre are aligned with the University's institutional policies, development plans, and operational needs. SUZA shall work closely with the Project Management Team (PMT), the Ministry of Education and Vocational Training (MoEVT), and other implementing partners to facilitate smooth project implementation, including coordinating site access, supporting supervision activities, and minimizing disruptions to academic programs and campus operations.

During the operational phase, SUZA shall be responsible for the sustainable operation and maintenance of the facilities in accordance with the environmental, social, health, and safety requirements outlined in the ESMP. This includes ensuring adequate staffing, resources, and procedures for environmental management, occupational and community health and safety, waste management, and efficient use of water and energy. SUZA shall also support ongoing environmental and social monitoring and reporting, address any non-compliance issues within its mandate, and ensure that staff, students, and facility users are adequately informed and trained on relevant safeguards and safety procedures.

c) Vocational Training Authority (VTA)

The Vocational Training Authority shall support the implementation of the ESMP within its institutional mandate, particularly in relation to vocational training facilities and operational aspects of the project. VTA shall collaborate with the PMT to ensure that environmental, social, and occupational health and safety measures are integrated into training programs, facility operations, and capacity-building initiatives associated with the project.

d) Supervision Consultants

The Supervision Consultants shall be responsible for day-to-day oversight of construction activities and for monitoring the Contractor's compliance with the ESMP and the site-specific Contractor Environmental and Social Management Plans (C-ESMPs). They shall conduct regular site inspections, verify implementation of mitigation measures, identify non-compliance issues, and recommend corrective actions. The Supervision Consultants shall also prepare periodic environmental and social monitoring reports for submission to the PMT.

e) Contractor and Sub-contractors

The Contractor shall bear primary responsibility for implementing all ESMP requirements during the construction phase of the project. This includes the preparation, approval, and implementation of site-specific C-ESMPs, the provision of adequate resources, and ensuring compliance by all subcontractors. Sub-contractors shall be contractually obligated to comply with the ESMP and shall be accountable to the main Contractor for environmental, social, and occupational health and safety performance within their respective scopes of work. Both the Contractor and Sub-contractors shall ensure that all project workers receive appropriate training and awareness on ESMP requirements, occupational health and safety procedures, and applicable environmental and social safeguards.

f) Zanzibar Environmental Management Authority (ZEMA)

The Zanzibar Environmental Management Authority (ZEMA) shall act as the regulatory authority responsible for environmental oversight and compliance monitoring in accordance with the Zanzibar Environmental Management Act No. 3 of 2015 and the Environmental Assessment Regulation, 2019. ZEMA shall review and approve environmental documentation, conduct compliance inspections, and enforce applicable environmental standards and conditions as necessary.

g) Funding Institution

The Funding Institution, namely the African Development Bank (AfDB), shall provide oversight to ensure that the project complies with its environmental and social safeguard policies and financing conditions. The AfDB shall review environmental and social performance reports, conduct supervision missions as required, and provide guidance to address any identified safeguard-related issues.

5. Capacity Building for the Implementation of the ESMP

Adequate institutional and human capacity is critical to the effective implementation of this Environmental and Social Management Plan (ESMP). Strengthening the capacity of the Project Management Team (PMT) and all implementing partners will ensure that environmental and social mitigation measures are properly understood, applied, monitored, and reported throughout the project lifecycle. Targeted capacity-building and training programs shall be provided to PMT members and relevant staff from implementing partner institutions, including sector specialists, environmental officers, and personnel from departments responsible for social planning and community development, economic planning, blue economy, land administration, and health. These training activities shall be designed to enhance technical knowledge, improve coordination among stakeholders, and promote consistent application of environmental and social safeguards.

The training program shall focus on, but not be limited to, the following key areas:

(a) Environmental monitoring procedures and compliance requirements;
(b) Selection and use of indicators for environmental and social performance monitoring;
(c) Occupational and community health and safety management;
(d) Effective implementation and supervision of ESMPs and Contractor ESMPs (C-ESMPs);
(e) Grievance redress and stakeholder complaint management mechanisms; and
(f) Environmental and social reporting, documentation, and communication requirements.

These capacity-building initiatives shall be implemented continuously, with refresher training provided as needed to address staff turnover, evolving project conditions, or emerging environmental and social risks.

6. ESMP Resources and Responsibilities

An essential component of the Environmental and Social Management Plan (ESMP) is the clear identification and allocation of the resources required for its effective and efficient

implementation. Adequate planning and allocation of these resources ensures that ESMP measures are implemented cost-effectively while achieving the intended environmental and social performance objectives. The Project Management Team (PMT) shall be responsible for identifying, mobilising, and overseeing all human, financial, and technical resources required for ESMP implementation. This includes ensuring that the necessary resources are clearly linked to specific environmental and social risks, mitigation measures, and monitoring activities identified for the project. Resource requirements, including their respective sources and deployment locations, shall be documented and integrated into overall project planning and budgeting processes.

Financial records related to ESMP implementation shall be properly maintained and regularly reviewed to promote transparency, accountability, and sound financial management. Maintaining such records will enable the project to demonstrate the value of effective environmental and social risk management by highlighting avoided costs, such as reductions in accidents, occupational illnesses, lost workdays, environmental damage, and associated healthcare and remediation expenses.

Human resources involved in risk-related and safeguard activities shall be clearly defined, documented, and assigned appropriate responsibilities. This documentation ensures that staff are adequately informed of relevant environmental and social policies, procedures, and risks, enabling them to perform their duties safely and effectively. It also supports internal and external audits, facilitates targeted capacity-building and training programs, and promotes greater accountability in environmental and social monitoring, reporting, and compliance across all levels of project implementation.

7. The Updated ESMP

The Table below presents the updated ESMP, which outlines revised and additional mitigation and management measures based on the findings of the ESIA and new information obtained during the initial stages of project implementation. The updated ESMP also identifies previously unaddressed or insufficiently addressed environmental and social issues and proposes appropriate corrective actions, institutional responsibilities, and monitoring mechanisms to support effective ESMP implementation throughout the remaining construction and operational phases of the project.

Table: Updated Environmental and Social Management Plan (ESMP)

Component I: Construction of a swimming pool at SUZA					
Pre-Construction (Planning/ Design) Phase					
Aspect	**Anticipated Environmental and Social Impacts**	**Proposed mitigation measures)**	**Monitoring Indicators**	***Responsible Institutions***	***Cost estimate (USD)***
Construction design-related impact					
Environmental Impact	• Poor facility designs that may drive demand for raw materials • Designs that may increase greenhouse emissions • Design that may impact its long-term energy and waste production during operation. • Design that focuses on underground water usage • Designs that are out of character with the culture and theme of the area • Designs that may cause air, water, and noise pollution (e.g., improper waste disposal methods and inefficient machinery). • Design that may increase does not control swimming pool water evaporation	• Project designs to take cognizance of environmental best practices like energy and water conservation. E.g., project designs should promote natural aeration and lighting, use alternative energy like solar, installation of fixtures that enhance water and energy efficiency, e.g., rainwater harvesting • Design with Nature and culture in mind. E.g., consider implementing rainwater harvesting systems to collect water for initial filling and top-ups, • Promote quieter processes, proper waste disposal	• Presence of design with Energy efficiency swimming pool facility • Building materials promoted • Environmentally sensitive designs, e.g. promoting use of Environmentally friendly construction materials • Presence of a design with Water water-efficient swimming pool facility • Design that reduced water evaporation	MoEVT Architects and contractors	8,000

		methods, and efficient machinery. • The design should incorporate swimming **pool covers** (especially thermal or solar ones) to reduce evaporation by up to 90% and retain heat.			
Permits and Legal Compliance	• Unauthorized tree cutting • Non-compliance with environmental and forestry regulations • Risk of project delays or penalties	• Obtain all required permits for tree cutting and demolition before commencement • Ensure approvals from the Department of Forestry and the West B Municipal Council. • Maintain copies of permits on-site	• Availability of valid permits • Compliance audit reports	Constructor and Consultant	2,000
Vegetation Clearance and Tree Cutting	• Loss of trees and vegetation • Habitat destruction and biodiversity loss • Reduced carbon sequestration • Landscape degradation	• Limit tree cutting to the approved construction footprint only. • Conduct tree inventory before clearance. • Protect retained trees with physical barriers. • Implement compensatory tree planting using native species	• Number of trees removed vs. approved plan. • Evidence of replanting. • Survival rate of planted trees	Constructor and Consultant	6,000

Demolition of Existing Buildings	• Generation of large volumes of demolition waste. • Pollution risks from improper disposal.	• Conduct pre-demolition audit. • Segregate demolition waste at source. • Reuse and recycle materials where possible. • Dispose of residual waste at licensed sites.	• Waste management plan in place. • Waste disposal records	Constructor and Consultant	7,000
Hazardous Materials Management (e.g., Asbestos)	• Health risks from asbestos or other hazardous materials. • Environmental contamination.	• Conduct a hazardous materials survey before demolition. • Engage licensed professionals for asbestos removal. • Dispose of hazardous waste at approved facilities	• Hazardous waste handling records. • Disposal certificates	Constructor and Consultant	5,000
Air Quality (Dust and Emissions)	• Dust emissions affecting nearby communities. • Temporary air quality deterioration	• Apply water spraying during demolition and clearance. • Cover trucks transporting debris. • Limit vehicle idling.	• Dust suppression measures in place. • Community complaints.	Constructor and Consultant	4,000
Noise and Vibration	• Noise nuisance to surrounding communities, • Health and safety concerns.	• Restrict demolition to approved working hours; • Use equipment fitted with a silencer. • Provide PPE to workers.	• Compliance with working hours. • Noise level observations.	Constructor and Consultant	3,000
Protection of Utilities and Services	• Damage to water, electricity, or telecom lines. • Disruption of essential services.	• Identify and map existing utilities before demolition. • Coordinate with utility service providers. • Clearly mark utility lines on-site.	• Utility mapping records. • Incidents of service disruption.	Constructor and Consultant	2,000

Social Impacts	• Unmanaged community expectations that may lead to conflicts • Project activities that may not align with social, cultural, and religious norms	• Public participation/sensitisation on the project • Stakeholder view on project components and execution • Consult the local community, local engineers, and user departments during the design phase of the building • Incorporate stakeholders' comments and or views on the design	No of stakeholder sensitisation sessions General awareness level of the project Percentage of stakeholders' comments or views incorporated into the design	MoEVT to take the lead through PMU	5000
Protection of Utilities and Services	• Damage to water, electricity, or telecom lines. • Disruption of essential services.	• Identify and map existing utilities before demolition. • Coordinate with utility service providers. • Clearly mark utility lines on-site.	• Utility mapping records. Incidents of service disruption	Constructor and Consultant	2,000
Community Health and Safety	• Risk of injury from falling debris. • Public safety hazards. • Increased truck movement.	• Fence off demolition areas. • Install safety signage and barriers. • Restrict unauthorized access. • Sensitize workers on safety procedures.	• Presence of fencing and signage. Accident/incidence reports	Constructor and Consultant	5,000
Worker Conduct and Community Relations	• Community conflicts. • GBV/SEA/SH risks. • Social tensions.	• • Enforce a Worker Code of Conduct before mobilization. • Conduct induction training on acceptable behavior. • Implement grievance redress mechanism.	• Signed Codes of Conduct. Grievance records.	Constructor and Consultant	3,000

SUBTOTAL					**52,000**
Construction Phase					
Aspect	**Anticipated Environmental and Social Impacts**	**Proposed mitigation measures)**	**Monitoring Indicators**	***Responsible Institutions***	***Cost estimate (USD)***
Land degradation	• Extraction of raw materials (sand, ballast, rocks, timber, and poles) may lead to Loss, degradation, or fragmentation of ecologically sensitive areas • Earthworks and clearance may lead to loss of plant species and habitats • Potential for adverse effects from alteration of soil structure and increased runoff from paved surfaces, leading to changes in water flow and drainage as well as soil erosion,	• Raw materials like sand, ballast, and stones sourced from licensed quarries. • Rehabilitation of cleared areas with native species	• Proper sourcing of raw materials • Compliance with transportation rules • Land restoration and revegetation after construction and or rehabilitation works	***PMU& Contractor***	5,500
Air Pollution	• Dust and Fugitive gases from transportation tracks • Emissions by machinery (NOx, Sox, and fugitive dust from disturbed soil surfaces • Dust from construction work	• Loose materials to be covered during transportation to reduce fugitive gas • Transportation trucks to observe speed limits. Where possible, implement measures for traffic calming, such as bumps near settlements and around corners.	• Ambient air quality	***PMU& Contractor***	6,500

		• Reducing machinery idling times to cut emissions • Cover the area with a dust cover • Provide workers with proper PPE, e.g., a mask.			
Accident Risks during Transport	• Accident risks by vehicles to and from the site	• Erect adequate signages waring of different hazards: e.g., heavy trucks turning, observe speed limits, among others • Transportation trucks to observe speed limits. Where possible, put measures for traffic calming like bumps near settlements, around corners, etc • Sensitize the machine operators on the need for safe practices • Machinery to be operated only by qualified personnel	• Observe speed limits • Traffic calming like erection of bumps in blind spots • Proper signage	***PMU& Contractor***	5,000
Waste Management	• Pollution risks to soils and water due to poor disposal of construction waste • Generation of wastes (liquid and solid waste	• Waste must be disposed of in licensed sites only and in compliance with local laws and bylaws • Contractor to prepare a detailed waste management plan • Provision of adequate facilities for solid and liquid waste	• Solid waste separation and recycling/disposal measures adopted in camp settlements • Proper waste management practices related to construction works,	***PMU& Contractor***	8,000

		management at the sites. Sensitize workers on proper waste management, including the 3Rs • Facilitate programs/measures to ensure appropriate sanitary and medical facilities are available	• Solid and liquid waste management practices and status.		
Hazardous waste management	• Asbestos from the demolished houses at the site	• Waste must be disposed of in licensed sites only and in compliance with local laws and bylaws • Contractor to prepare a detailed waste management plan	• Special sites and methods of managing asbestos	***PMU Contractor ZEMA***	5,000
Occupational Health and Safety Risks	• Poor construction management practices may lead to adverse effects on safety, human health, and well-being. • Storage of materials, circulation of construction machinery leading to accidents, pollution risk, etc.;	• Fencing of construction areas to reduce unauthorised access • Proper signage warning of different hazards • Provide PPEs to all workers and visitors in the construction areas • Sensitize workers on health and safety • Make available First Aid Kits with necessary medicine at the construction site for emergency treatment for injured workers	• Accident/incidence reports • Provision and use of PPEs • Presence of adequate signage • Availability of First Aid Kits with medicine	***PMU& Contractor***	8,000

Noise and Vibration	• Noise and Vibration • Health and safety concerns	• Strict adherence to regulations on noise and vibration, including of silencers and mufflers for loud equipment • Work to be carried out within stipulated hours to reduce nuisance • Proper PPE provision and use	• Compliance with laws and regulations on noise and vibration • Hours of operation by contractor, • Compliance with the Environmental Guidelines • Environmental audits	Contractor PMU	8,000
Chemicals Management	• Risk of oil spills, fires, etc., from servicing of equipment • Fire risks	• Proper housekeeping within workshops for equipment to reduce fire and pollution risks • Prepare an emergency management plan	• Compliance with the Environmental Guidelines • Environmental audits	Contractor PMU	6,000
Conflicts and Grievances	• Labour-related disputes • Differences (Perceived or real) in working conditions between workers may lead to resentment, • Risk of gender related violence and crimes	• Development of transparent and culturally appropriate communication with communities, an Employment Plan, with clear employment requirements, and procedures for the construction and operational /maintenance workforce, • Fair and transparent hiring and staff management procedures, • Staff training and awareness raising in communities, • Implementation of a Grievance Procedure, • Ensure the participation and benefit of marginalized and	• Employment records • Grievance redress records • Level of awareness on gender issues, HIV.	Contractor PMU Local administration Shehas	1,000

		vulnerable parts of the communities (poor, landless, minority groups, women, old and youth, people with disabilities) throughout and after the project.			
Community and Worker health and safety	• Risk of exposure to COVID 19 • Risk of Occurrence of communicable diseases, including HIV/AIDS, COVID-19, and sexually transmitted diseases (STDs). • Social differences may lead to discrimination and harassment, • Real or perceived disruption to normal community life, through the physical presence of a workforce; in particular, potential for conflicts to occur over resources,	• Development of COVID-19 protocols, including the provision of adequate hand-washing facilities • Training and awareness raising and Implementation of a health management for the workforce and their dependents on HIV/AIDS and other STDs, and communicable diseases; health awareness raising campaigns for communities on similar topics, • Community grievance redress mechanism • Offer employment priority to local people to minimize the number of newcomers, hence minimizing the likelihood of new HIV/STD transmission.	• Observance of COVID-19 protocols • Provision of materials for sexual health awareness • Grievance redress records • Level of awareness on gender issues, HIV,	Contractor PMU Local administration Shehas	10,000

Labour Influx	• Risk of increased occurrence of communicable diseases, including HIV/AIDS, COVID-19 and sexually transmitted diseases (STDs). • Risk of increased GBV/SEA/HS at the construction site	• Give employment priority to locals to avoid newcomers from outside the area • Train workers and local community on GBV/SEA/HS prevention measures	•		
SUBTOTAL					**63,000**
Operation Phase					
Aspect	**Anticipated Environmental and Social Impacts**	**Proposed mitigation measures)**	**Monitoring Indicators**	***Responsible Institutions***	***Cost estimate (USD)***
Waste Management	• Generation of wastes (Liquid and solid) by the student and staff population • Pollution risks from the generated waste • Waste waters from the swimming pool • Management of hazardous chemicals for use in the swimming pool	• Each institution to have infrastructure for solid and liquid waste management based on Best Available Technologies • Programs for promoting best environmental practices include the adoption of the 3Rs in waste management • Chlorination of swimming pool waters • Pool water recirculation system: • discharged into the municipal sewer	• Status of waste management • Quality of the general environment	Institution administration MoEVT	5,000

		• substitute the hazardous chemicals with less hazardous ones			
Pressure on Resources	• Increased pressure on resources (water, energy) • Influx of population to capitalize on demand for swimming pools, as well as good services to support the student population • Increased use of water for the swimming pool	• Sensitize students on resource efficiency measures like keeping taps closed, switching off lights • Use of resource-efficient fixtures like energy-efficient lighting and electronic appliances, water-efficient fixtures, among others • Programs for self-sustained within the TVETs, including agriculture • Using an automatic pumping • Use of a pool cover to reduce evaporation. • Promote use of rainwater harvesting systems to collect water for initial filling and top-ups	• Presence of local development plans • Adoption of resource efficiency measures	Institution administration MoEVT	10,000
Social Conflicts	• Potential for adverse effects if expectations are not met and community relations are not well managed,	• Sensitize communities to utilize the facilities to enhance their access to education	• Level of TVET enrolment by	Institution administration MoEVT	10,000

		• Sensitize communities on opportunities from the facility • Favor local suppliers in procurement for goods and services • Develop a grievance management system	local communities • Local content in procurement processes • No of grievances reported and resolved		
SUBTOTAL					**25,000**
Decommissioning Phase					
Aspect	**Anticipated Environmental and Social Impacts**	**Proposed mitigation measures)**	**Monitoring Indicators**	***Responsible Institutions***	***Cost estimate (USD)***
Waste Management	• Construction waste containing ballast, rocks, timber, poles, and roofing materials that need disposal • Generation of wastes (liquid and solid waste	• Usable materials like construction blocks, roofing, steel, etc., to be sold off to recyclers for recycling and re-use. • Remaining materials to be used for burrowing or disposed of in designated sites. Can also be used for backfilling access roads	• Safe disposal of construction waste • Solid waste separation and recycling/disposal measures adopted in camp settlements •	MoEVT to take the lead through PMU	6,000

Air Pollution	• Dust and Fugitive gases from transportation tracks	• Loose materials to be covered during transportation of demolition waste to reduce fugitive gas • Transportation trucks to observe speed limits. • Reduce truck idling time • Limit the number of trucks that will transport demolished construction waste to avoid increased air pollution	• Air quality during demolition •	PMU Contractor	6,000
Accident Risks	• Traffic-related accidents • Machinery-related accidents	• Transportation trucks to observe speed limits. Where possible, implement measures for traffic calming, such as bumps near settlements and around corners. • Only Qualified personnel to operate machinery • Provide PPEs to all workers engaged in decommissioning activities in the construction areas	• Accident/incidence reports	PMU Contractor	8,000

		• Sensitize workers on health and safety, including the use of PPEs • Make available a First Aid Kit to provide emergency treatment to an injured person • Proper signage warning of different hazards			
Land degradation and maintenance	• Pollution risks to soils and water due to the inappropriate disposal of construction waste • Earthworks and clearance may lead to loss of plant species and habitats • Potential for adverse effects from alteration of soil structure and increased runoff from paved surfaces, leading to changes in water flow and drainage, as well as soil erosion • Risk of leaving the site with potholes and degraded land	• Waste must be disposed of in licensed sites only and in compliance with local laws and bylaws • Contractor should follow the prepared waste management plan • Rehabilitation of cleared areas with native species • Fill potholes and level the degraded landscape with suitable soils and plant vegetation to avoid erosion	• Compliance with laws and regulations, • Proper waste management practices related to construction works, • Land restoration and revegetation after construction and or rehabilitation works, • Compliance with the Environmental Guidelines	Contractor MoEVT	9,000
Noise & Vibration	• Noise and Vibration • Risk of oil spills, fires, etc., from servicing of equipment • Storage of materials, circulation of construction machinery leading to accidents, pollution risk, etc.	• Strict adherence to regulations on noise and vibration, including the use of silencers and mufflers for loud equipment	• Noise levels at site • Hours of Operation • Ambient air quality around site	Contractor MoEVT	5,000

	• Health and safety concerns.	• Work to be carried out within stipulated hours to reduce nuisance • Proper housekeeping within workshops for equipment to reduce fire and pollution risks • Proper PPE provision • Limit the number of trucks that will be used in the transportation of demolished materials			
General health and safety Risks	• Poor construction management practices may lead to adverse effects on safety, human health, and well-being. • Demolition of camp facilities, fence, and other used construction materials may bring about the risk of accidents to workers (e.g., injuries) • Give instructions to workers on handling heavy machinery and tools to avoid unnecessary accidents and injuries • Provide PPE to employed workers while engaged in demobilization works	• Reducing machinery idling times to cut emissions • Sensitize the machine operators on the need for safe practices • Erect adequate signages waring of different hazards: e.g., heavy trucks turning, observe speed limits, among others • Transportation trucks to observe speed limits. Where possible, implement measures for traffic calming, such as bumps near settlements and around corners.	• Proper use of PPES among workers • Accident/Incidence records	Contractor MoEVT	6,000

		• Provide PPEs to all workers engaged in the decommissioning exercise • Sensitize workers on health and safety by providing instruction during the demolition of temporary structures • Restrict access to community members and unauthorised people in the construction site during decommission • Make available the First Aid Kit at the site to provide emergency treatment of any injured workers			
Social Impacts	• Loss of income from temporary job opportunities by local people due to the retrenchment of construction workers after project completion • Occurrence of communicable diseases, including HIV/AIDS, COVID-19, and sexually transmitted diseases (STDs). • Social differences may lead to discrimination and harassment.	• Community grievance redress mechanism • Giving employment priority to local people, because after project closure, they will easily resume their normal economic activities.	• No. of Trainings • Grievance reports		2,000

SUBTOTAL					**42,000**
COMPONENT 1 SUBTOTAL					**182,000**
Component II: Construction of a Technology and Business Incubation Centre					
Pre-Construction (Planning/ Design) Phase					
Aspect	**Anticipated Environmental and Social Impacts**	**Proposed mitigation measures)**	**Monitoring Indicators**	***Responsible Institutions***	***Cost estimate (USD)***
Land Use Conflicts	• Improper site selection for the incubation centre may lead to conflicts with other stakeholders • Unmanaged community expectations that may lead to conflicts, e.g., during relocation to pave the way for a modern incubation centre	• Participatory site selection and site planning by all stakeholders • Good construction site "housekeeping" and management procedures (including site access),	• Stakeholders' engagement	MoEVT and Vocational Training Authority; The Zanzibar Environmental Management Authority (ZEMA) AfDB and PMT	1,000
Design related	• Poor facility designs that may drive demand for raw materials • Designs that may increase greenhouse emissions • Designs that are out of character with the culture and theme of the area • Design that may increase pressure in the use of water resources	• Project designs to take cognizance of environmental best practices like energy and water conservation. E.g., project designs to promote natural aeration and lighting, use alternative energy like solar, and propose	• Energy efficiency of buildings • Building materials promoted • Environmentally sensitive designs	MoEVT Architects and contractors	10,000

		fixtures that enhance water and energy efficiency • Design with Nature and culture in mind • Design the promotion of quieter processes, proper waste disposal methods, and efficient machinery. • Design that promotes the use of rainwater harvesting			
Increased Pressure on resources	• Poor facility designs that may drive demand for raw materials and increase greenhouse emissions	• Approval of designs and plans by relevant authorities at all locations, • project designs to take cognizance of environmental best practices	• Approval of all development works • Level of Compliance with laws and regulations, Environmentally sensitive designs	PMT	10,000
SUBTOTAL					**21,000**
Construction Phase					
Aspect	**Anticipated Environmental and Social Impacts**	**Proposed mitigation measures)**	**Monitoring Indicators**	***Responsible Institutions***	***Cost estimate (USD)***
Land degradation	• Extraction of raw materials (sand, ballast, rocks, timber, and poles) may lead to Loss, degradation, or	• Raw materials like sand, ballast, and	• Proper sourcing of raw materials	***PMU& Contractor***	7,000

	fragmentation of ecologically sensitive areas • Earthworks and clearance may lead to loss of plant species and habitats • Potential for adverse effects from alteration of soil structure and increased runoff from paved surfaces, leading to changes in water flow and drainage, as well as soil erosion,	stones sourced from licensed quarries. • Rehabilitation of cleared areas with native species.	• Compliance with transportation rules • Land restoration and revegetation after construction and or rehabilitation works		
Air Pollution	• Dust and Fugitive gases from transportation tracks • Emissions by machinery (NOx and Sox) and fugitive dust from disturbed soil surfaces • Dust emission from construction work	• Loose materials to be covered during transportation to reduce fugitive gas • Transportation trucks to observe speed limits. Where possible, put measures for traffic calming like bumps near settlements, around corners, etc • Reducing machinery idling times to cut emissions • Cover building with debris netting to protect passers-by from falling debris and construction dust.	• Ambient air quality	***PMU& Contractor***	8,000

		• Provide workers with proper PPE, e.g., a mask.			
Accident Risks during Transport	• Accident risks by vehicles to and from the site	• Erect adequate signage warning of different hazards: e.g., heavy trucks turning, observe speed limits, among others • Transportation trucks to observe speed limits. Where possible, put measures for traffic calming like bumps, near settlements, around corners, etc • Sensitize the machine operators on the need for safe practices • Machinery to be operated only by qualified personnel	• Observe speed limits • Traffic calming like erection of bumps in blind spots • Proper signage	***PMU& Contractor***	9,000
Waste Management	• Pollution risks to soils and water due to poor disposal of construction waste • Generation of wastes (liquid and solid waste.	• Waste must be disposed of in licensed sites only and in compliance with local laws and bylaws • Contractor to prepare a detailed waste management plan • Provision of adequate facilities for solid and	• Solid waste separation and recycling/disposal measures adopted in camp settlements • Proper waste management practices related	***PMU& Contractor***	7,000

		liquid waste management at the sites. Sensitize workers on proper waste management, including the 3Rs. • Facilitate programs/measures to ensure appropriate sanitary and medical facilities are available	to construction works, • Solid and liquid waste management practices and status.		
Occupational Health and Safety Risks	• Poor construction management practices may lead to adverse effects on safety, human health, and well-being. • Storage of materials, circulation of construction machinery leading to accidents, pollution risk, etc.; •	• Fencing of construction areas to reduce unauthorised access • Proper signage warning of different hazards • Provide PPEs to all workers and visitors in the construction areas • Sensitize workers on health and safety • Make available First Aid Kits with necessary medicine at the construction site for emergency treatment for injured workers	• Accident/incidence reports • Provision and use of PPEs • Presence of adequate signage	***PMU& Contractor***	10,000

Noise and Vibration	• Noise and Vibration • Health and safety concerns	• Strict adherence to regulations on noise and vibration, including se of silencers and mufflers for loud equipment • Work to be carried out within stipulated hours to reduce nuisance • Proper PPE provision and use	• Compliance with laws and regulations on noise and vibration • Hours of operation by contractor, • Compliance with the Environmental Guidelines • Environmental audits	Contractor PMU	9,000
Chemicals Management	• Risk of oil spills, fires, etc., from servicing of equipment • Fire risks	• Proper housekeeping within workshops for equipment to reduce fire and pollution risks • Prepare an emergency management plan	• Compliance with the Environmental Guidelines • Environmental audits	Contractor PMU	5,000
Conflicts and Grievances	• Labour-related disputes • Differences (Perceived or real) in working conditions between workers may lead to resentment, • Risk of gender related violence and crimes	• Development of transparent and culturally appropriate communication with communities, an Employment Plan, with clear employment requirements, and procedures for the construction and operational	• Employment records • Grievance redress records • Level of awareness on gender issues, HIV.	Contractor PMU Local administration Shehas	5,000

		/maintenance workforce, • Fair and transparent hiring and staff management procedures, • Staff training and awareness raising in communities, • Implementation of a Grievance Procedure, • Ensure the participation and benefit of marginalized and vulnerable parts of the communities (poor, landless, minority groups, women, old and youth, people with disabilities) throughout and after the project.			
Community and Worker health and safety	• Risk of exposure to COVID 19 • Risk of Occurrence of communicable diseases, including HIV/AIDS, COVID-19, and sexually transmitted diseases (STDs). • Social differences may lead to discrimination and harassment,	• Development of COVID-19 protocols, including the provision of adequate hand-washing facilities • Training and awareness raising and Implementation of a health management for	• Observance of COVID-19 protocols • Provision of materials for sexual health awareness • Grievance redress records	Contractor PMU Local administration Shehas	5,000

	• Real or perceived disruption to normal community life, through the physical presence of a workforce; in particular, potential for conflicts to occur over resources,	the workforce and their dependents on HIV/AIDS and other STDs, and communicable diseases; health awareness raising campaigns for communities on similar topics. • Community grievance redress mechanism	• Level of awareness on gender issues, HIV.		
Labour Influx	• Risk of increased occurrence of communicable diseases, including HIV/AIDS, COVID-19, and sexually transmitted diseases (STDs). • Risk of increased GBV/SEA/HS at the construction site	• Give employment priority to locals to avoid newcomers from outside the area • Train workers and the local community on GBV/SEA/HS prevention measures	• Percentage of workforce recruited from the local community (disaggregated by gender) • Number of non-local workers employed • Availability of local employment and recruitment records at the project site • Number of HIV/AIDS, COVID-19, and		3,000

			STD awareness and prevention training sessions conducted • Number of workers trained on communicable disease prevention • Availability of hand-washing facilities, and information/education materials at the site • Number of GBV/SEA/HS awareness and prevention training sessions conducted • Number of GBV/SEA/HS cases reported and addressed through the grievance mechanism (confidentially)		

			• Number of grievances related to labour influx received and resolved.		
SUBTOTAL					**68,000**
Operation Phase					
Aspect	**Anticipated Environmental and Social Impacts**	**Proposed mitigation measures)**	**Monitoring Indicators**	***Responsible Institutions***	***Cost estimate (USD)***
Waste Generation	• Generation of wastes (Liquid and solid) from the market facilities Pollution and nuisance risks from the generated waste.	• Each market facility to have the requisite infrastructure for the management of solid and liquid wastes • Programs for promoting best environmental practices include the adoption of the 3Rs • Make access to waste collection containers at strategic places	• Status of waste management Quality of the general environment	Market Management committees	10,000

Traffic generation	• Increased traffic to the markets may lead to traffic congestion • Accident risks around the market	• Traffic Management plans for areas around market facilities • Encourage Non-Motorized Transport for market access • Redesign access points to and from markets	• Traffic management measures in place	Local Authorities	5,000
Space Contestation	• Proliferation of hawkers in the area may lead to insecurity and challenges in access • Mushrooming of other support facilities like restaurants,	• Preparation of local development plans to take care of anticipated developments. The plans include proposals for enhancing infrastructure services to cater for extra population • Market design to provide for mixed use • Where possible, have themed market days	• Presence of local development plans • Level of order within markets	Local Authorities	4,000
Social Conflicts	• Conflicts related to access and use of market space • Conflicts related to market management • Exclusion in access to markets	• Provide space to all qualified personnel based on agreed criteria during design • Establish market management committees • Ensure inclusivity in space allocation	• Market management committees • Grievances records	Market management	5,000

		• Establish and implement a grievance redress mechanism			
Pressure on Resource Use	• Increased pressure on resource use, especially water for market surface cleaning and sanitation	• Promote rainwater harvesting to minimize the use of underground water pumping for market use	• Availability of rainwater harvesting facilities	Contractor and Consultant	2,000
SUBTOTAL					**26,000**
Decommissioning Phase					
Aspect	**Anticipated Environmental and Social Impacts**	**Proposed mitigation measures)**	**Monitoring Indicators**	***Responsible Institutions***	***Cost estimate (USD)***
Air Pollution	• Dust and Fugitive gases from transportation tracks.	• Loose materials to be covered during transportation of demolition waste to reduce fugitive gas • Transportation trucks to observe speed limits. Where possible, put measures for traffic calming like bumps near settlements, around corners, etc • Reducing trucks' idling times to cut emissions • Limit the number of trucks that will transport demolished	• Ambient air quality	PMU& Contractor	5,000

		construction waste to avoid increased air pollution			
Accident Risks during Transport	• Accident risks by vehicles to and from the site.	• Erect adequate warning signs of different hazards: e.g., heavy trucks turning, observe speed limits, among others • Transportation trucks to observe speed limits. Where possible, put measures for traffic calming like bumps near settlements, around corners, etc • Limit the number of trucks that will transport demolished construction waste	• Observe speed limits • Traffic calming like erection of bumps in blind spots • Proper signage	PMU& Contractor	6,000
Waste Management	• Pollution risks to soils and water due to the inappropriate disposal of demolished construction waste • Generation of wastes (liquid and solid waste	• Waste must be disposed of in licensed sites only and in compliance with local laws and bylaws • Contractor should comply with or follow the prepared waste management plan • Ensure the construction site is free from any hazardous materials	• Solid waste separation and recycling/disposal measures adopted in camp settlements • Proper waste management practices related to construction works,	PMU& Contractor	5,000

		like nails, pieces of iron sheets, iron bars, and other metals	• Solid and liquid waste management practices and status.		
Occupational Health and Safety Risks	• Demolition of camp facilities, fence, and other used construction materials may bring about the risk of accidents to workers (e.g., injuries)	• Provide PPEs to all workers engaged in the decommissioning exercise. • Sensitize workers on health and safety by providing instruction during the demolition of temporary structures • Restrict access to community members and unauthorised people in the construction site during decommission	• Accident/incidence reports • Provision and use of PPEs • Presence of adequate signage	PMU& Contractor	6,000
Noise and Vibration	• Noise and Vibration • Health and safety concerns	• Strict adherence to regulations on noise and vibration, including the silencers and mufflers for loud equipment • Work to be carried out within stipulated hours to reduce nuisance	• Compliance with laws and regulations on noise and vibration • Hours of operation by contractor,	Contractor PMU	4,000

		• Proper PPE provision • Limit the number of trucks that will transport demolished construction waste	• Compliance with the Environmental Guidelines • Environmental audits		
Landscape maintenance	• Degraded landscape, erosion, poor aesthetics	• Fill potholes and level degraded areas. • Use suitable soils and proper compaction. • Re-vegetate disturbed areas. • Implement erosion control measures.	• Area rehabilitated. • Vegetation survival rate. • Evidence of erosion. • Site inspection reports.	Contractor PMU	2,000
SUBTOTAL					**28,000**
COMPONENT II SUBTOTAL					**143,000**
General and Cross-Cutting Impacts (Social Impacts Management)					
Aspect	**Anticipated Environmental and Social Impacts**	**Proposed mitigation measures)**	**Monitoring Indicators**	***Responsible Institutions***	***Cost estimate (USD)***
Construction work force leading to increased risk of communicable diseases (HIV/AIDS, STDs) among workers and local	• Higher prevalence of HIV/AIDS and STDs among workers. • Transmission of infections to local communities. • Reduced workforce productivity due to illness.	• Conduct regular campaigns on HIV/AIDS and STD prevention for workers and local communities. • Provide access to sexual and reproductive	• No of awareness campaigns conducted. • No of workers and community members reached.	Project Management Unit Contractor AfDB	6,000

communities near construction sites.	• Social and public health challenges in the surrounding areas.	health services (e.g., testing, counseling, treatment referrals). • Implement workplace HIV/AIDS awareness and prevention program including posters, brochures, and access to information. • Encourage safe sex practices and distribute condoms at camp sites. • Include local communities in awareness campaigns and health interventions. • Establish mechanisms for employees to seek information and assistance confidentially.	• Availability of educational materials at sites. • Participation in HIV/AIDS programs. • No of workers accessing testing or counselling. • Reports of HIV/STD cases among workers and trends over time.		
Risk of Gender-Based Violence (GBV) due to the construction workforce and interactions with local communities	• Physical, psychological, and sexual harm to women and vulnerable groups. • Trauma and long-term mental health issues. • Legal and reputational risks for the project. • Disruption of community relations.	• Develop and Implement a GBV Policy: Clear policy prohibiting harassment, assault, and exploitation. • Conduct GBV awareness and prevention training for	• Number of GBV awareness sessions conducted. • Number of workers and community members trained.	Contractor and Consultant.	5,000

	• Reduced productivity and worker morale.	all workers and contractors. • Establish confidential, accessible reporting channels (hotline, grievance mechanism, suggestion boxes). • Ensure secure and gender-sensitive living and transportation arrangements. • Work with local leaders and organizations to raise awareness and support victims. • Appoint GBV focal points to respond to incidents quickly and sensitively. • Clearly communicate consequences for perpetrators, including disciplinary actions and legal referral.	• Number of reported GBV incidents and response time. • Number of grievance mechanisms accessed. • Regular audits of accommodation, transport, and workplace safety. • Feedback from workers and communities on perception of safety. • Documentation of enforcement actions taken in GBV cases		
Potential Changes to the Social Fabric	• Disruption of traditional social structures and family dynamics, • Increased social tensions or conflicts between workers and residents. • Cultural dilution or erosion of local customs.	• Community Engagement: Conduct regular consultations with local communities to understand concerns and integrate their input into project planning.	• Number of community consultations held and issues raised.	Contractor and Consultant.	1,000

	• Increased crime, substance abuse, or other social vices. • Inequitable access to resources (water, land, services). • Strain on local infrastructure and public services.	• Worker Conduct Policies: Enforce codes of conduct for workers that respect local norms and culture. • Cultural Awareness Programs: Sensitize workers to local traditions, norms, and acceptable behaviors. • Support Local Economy: Hire local labor where possible and support local businesses to promote economic inclusion. • Social Infrastructure Investment: Improve local services (health, education, sanitation) to mitigate pressure from population influx. • Conflict Resolution Mechanisms: Establish community grievance mechanisms to resolve disputes quickly and fairly. • Monitoring Social Changes: Periodic social impact	• Compliance with worker codes of conduct. • Worker participation in cultural awareness programs. • Local hiring percentages and support to local businesses. • Community satisfaction surveys regarding project impact. • Number and resolution of grievances reported. • Observed changes in social cohesion, crime rates, and local infrastructure use		

		assessments to track changes in social cohesion, crime rates, and community well-being			
Vulnerable Members of the Community	• Exclusion from economic opportunities or social benefits, • Increased exposure to health risks (e.g., communicable diseases, accidents). • Displacement or disruption of livelihoods, • Exposure to social risks such as harassment, exploitation, or GBV. • Reduced access to essential services (healthcare, water, education).	• Conduct targeted consultations with vulnerable groups to identify their needs and concerns. • Ensure vulnerable groups have access to healthcare, education, and social services. • Prioritize vulnerable groups in employment opportunities, skills training, and local procurement. • Protect from construction hazards (e.g., fencing off dangerous areas, health awareness campaigns). • Include vulnerable groups in GBV awareness programs and establish safe reporting mechanisms. • Track the well-being of vulnerable groups	• Number of consultations held with vulnerable groups, • Participation of vulnerable members in employment and training programs. • Access to healthcare and social services measured via outreach programs. • Number of grievances reported and resolved for vulnerable groups. • Reduction in exposure to hazards (e.g.,	• Shehas • Contractor • PMT/Consultant	5,000

		through surveys, grievance mechanisms, and social assessments.	accidents, health incidents). • Periodic social assessments documenting improvements in inclusion and well-being.		
Occupational Health and Safety (OHS)	• Injuries, accidents, fatalities; exposure to hazardous materials	• Implement OHS Management Plan. • Provide PPE and safety training. • Toolbox talks and safety signage. • Emergency response procedures.	• Number of accidents/incidents. • PPE availability and use. • Safety training records, • Lost Time Injury Frequency Rate (LTIFR)	• Contractor and Consultant	2,000
Labor and Working Conditions	• Labor disputes, child/forced labor, poor working conditions	• Labor Management Procedures (LMP). • Fair recruitment and wages. • Worker grievance mechanism.	• Number of grievances filed/resolved. • Worker contracts reviewed. • Compliance with labor laws	• Contractor and Consultant	1,000
Occupational Health and Safety (OHS)	• Injuries, accidents, fatalities; exposure to hazardous materials	• Implement OHS Management Plan. • Provide PPE and safety training.	•	• Consultant and Consultant	3,000

		• Toolbox talks and safety signage. • Emergency response procedures.			
SUBTOTAL					**23,000**
OVERALL TOTAL					**348,000**