

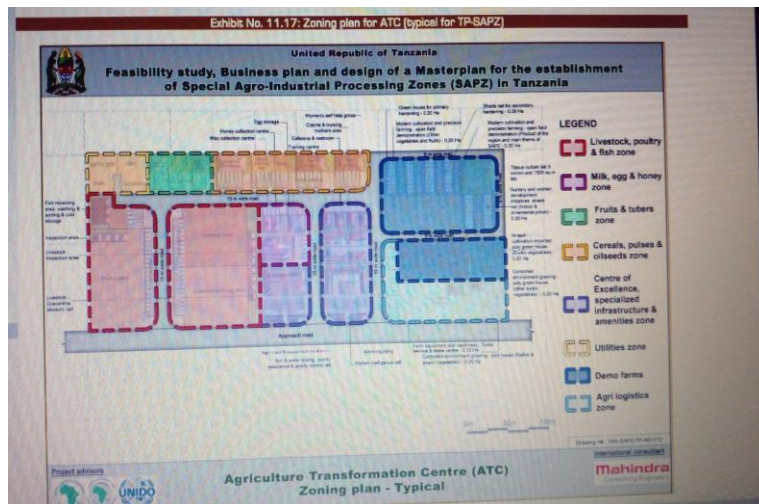
UNITED REPUBLIC OF TANZANIA (URT)



THE AGRO-INDUSTRIAL DEVELOPMENT PROGRAM Special Agro-Industrial Processing Zones (SAPZ)

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT [ESIA] VOLUME 2

AGRICULTURAL TRANSFORMATION CENTRES (ATC) AND CONNECTIVITY INFRASTRUCTURE



Consultant
Dr. Rosemarie Mwaipopo
Environmental Expert, Tanzania
PO Box 35043
Dar es Salaam, Tanzania
Email: salwengele@gmail.com

Client
Permanent Secretary
Prime Minister's Office
Government City, Mtumba
PO Box 980, Dodoma, Tanzania
Email: ps@pmo.go.tz

Name and Address of Experts who conducted EIA: Dr Rosemarie Mwaipopo, PhD; (**Volume II: 3 ATCs**);
Dr. Alphonse TIBA, PhD ;(**Volume I: APH**); Mr. Maisory Chacha (**Volume III: 10 ACs and FACs**)

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EXECUTIVE SUMMARY

The Government of the United Republic of Tanzania (URT), through funding from the African Development Bank (AfDB) is intending to engage in agro-industrialization development through Special Agro-industrial Processing Zones (SAPZ). The coordinator of this programme is the Prime Minister's Office (PMO). Regional Administrative Secretaries and respective Local government authorities at District level are key stakeholders. The main objective of the proposed SAPZ is to support structural transformation of the Tanzanian economy through agro-industrialization and processing with a view to increasing production and productivity and value addition intended for enhancing household income, generating employment, and increasing domestic consumption and exports. Specifically, the program will support the establishment of the integrated Lake Zone Special Agro-industrial Processing Zone comprising:

- i) A main agro-processing hub (APH) located in Shinyanga region;
- ii) Three major agricultural transformation centres (ATCs) tentatively located in Geita, Tabora and Mwanza regions; and
- iii) A network of Aggregation centres (ACs) and Fish Aggregation Centres (FACs) to be located in the procurement zones around the ATCs.

Objectives of the ESIA

The overall objective of this assignment was to undertake an Environmental and Social Impact Assessment (ESIA) and prepare an Environmental and Social Management Framework (ESMF) in accordance with national and the lenders' policies and Environmental and Social Assessment Procedures. Specifically, the ESIA was obliged to make a description of the Baseline environment; examine relevant Policy, Legislative and Institutional framework, Identify and analysis impacts and develop and ESMO and Monitoring Plan. The ESIA complies with the National Environmental Management Act of 2004 and, the lenders' (AfDB) international guiding principles for conducting an ESIA, observing key Operational standards.

Project description

This project aims to support structural transformation of Tanzanian economy through agro-industrialisation through increasing production and productivity, adding value, household income, generating employment, and increasing domestic consumption and exports. Direct project beneficiaries will include; crop farming households, livestock farm households, fisherfolks, Small and Medium Enterprises (SMEs) involved in crops, livestock and fisheries processing, other agro-allied industries, traders, transporters, consumers, youth & women entrepreneurs, among others. Other beneficiaries are expected to include; agricultural extension workers, research institutions, government institutions, traders; financial institutions and private sector companies dealing in agricultural technologies and inputs; veterinary extension workers, consumers, local government

through enhanced revenue, contractors, input suppliers and the general public. In view of the project design, the project beneficiaries are expected to go beyond the site-specific populations.

It is comprised of four (4) components: Component 1 which is on the Development of infrastructure for agro-industrialization; Component 2 which will deal with External Infrastructure and Linkages to APH, ATC, AC, and FAC; Component 3 on Ecosystem Development/SAPZ program enablers and Component 4 which establishes a Program management and Coordination unit (PCU)

Structure of the ESIA

Because of the nature, structure and scope of the proposed activities, the ESIA work has been divided into three work streams and hence ESIA volumes. Volume 1 covers the APH and connectivity infrastructure; Vol II covers ATC and connectivity infrastructure and Volume III which addresses the AC/FACs and Connectivity Infrastructure.

SAPZ and the Agri-business/Agro-processing in Tanzania

Despite the recent ravages of COVID-19, the agricultural sector remains one of the most important economic sectors in Tanzania. The country aims to improve productivity and incomes by improving the business environments; and, to facilitate increased business start-up and private sector involvement in tandem with job creation. In addition to relying on rain-fed agriculture, the sector is also challenged by shortages in inputs, marketing hurdles, poor storage and credit facilities are some of the challenges confronting the sector (Trade.tan, 2021). The SAPZ initiative offers the potential to overcome these challenges through innovative ways.

Methodology for the ESIA

National requirements for conducting an ESIA were adopted as stipulated by the EMA of 2004, and involved a Desk review; field survey; Transect walks and stakeholder engagement and consultations. From the assessment of baseline conditions and evaluation of stakeholder concerns, this ESIA makes an analysis of envisaged potential project related impacts in accordance to their significance qualitatively and quantitatively. The ESIA also draws and Environmental and Social Management Plan (ESMP) and Environmental Monitoring Plan (EMOP).

Policy, Legal and Institutional framework

The ESIA has made a critical review of key national policies, laws and instruments that constitute the national regulatory framework and technical guidelines that are relevant to the SAPZ/ATC project interventions. AfDB Operational Safeguards have also been reviewed in relation to the envisaged project processes and their possibility of being triggered.

Project Baseline Information

A description of baseline information related to the three ATC sites of Ng'ombe, (Misungwi DC); Ibologero (Igunga DC) and Bukombe (Bukombe DC), detailing the key physical, biological and socio-economic environments within the contexts of the respective districts. Findings from the ESIA survey shows that:

- Site Description: all three locations for the proposed ATCs are within areas 'officially' owned by the Central Government. There is no encroachment for settlement or permanent cultivation, hence involuntary resettlement will not be triggered
- Structures are evident in all sites, some still used for livestock marketing, others recently introduced for social service provision (schools). These structures depending on their status can be integrated in the ATC facility activities.
- Biophysical environment: Some indications of flora and fauna will be disturbed by mobilization and construction. A deeper study needs to be conducted on site to establish their significance
- The sites' proximity to existing settlements makes them accessible to services such as water, education and health facilities, and marketing (livestock).
- Power supply is available in all three sites
- Connectivity infrastructure: Each site is accessible through a major tarmacked highway. Service roads for access to site will have to be constructed. Connectivity by telephone is through mobile telephones.

Potential Impacts and Impact Analysis

Several potential impacts as a result from the project implementation have been identified by type, phase, duration and possibility of reversibility. On the overall, benefits were envisaged in terms of increased employment opportunities, enhanced agri-business for local livelihoods and incomes, and improved quality of local products due to the possibilities of more intensive extension and outreach. Social-related concerns were obtained from stakeholder consultations and in all phases, the most important concern was related to employment and livelihood opportunities, but also Gender-related abuses that could be experienced in all phases.

Potential positive impacts include:

- Employment opportunities
- Enhanced farming and livestock keeping skills
- Enhanced women's empowerment
- Advanced trade linkages
- Enhanced District economies and incomes

Potential negative impacts include:

- Limitations in access to employment because of discrimination

- Conflict or competition in basis resources due project/population influx
- Decline in business
- Dust pollution
- Biodiversity loss
- Increase in waste generation
- Contamination of water sources
- Spread of animal pathogens
- Potential of aflatoxins
- Spread of infectious diseases
- Gender-based violence
- Abuse against children
- Workers' health and safety

Environmental and Social Management Plan (ESMP).

The Environmental and Social Management Plan (ESMP) is drawn in line with the Government of Tanzania's policy and legal considerations and the lenders (AfDB) guidelines to guide the implementation of projects and mitigate the identified potential environmental and social impacts. Mitigation measures and responsibilities have been outlined whose adherence will be checked by the defined EMP.

The Environmental Monitoring plan (EMP)

The main objective of the EMP will be to ensure the following:

- Verify the effectiveness of mitigation measures proposed
- Give reliable projections on the development of mitigation measures across time
- Provide timely information on environmental and social impacts
- Provide information to other projects of similar settings.

It is recommended that the activities and indicators recommended for monitoring will be conducted in each phase on a regular basis by the Project/Facility Supervisor and respective Municipal authorities. They will also be responsible to design routine monitoring and reporting system to verify the implementation of effective environmental and social systems.

Stakeholder concerns and analysis

Stakeholders identified within the ESIA process included; Communities and Village/Mtaa level authorities; Government Ministries (PMOs, MoHCDGEC); Regional Administrative Secretariat and District Council Authorities, especially the District Management Teams, and individual stakeholders such as traders, livestock keepers. The process involved consultations on a one-to-one basis, FGDs, Interviews and discussions during Transect walks. Their concerns have been fully integrated into the impact and impact analysis framework.

Grievance Redress Mechanism

A Grievance Redress Mechanism (GRM) will be formed that will be responsible for receiving, assessing and resolving environmental and social grievances resulting from Project implementation. The proposed considerations for conducting GRM will include the following:

- Identification of a transparent, accessible and gender-sensitive process for grievance redress
- Outlining roles and responsibilities of GRM officials
- Outlining and publicize the process for receiving, acknowledging, investigation and resolution of grievances
- Maintaining a grievance register for monitoring purposes

Conclusions:

This ESIA study results show that SAPZ-ATC project activities will have several positive and negative impacts on the social, economic and bio-physical environment in the catchments of the proposed project sites. Positive impacts are expected to be long-term and with potential multiplier effects on the overall social and economic context, with significant national level economic impacts. The major negative impacts will arise from the construction and operational phases of the proposed projects. The study also shows that most negative impacts can be effectively mitigated if measures are put in place on a timely basis.

Recommendations

The following recommendations are given:

- (i) Design mechanisms to monitor the ESMP and the implementation of proposed mitigation measures.
- (ii) Stipulate the contribution, roles and responsibility of the key stakeholders at the project implementation level, who are District/Municipal authorities in order to maintain ownership and commitment in implementing the proposed mitigation and impact enhancement measures.
- (iii) Disseminate information on the roles and responsibility of community members who are located differently within the crop/livestock products value chain, including the envisaged opportunities for livelihood enhancement to promote accountability and compliance to the SAPZ concept.
- (iv) Develop a Stakeholder Engagement Plan (SEP) in line with a Grievance Redress Mechanism (GRM) that will address issues demanding consultations, corrections or further referral as need demands.

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LIST OF ACRONYMS/ABBREVIATIONS

AC	Aggregation Centres
AfDB	African Development Bank
APC	Agriculture Processing Centre
ATC	Agricultural Transformation Centre
DC	District Council
DED	District Executive Director
EMA	Environmental Management Act
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
FAC	Fish aggregation Centre
GBV	Gender-based Violence
PMO	Prime Minister's Office
RAS	Regional Administrative Secretary
SAPZ	Special Agro-processing Zone
SMEs	Small and Medium Scale Enterprises
URT	United Republic of Tanzania
VEO	Village Executive Officer
VPO	Vice President's Office
WEO	Ward Executive Officer

1.0 INTRODUCTION

1.1 PROJECT BACKGROUND

The Government of the United Republic of Tanzania (URT), through funding from the African Development Bank (AfDB) is intending to engage in agro-industrialization development through Special Agro-industrial Processing Zones (SAPZ). The coordinator of this programme is the Prime Minister's Office (PMO). Regional Administrative Secretaries and respective Local government authorities at District level are key stakeholders. The main objective of the proposed SAPZ in Tanzania is to support structural transformation of the Tanzanian economy through agro-industrialization and processing with a view to increasing production and productivity and value addition intended for enhancing household income, generating employment, and increasing domestic consumption and exports. Specifically, the program will support the establishment of the integrated Lake Zone Special Agro-industrial Processing Zone comprising:

- i) A main agro-processing hub (APH) located in Shinyanga region;
- ii) Three major agricultural transformation centres (ATCs) tentatively located in Geita, Tabora and Mwanza regions; and
- iii) A network of Aggregation centres (ACs) and Fish Aggregation Centres (FACs) to be located in the procurement zones around the ATCs.

This report presents the findings, risks and impact identification and makes recommendations from the Environment and Social Impact Assessment (ESIA) conducted in November-December 2021.

1.2 OBJECTIVES OF THE ESIA

The overall objective of this assignment was to undertake an Environmental and Social Impact Assessment (ESIA) and prepare an Environmental and Social Management Framework (ESMF) in accordance with national and the lenders' policies and Environmental and Social Assessment Procedures.

The specific objectives of the ESIA as provided in the ToRs included to:

- Make a description of the Baseline Environment
- Identify and describe the relevant Legislation and Regulatory Framework
- Determine the impacts of project facilities and activities
- Analyze and describe all Occupational health and safety concerns
- Develop a management plan to mitigate negative impacts.
- Develop a monitoring plan, giving specific description, and technical details, of monitoring measures for both ESMP and RAP (if required).
- Undertake a comparison of any other options that have been considered and studied.
- Prepare an Environmental and Social Impact Assessment report in accordance with the regulatory provisions.

1.2.1 SCOPE OF THE ESIA

The ESIA process is stipulated in Tanzania’s existing environmental and social management systems. According to the National Environmental Management Act (EMA 2004) the assignment is required to identify anticipated risks and impacts in view of the proposed project activities and propose relevant interventions (that will address critical gaps, risks and impacts) in this case, arising from the SAPZ project. The systems are documented in relevant national policies, laws, regulations, guidelines and institutions. The risks and impacts are based on an assessment of the nature of proposed project activities and their locations/context.

The ESIA also complies with the lenders’ (AfDB) international guiding principles for conducting an ESIA, observing key Operational standards. The study also borrows from other related international standards for comprehensiveness. All relevant guidelines will be addressed with a careful gender lens. The AfDB Gender policy (2001) defines the commitment of the Bank to promote gender mainstreaming as a means of fostering poverty reduction, economic development and gender equality in the continent. As such, the importance of making gender dimensions visible at all appropriate policy/project documents is acknowledged (gender analysis).

The Banks Operational safeguards which are observed are presented in box 4.1 below:

Table 1.1: AfDB Operational Safeguards

Operational Safeguard	Description
OS 1	Environmental and social assessment
OS 2	Involuntary Resettlement: Land Acquisition, Population Displacement and Compensation
OS 3	Bio-diversity and ecosystem services
OS 4	Pollution Prevention and Control, Greenhouse Gases, Hazardous Materials and Resource Efficiency
OS5	Labour conditions, Health and Safety

The SAPZ project has been considered as Category 1 under the AfDB ISS guidelines because of the potential cumulative environmental and social impacts that will be associated with the construction and operation of structures and infrastructure development that could be significant and irreversible.

The ESIA process foresees the consequences of proposed projects in relation to social, physical, economic and cultural environment with which these projects interact. In this case, the ESIA focused on socioeconomic, environmental and natural resource concerns that could affect the sustainability of the proposed project. It also examined how the project might cause harm to other stakeholders within the projects’ catchments and identifies measures to mitigate or minimize the negative impacts and enhance positive ones in order to ensure the project's sustainability.

2.0 PROJECT DESCRIPTION AND THE TANZANIAN COUNTRY CONTEXT

This chapter presents the general description of the SAPZ project and its components and relates the project objectives to the Tanzania country context in terms of the

2.1 PROJECT DESCRIPTION

The main objective of the proposed SAPZ in Tanzania is to support structural transformation of Tanzanian economy through agro-industrialisation with a view to increasing production and productivity, adding value, household income, generating employment, and increasing domestic consumption and exports. Specifically, the program will support the establishment of the integrated Lake Zone Special Agro-industrial Processing Zone comprising: i) a main agro-processing hub (APH) located in Shinyanga; ii) three major agricultural transformation centres (ATCs) tentatively located in Geita, Tabora and Mwanza regions; and iii) a network of Aggregations centres (ACs) and Fish Aggregation Centres (FACs) to located in the procurement zones around the ATCs.

The proposed SAPZ will be developed in accordance with best industry practices and using eco-industrial parks standards. To ensure its social, economic and environmental sustainability, the proposed design will take into account all external dependencies and will seek to (i) establish agro-industrial infrastructure; (ii) build capacity of stakeholders in entrepreneurship; (iii) strengthen institutional capacity and develop innovative marketing incentives; (iv) identify potential and existing risks for development of sustainable agribusiness; (v) enhance the quality of procurement zone in terms of youth employment and skills development; (vi) create youth employment opportunities; (vii) create feasible business opportunities for SME's; (viii) help towards achieving food security; and (ix) leverage private sector resources for investments within the SAPZ.

The Project will be implemented in selected districts through the development of APH, ATC, AC and FAC with, Shinyanga, Tabora, Geita, Simiyu, Mwanza, Mara, Singida, Kagera, Arusha, Kigoma and Manyara to be considered as procurement zones for the programme.

2.1.1 Project beneficiaries: The beneficiaries will include; crop farming households, livestock farm households, fisherfolks, Small and Medium Enterprises (SMEs) involved in crops, livestock and fisheries processing, other agro-allied industries, traders, transporters, consumers, youth & women entrepreneurs, among others. Other beneficiaries are expected to include; agricultural extension workers, research institutions, government institutions, traders; financial institutions and private sector companies dealing in agricultural technologies and inputs; veterinary extension workers, consumers, local government through enhanced revenue, contractors, input suppliers and the general public. In view of the project design, the project beneficiaries are expected to go beyond the site-specific populations.

2.1.2 Project Components: The proposed components of the Project are: (i) Development of infrastructure for agro-industrialisation including; the APH, ATC and AC/FAC, (ii) External infrastructure & linkages to the APH, ATC, AC) and FAC) (iii) Ecosystem development/SAPZ program enablers; and (iv) Project Coordination and Management. Thus, the following provisions under these components have been agreed for implementation under the Program:

Component 1: Development of infrastructure for agro-industrialization: The components include the development of infrastructure including all APH, ATC, AC and FAC as well as rehabilitation of the existing abattoirs and meat processing factory as detailed below.

- **Agricultural Processing (Hub) APH:** The SAPZ project plans to establish an APH along the Old Shinyanga road. The site is spread across an area of 426.08 ha and it is located within the Tanganyika Parker, Shinyanga District, Shinyanga region. The ESIA for the proposed APH was conducted as part of this exercise.
- **Agricultural Transformation Centre (ATC):** Three ATCs were planned to be established at Ng’ombe, Ibologero and Nyamigota in Mwanza, Tabora and Geita regions respectively and the initially proposed locations are shown below:

Table 2.1: Initially proposed ATC locations

Particulars	Nearest town/village/division	District	Region	Distance from APH in Shinyanga (kms)
ATC – I	Nyamigota	Geita	Geita	253 km from TP-APH
ATC – II	Ng’ombe	Misungwe	Mwanza	105 km from TP-APH
ATC – III	Ibologero	Igunga	Tabora	122 km from TP-APH

Bukombe site for ATC-I at Bukombe District was eventually selected to replace the proposal of Nyamigota (Geita district).

- **Aggregation Centres (ACs):** For ensuring adequate supply of raw material to the proposed APH, it is required to create a network of ATC’s and AC’s/FAC’s in the production zone. The indicative locations of ACs, which were verified during field visits were as proposed below:

Table 2.2: Proposed AC locations

Sn.	Nearest town/ village/ Traditional authority/Sub chief	District	Region
1	Ushirombo	Bukombe	Geita
2	Ruhuma	Chato	Kagera
3	Kalebezo	Sengerema	Mwanza
4	Bunda	Bunda	Mara
5	Bariadi	Bariadi	Simiyu
6	Nyankurukuru	Ilemea	Geita
7	Kisengi	Uyui	Tabora
8	Iguguno	Iramba	Singida
9	Igombe	Kahama Rural	Shinyanga
10	Mbalagane	Maswa	Simiyu

- **Fish Aggregation Centre (FACs)** - The concept of FAC is uniquely configured for leveraging the enormous potential of the fisheries sector in Tanzania and the proposed locations are as mentioned below:

Table 2.3: Proposed FAC locations

Sn	Nearest town/ village/ Traditional authority/Sub chief	District	Region
1	Kasalazi	Buchosa	Mwanza
2	Kayenze	Magu	Mwanza
3	Masahunga	Bunda	Mara

The ESIA for the proposed ten ACs was also conducted concurrently to the ESIA for the proposed ATCs which is reported

Component 2: External Infrastructure & linkages to APH, ATC, AC and FAC: The external infrastructure is one of the pre-requisites for the development of an SAPZ and the required linkages are envisioned to be provided by the government through their nodal agencies which includes enhancing and improving (i) road connectivity (ii) water connectivity (iii) telecommunication and (iv) power connectivity to the APH, ATC, FAC and AC.

Component 3: Ecosystem development/SAPZ program enablers: This component will (i) enhance production, productivity and support the development of agricultural value chains, (ii) enable policy environment, institutional capacity smallholder farmers and TVET skills/agri-

entrepreneurship development for youth employment, and (iii) provide for governance.

Component 4: Program Management and Coordination; a PCU with dedicated staff will be established within the PMO’s office for project implementation including monitoring and evaluation, procurement, financial management and a project coordinator. Investment promotion will also be coordinated through this component.

Investment by private sector within APH, ATC, AC and production farms: This component depends on the outcome of the previous components in order to achieve the required investment by the private sector. However, the budget is an estimate and can vary with the extent of branding and marketing done for the project as well as depending upon the extent of incentives offered to attract the private sector into the SAPZ.

2.1.3 Structure of the ESIA

Because of the nature, structure and scope of the proposed activities, the ESIA work has been divided into three workstreams and hence ESIA volumes as follows:

Table 2.4: Proposed ESIA Volumes

Work stream	Document	Area of coverage/Scope
1.	ESIA Volume 1	APH & Connectivity Infrastructure
2.	ESIA Volume 2	3 ATCs & Connectivity Infrastructure
3.	ESIA Volume 3	ACs/FACs & Connectivity Infrastructure

This ESIA report covers Workstream 2, ie presents findings of the ESIA related to the three ATCs and related connectivity infrastructure which is detailed in section 6. These ATCs are expected to facilitate the aggregation of agro-commodities and act as feeders for the proposed APH in Shinyanga and a described below.

(i) Selected ATC sites

Agricultural transformation Centres (ATC) will serve as the key channel to ensure the steady flow of inputs to the APH. The suitability of the ATC sites was reached through consultations with key stakeholders. The feasibility study illustrates that ATCs were selected in consideration of the following:

- The demarcation of the TP-SAPZ procurement zone and configuration of the APH in the region
- Commodities to be handled within the ATC
- Commodity volume expected considering the product and surplus available in the catchment area of each ATC including storage related aspects
- Availability of agri-business, social and commercial infrastructure

- Expected to be within a 250 km radius from the APH
- Connectivity and access from the nearest existing road network

The final shortlisted ATC are those tabled in Table 1.6

Table 2.5: Specific ATC sites of this ESIA

Proposed ATC site and site description	Nearest community	District	Region
Ng'ombe ATC (159 acres) Products: Cotton, Chickpeas, Paddy, Maize, Sorghum, Sunflower, Cattle, Goat and Poultry 105 kms from Shinyanga APH	Ng'ombe Village	Misungwi DC	Mwanza
Iborogero ATC (91.18 ha) Products: Paddy, Maize, Cotton, Sorghum, Chickpeas, Green gram, Tobacco, Sunflower, Cattle, Goats and Poultry 122 kms from Shinyanga APH	Iborogero Ward, Iborogero Village	Igunga DC,	Tabora
Bukombe ATC, (12.32 acres) Products: Maize, Paddy, Cassava; Sweet potatoes, Cattle 192 kms from Shinyanga APH	Bukombe Ward	Bukombe DC	Geita

2.2 TANZANIA: THE COUNTRY CONTEXT

The United Republic of Tanzania has enjoyed a fairly favourable economic growth between 2019 and 2020, attributed to improvements in the domestic and external economic environment. The growth was mainly driven by construction and manufacturing on the supply side and investments on the demand side. Economic growth was estimated to remain stable at 6.4% in 2020 and 6.6% in 2021 which was projected on the expectations of value addition in agriculture due to adequate rains, public investments, and increase in export earnings from mining with supportive monetary and fiscal policies. In 2019, the country achieved the status of a Lower Middle-Income country, indicating its achievements towards the goals of its development vision, Tanzania Vision 2025. But the growth sharply slowed down from 2020 with the advent of COVID-19 and its worldwide ramifications

The COVID 19 ramifications on the economy notwithstanding, the economy grew by 4.3% in the quarter ending June 2021, indicating significant recovery. The main drivers of growth were agriculture that contributed 0.6% of this growth, Transport and storage (0.4%), with Trade and repair, Manufacturing, Mining and QUARRYING AND, Construction each contributing 0.3% of the growth (BoT, 2021)

The agricultural sector is one of the most important economic sectors in Tanzania, which accounted for about 29% of the country's GDP in 2015 and an estimated 70% of its population employed in the sector (URT, 2021a). The sector also has an added contribution to GDP through its linkages with other sectors

such as the manufacturing and services sector such as tourism and the hotel industry, building and construction, education and other sectors.

The sectors with highest annual average growth rates between 2016 and 2019 were construction (14.4 percent); manufacturing (8.3 percent); transportation and storage (8.2 percent); mining and quarrying (8.0 percent); and information and communication (6.2 percent). The share of agriculture in total GDP has however declined from 29.0 percent in 2015 to 26.6 percent in 2019 (URT, 2021). The decline of the share of agriculture in total GDP and the corresponding rise in the shares of 'modern sectors' (of mining and tourism) albeit indicating structural changes in the economy of Tanzania, also indicate a denied emphasis in enhancing the hidden potentials of the agricultural sector of Tanzania. The Tanzanian FYDP III notes that the private small-holder producers in the agricultural sector have sustained food security, local incomes in the country and contributed to an increase in cash crop production. Cashew nuts, whose contribution from exports grew to USD 353.1 million in 2019 from USD 201 million in 2016, is among the most significant followed by y coffee whose exports grew to USD 153.4 million from USD 109 million in the same period (URT, 2021). Other products also of significance include corn, oil seeds, cotton (textiles and apparel), leather and meat and dairy products (Trade,tan, 2021). .

The agricultural sector is one of the notable economic sectors on the Tanzania economy, together with tourism, mining, construction, and manufacturing. For the period 2013-2019, agriculture together with Forestry and Fishing had 28.9% of the Tanzanian GDP, suoerseeded by Industry and Construction (31.1%) and the highest share of GDP being held by Services (40%).¹ The SAPZ concept provides an opportunity to improve the agricultural sector, and likewise the wellbeing of its key stakeholders and the economy as a whole by addressing the major constraints in the agribusiness sector which are;

- Supply chain management issues
- Constraints for exports
- Technological constraints

One of the effective and proven ways to address these challenges is to promote large-scale agro clusters, which are introduced by the SAPZ concept. An agro-cluster is a *concentration of agro-commodity producers, agribusinesses, and institutions that are engaged in the same agricultural sector or agro-industrial sub-sector, interconnected with each other, building value and networks, addressing common challenges, and pursuing common opportunities* (MACE, 2021:48). Such clusters are also known to be effective in promotion of value addition in the processing industry among other credit, but also if managed and operated effectively, can improve linkages of the various sectors involved in the commodity value chain from production to processing and at different levels.

¹ <https://www.tanzaniainvest.com/economy> and follow us on www.twitter.com/tanzaniainvest

2.2.1 AGRIBUSINESS and AGRO-PROCESSING POTENTIAL

The SAPZ' project reflects the country's FYDP III (2021/22-2025/26), whose objectives aim inter alia, to strengthen capacity building in the areas of science, technology and innovation; to enhance competitiveness and productivity in all sectors; to strengthen the industrial economy as a basis for export-driven growth including investing in new products and markets, to enhance the scope of Tanzania's benefits from strategic geographical opportunities through enabling improved business environments; and, to facilitate increased business start-up and private sector involvement in tandem with job creation.

The country's potential for agribusiness and agro-processing has however been limited by the nature of the sector which is dominated by small-holder farmers on the one hand, reliant on poor technologies and rainfed production on the one hand, while traditional livestock keeping practices have also denied practitioners to gain value from their production systems. Shortages in inputs, marketing hurdles, poor storage and credit facilities are some of the challenges confronting the sector (Trade.tan, 2021). Introduction of subsidies to farmers and investors in the sectors and enhancing value addition opportunities are measures taken by the government to address these challenges. The government understands that committed investment on the producers in this sector through enabling production, marketing and export environment, improved awareness of standards, access to capital, acquisition of new knowledge on production, storage, processing, packaging, logistics, quality assurance and marketing, more achievements will be realized (URT, 2021a).

3.0 METHODOLOGY

This chapter presents the methodology adopted for this ESIA process generally followed the national requirements as stipulated by the EMA of 2004 for conducting an ESIA. of the information collection, and evaluation and analysis of potential impacts arising from the assessment of baseline conditions. Specifically, the following methods were employed:

3.1 Desk review:

This method entailed the review of published and unpublished materials on the project sites and social and environmental conditions, and, relevant policies, and legal and institutional frameworks related to environment and social management. Existing reports on the project, including Regional Investment profiles; Socio-economic profiles; Program Aide Memoires; Program Concepts Notes; Draft Program Appraisal Documents; Project feasibility study reports and other relevant documents were also used.

3.2 Field survey and assessments

This involved physical visits, collecting and analyzing information from each of the three ATC sites (Ng'ombe, Ibologero and Bukombe) for the purpose of assessing baseline conditions on the physical, biological and socio-economic environment and, conducting stakeholder consultations. Specifically, it entailed conducting Transect Walks through the proposed ATC sites, and, assessing in each project site the following:

- Physical environment: geological conditions, topography, soils, climate and meteorology; ground water and surface hydrology
- Biological environment: conditions of existing flora and fauna
- Socio-economic environment: Economic aspects and major livelihoods of surrounding communities; social service facilities; gender considerations; health and safety issues and risks; related community-organizations; project site connectivity

3.3 Stakeholder engagement and consultations

Stakeholder engagement and information disclosure was conducted as a process throughout the different administrative/community levels within the project areas. Consultations were held with officials at the Regional Secretariats of Mwanza, Tabora and Geita regional offices. Consultations were also held with the respective District Executive Directors (DED) and members of District Management Teams in Misungwi, Igunga and Bukombe District Councils. Stakeholder consultations and interviews were then undertaken with the respective communities around the three ATC sites at Ng'ombe, Ibologero and Bukombe.

From these consultations, the following were achieved:

- Public information sharing on project objectives
- Viewing of concerns on project related impacts
- Public commitment to the project development.

3.4 Impact assessment

From the assessment of baseline conditions and evaluation of stakeholder concerns, this ESIA makes an analysis of the following envisaged project related impacts both qualitatively and quantitatively:

- Direct and indirect impacts, short term and long term
- Avoidable/unavoidable - reversible/irreversible impacts
- Pre-construction actions to avoid or minimize negative impacts
- Construction and operational phase impacts
- Cumulative impacts occurring as a consequence of other activities in the project area: existing activities, projects under construction or planned activities within a reasonable time frame.
- Impacts on critical and non-critical habitats.
- Potential risk of the spread of HIV/AIDS and other STIs during the construction period

3.5 Environmental and Social Management Plan

From this assessment, negative and positive impacts were identified as possible developments from project implementation. Mitigation measures for the few adverse environmental and social impacts have thus been proposed, including a monitoring plan to systematically address these predicted social, economic and environmental impacts.

3.6 Analysis of Alternatives

This ESIA did not consider the option of an alternative because the analysis during the feasibility study went through all available options and established the suitability of the selected ATC sites in consideration of their location within the desired catchment of the APH and ACs, The no action alternative as an option was thus excluded from this ESIA.

3.7 Structure of the ESIA Report

This report is presented in the following sections as according to the EIA and Audit Regulations of 2005 which prescribes the sections of an ESIA report. This report is organized according to the following sections:

1. Executive Summary
2. Acknowledgements
3. Acronyms and abbreviations
4. Introduction and Objectives of the ESIA
5. Project description and Country context
6. Methodology
7. Policy, legal and Institutional Framework
8. Impacts and Impact analysis
9. Stakeholder consultations and Analysis
10. Environmental and Social Management Plan
11. Grievance redress Mechanism
12. Summary and conclusions

4.0 POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

This Chapter presents an analysis from the review of key national policies, laws and instruments that constitute the national regulatory framework and technical guidelines, and that are relevant to the SAPZ/ATC project interventions. These instruments provide the guiding principles for consideration of the potential impact of the project in all its stages of implementation.

4.1 Overarching policy/legal instruments

The objectives of the proposed SAPZ project comply with some of the provisions of the major policy frameworks of the country, particularly the Constitution of the United Republic of Tanzania (1977) and the Tanzania Development Vision (2025).

(i) The Constitution of the United Republic of Tanzania (1977) and its amendments.

The Constitution (1977) which serves as the overarching framework guiding social and legal systems in Tanzania, not only provides for basic rights and duties for all citizens, it also stresses, *inter alia*, that citizens have a duty to safeguard public property, and that the national economy is planned and promoted in a balanced and integrated manner; and that every person who is able to work does work, and work means any legitimate activity by which a person earns a living. The social and economic considerations of the SAPZ' process resonate these provisions.

(ii) The Tanzania Development Vision (TDV 2025)

TDV (2025) envisions Tanzania with a competitive and dynamic economy with high productivity by 2025. Among the five attributes that it sees the nation to attain, is for the country to attain a strong, diversified, resilient and competitive economy which can effectively cope with the challenges of development and which can also easily and confidently adapt to the changing market and technological conditions in the regional and global economy.

4.2 Policies

This section describes key policies relevant to the SAPZ project implementation and the issues that need to be captured in project implementation. Each of these have specific aspects related to environmental and social safeguards.

Table 4.1: Relevant Policies

	Policy	Description and areas of compliance to SAPZ
	National Environmental Policy (NEP, 1997)	This policy recognizes that environmental issues consist of both social and ecological systems, and are important to sustainable development. The policy outlines strategic plans for environmental management at all levels and provides an approach for mainstreaming environmental issues for strategic decision-making. This includes putting in place appropriate mitigation measures to prevent and/or reduce social or ecological impacts likely to be generated by project interventions.
	National Land Policy, 1995 [revised 1997]	<p>Address issues of land tenure; promotion of equitable distribution of access to land by all citizens; improvement of land delivery systems; fair and prompt compensation when land rights are taken over or interfered with; promotion of land information management; recognition of rights in unplanned areas; improvement of efficiency in land management and administration; land disputes resolution; and, protection of land resources from degradation for sustainable development.</p> <p>Land tenure systems and land management and administration will be important for securing and developing land for SAPZ related projects, in this case ATC sites. Likewise, as according to this policy, the SAPZ will have to respect the protection of land and land resources from degradation.</p>
	National Agricultural Policy, 2013	Aims at developing an efficient, modern, commercial, competitive and profitable agricultural industry that contributes to the improvement of the livelihoods of Tanzanians and broad based economic growth and poverty alleviation; strengthening agricultural support and technical services; Effective utilization of factors of production (land, labour and capital) for enhanced production, productivity and profitability, food and nutrition security; improve market competitiveness, and improve agricultural processing, quality, and add value to agricultural produce.

	Agricultural marketing Policy, 2008	This policy aims to facilitate strategic marketing of agricultural products while ensuring fair returns to all stakeholders based on a competitive, efficient and equitable marketing system. Specifically, the policy seeks to achieve this by promoting strategies that will stimulate diversification and value addition in agricultural products in response to market demand; promote adherence to quality, standards and grade in agricultural products; reform the legal and regulatory framework that guide the agricultural marketing systems; empower, promote and support the formation and development of agricultural marketing institutions; promote investments in agricultural marketing infrastructure and agro-business; and to identify and promote niche markets.
	National Livestock Policy, 2006	Aims at stimulating development in the livestock industry in order to increase rural and national incomes, improve food security and environmental conservation. The policy aims to achieve this through <i>inter alia</i> increasing production, processing, the quality and marketing of livestock products for local industry and export; strengthening technical support services, new technologies and skills, including livestock farmers.
	National Water Policy, 2002	Recognizes water as fundamental for activities such as industrial production, irrigated agriculture, livestock keeping, hydropower production, including recreation and tourism. It sees it is imperative for sustainable water management systems to be put in pace, which should also be important for sustainable SAPZ operations.
	Sustainable Industrial Development Policy, 1996	Promotes human development and employment creation, economic transformation and technological progress for sustainable economic growth.
	National Trade Policy, 2003	Aims to raise efficiency and widen linkages in domestic production and build a diversified competitive export sector as the means of stimulating higher rates of growth and development. Key ways in which it seeks to achieve this is through triggering higher performance and competition within the domestic market, improved infrastructure, market information, value addition and, stimulation of investment flows into export-oriented areas
	National Policy on Small and Medium-scale Enterprises, 2003	Fosters job creation and income generation through promoting the creation of new SMEs, improving performance and competitiveness of existing ones SMEs, Increase participation and contribution to national economy.
	National Women and	This policy guides all sectors and institutions in Tanzania to ensure that gender sensitive plans and strategies are developed. It puts

	Gender Policy, 2000	emphasis on gender equality in all areas including employment, participation, and decision making. It recommends the development of gender disaggregated data for such purposes.
	National HIV/AIDS Policy, 2001	This policy acknowledges the impact to human and social development that is generated by HIV and AIDS and seeks to address it. A key objective is to prevent further transmission of HIV through the creation of preventive strategies for people of all age groups, especially the youth, and promoting community participation in controlling HIV transmission.
	National Health Policy, 2007	Seeks to promote the health status of all citizens and particularly those at risk, through a health care system that will meet the demands of citizens and increase living age of all Tanzanians. Its specific concerns include reducing disease and deaths through a better (targeted) health care system; ensure availability and accessibility of basic health services according to need; encourage community participation; enhance the control of infectious and non-infectious diseases, especially HIV and AIDS, malaria, tuberculosis, diseases caused by malnutrition, environmental factors, and workplace and chemicals management, and through community education and sensitization

4.3 Acts and Legislation

The following section presents key legislation that informs the requirements for compliance to ESIA relevant to the SAPZ project implementation.

Table 4.2: Key Legislation

	Legislation	Description and compliance to SAPZ
	National Environmental Management Act (EMA), 2004:	Establishes regulations to guide the registration, categorization, practicing and conduct of Environmental [and Social] impact assessments and Environmental audits. This Act also establishes the Environmental Experts Advisory Committee that is the main advisory body of NEMC
	Environmental Impact Assessment and Audit Regulations, 2005 (G.N.	These regulations provide rules relative to the procedures for and carrying out of environmental impact studies and environmental audits as provided for under the Environmental Management Act. They define the contents and form of an environmental impact

No. 349 of 2005):	assessment and the basic principles of an environmental audit.
Environmental Management (water quality standards) regulations, 2007:	These regulations deal with the protection of water sources and ground water; water pollution and water quality standards, provide measures for compliance and enforcement of water quality standards.
Environmental Management (Solid Waste Management) Regulations (2009);	These regulations define solid waste management as an essential service provided to protect the environment and public health, promote hygiene, remove materials, avoid waste, reduce waste quantities, decrease emissions and residues and prevent spread of diseases. This reflects the need for compliance from the inevitable likelihood of waste generation by the SAPZ projects, such as garbage, non-liquid materials arising from construction activities and other industrial processes.
Environmental Management (Air Quality Standards) Regulations, 2007:	These regulations deal with the prevention and control of air pollution and prescribe criteria and procedure for measurement for air quality; establish ambient air quality standards; establish emission standard for various sources of air pollution. They also define enforcement power.
Land Act, 2002, of 1999:	Recognizes all land in Tanzania as public land vested in the President as trustee of all citizens, Recognizes three categories of land, general land, village and reserved land
Village Land Act, 1999	This Act provides for the tenure and management systems of village or rural land. Village authorities are given primary responsibilities to consent the granting of land occupancy.
Land Acquisition Act, 1967 RE 2002)	Governs the compulsory acquisition of land in Tanzania. and provides procedures to be followed when doing so. The Act also considers modalities for acquisition for public purposes and eligibility for payment of compensation to those affected by land acquisition.
Agricultural Sector Development Programme II (2017/18 to 2027/28)	The programme outlines strategies for attaining (1) Sustainable Water and Land Use Management for crops, livestock and fisheries; (2) Enhancing Agricultural Productivity and Profitability through increased productivity growth rate for commercial market-oriented agriculture for priority commodities; (3) Promoting Commercialization and Value Addition through improved and expanded rural marketing and value addition by a competitive private sector and effective farmer organizations, and, (4) Outlining

		Sector Enablers, Coordination and Monitoring and Evaluation such as strengthened institutions, enablers and coordination framework through an improved Policy and Regulatory Framework and Business Environment Improvement, among others
	Water Resources Management Act, 2009	Provides the institutional and legal framework for sustainable management and development of water resources for human and other needs, which include outlining principles for water resources use and management; outlines regulations for the prevention and control of water pollution, including security of water sources; the participation of stakeholders and the general public in implementation of provisions of the National Water Policy and related issues.
	Water supply and sanitation Act 2009:	Provide for sustainable management and adequate operation and transparent regulation of water supply and sanitation services for the nation and community
	Water Utilization (Control and Regulation) Act, (No. 42) 1974	Provides the institutional and legal framework for sustainable management and development of water resources including prevention and participation of all stakeholders.
	Employment and Labour Relations Act, 2004:	To promote economic development through economic efficiency, productivity and social justice; guides fair employment relations and minimum standards regarding conditions of work; and to regulate industrial action as a means to resolve disputes. The Act also prohibits Child Labour, forced labour, and, discrimination, directly or indirectly, against an employee, in any employment policy or practice on grounds <i>inter alia</i> by gender.
	Occupational Health and Safety Act No. 5 of 2003	Provides regulations to safeguard the safety, health and welfare of persons at work in factories and other places of work; including those who are connected with activities of persons at work; and to provide corrective measures including prosecutions if demanded
	Public Health Act of 2009	concerned with the promotion, preservation and maintenance of public health by ensuring sustainable public health services to the general public are in place including environmental sanitation and hygiene, and, preventing and controlling living infectious or communicable and other diseases
	The Local Government Act, 1982 (revised in 2002) and	Gives responsibilities to village, district and urban authorities for planning, financing and implementing development programs

	its amendments:	within their areas of jurisdiction. Each authority has to suppress crime, maintain peace, good order and protect public and private property.
	Tanzania Investment Act, No. 26 of (1997)	Establishes the Tanzania Investment Centre (TIC), a one-stop agency of the Government of Tanzania which is mandated to promote, co-ordinate and facilitate investment into Tanzania. The Centre is a focal point for all investors and performs all liaison work for the investor from enquires right up to project start up. The Act also provides for land for investment purposes. Such land is identified, gazetted and allocated to the Tanzania Investment centre (TIC), which shall create derivative rights to investors.
	The Special Economic Zones Act of 2006	Authorizes the establishment of Special Economic Zones (SEZs) to encourage Greenfield investments in the light industry, agro-processing industry and agriculture.
	Law of the Child Act, 2009:	Provides for reform and consolidation of laws relating to children, to stipulate rights of the child and to promote, protect and maintain the welfare of a child with a view to giving effect to international and regional conventions on the rights of the child; to provide for affiliation, foster care, adoption and custody of the child; to further regulate employment and apprenticeship; to make provisions with respect to a child in conflict with law and to provide for related matters
	National Plan of Action on violence against Women and Children (2017/18-2021/22)	Provides for the protection of minors and women against sexual abuses and related forms of violence, and establishes anti-VAWC platforms at community level to address such abuses.
	The Plant Protection Act, 1997 and revisions	Provides regulations for prevention of the introduction and spread of harmful organisms, ensure sustainable plant and environmental protection, control the importation and use of plants and plant products and ensure the fulfilment of international commitments on plant protection.
	Industrial and Consumer Chemicals (Management and Control) Act 2009	This Act provides for the management and control of the production, importation, transportation, exportation, storage, dealing and disposal of chemicals.

4.4 Institutional Framework

The Environmental Management Act No.20 of 2004 gives NEMC the mandate to undertake enforcement, compliance, review and monitoring of environmental impact assessments, to determine the nature of assessment a proposed project should be subjected to, as well as playing a central role in facilitating public participation in environmental decision-making, exercise general supervision and coordinating overall matters relating to the environment (URT, 2004). NEMC is also mandated, in consultation with the Minister responsible for Environment, to offer certificates of approval for proposed projects. The functional office for these matters is the Division of Environment (DoE). With regards to the proposed ATCs and within the context of the SAPZs, the following are the main functionaries for environmental and social risks management.

Table 4.3: Key Institutions for Environmental management for the ATCs

Description of Responsibility	Institution
Environmental Management [responsible for ensuring that all development projects and programs in Tanzania comply with all relevant environmental laws]	<ul style="list-style-type: none"> • The Vice President Office (VPO): The Minister Responsible for Environment. • The National Environmental Advisory Committee • The Vice President Office (VPO) – Division of Environment (DoE) • The National Environment Management Council (NEMC) • Sectoral Environmental Units • NEMC Zonal Offices • Regional Environmental Management Expert (REME) • District Environmental Management Unit • Ward, Sub-Ward [Mtaa] / Village/Hamlet Environment Committees
Government Ministries, Divisions and Agencies	<ul style="list-style-type: none"> • Prime Minister’s Office (PMO) • Ministry of Agriculture • Ministry of Industry and Trade • Ministry of Communications • Ministry of Livestock Development and Fisheries • Ministry of Finance and Planning • Ministry of Health, Community Development, Gender, Elderly and Children • President’s Office- Regional Administration and Local Government •
Regional and Local Government Authorities	<ul style="list-style-type: none"> • Regional Secretariat

	<ul style="list-style-type: none"> • District Council and Council Management Teams
Community level	<ul style="list-style-type: none"> • Ward, Mtaa and Village Governments • Ward Executive Officer (WEO), Mtaa Executive Officer (MEO); Village Executive Officer (VEO)
Government Authorities	<ul style="list-style-type: none"> • Energy and Water Utilities Regulatory Authority, 2001 • The Occupational Safety and Health Authority (OSHA)

The ESIA also considered whether AfDB's Operational Safeguards are triggered in relation to the three ATCs. How they are relevant to the project and the aspects triggered are presented in Table 4.4.

Table 4.4: AfDB Operational Safeguards triggered by ATC development

OS No.	Safeguard	Relevance to project	Triggered
OS 1	Environmental and social assessment	The construction of ATC facilities will definitely impact on the bio-physical environment, and on the land, changing the landscape through constructing of the facilities and access roads. These are irreversible changes to the environment. The physical changes a likely to impact the social context in terms of interfering with traditional pathways, relationships to the environment.	✓ High
OS 2	Involuntary Resettlement: Land Acquisition, Population Displacement and Compensation	All identified ATC sites are within government owned locations and encroachment for settlement or permanent cultivation is not evident. Involuntary settlement will not be triggered by the projects.	No
OS 3	Bio-diversity and ecosystem services	Minor disturbances to biodiversity may be experienced during construction phases. There is also a possibility of tampering with nearby water sources (streams) In all sites.	✓
OS 4	Pollution Prevention and Control, Greenhouse Gases, Hazardous Materials and Resource Efficiency	Possibility of pollution or contamination from ATC operations is likely. The source may be water contamination, poor management of waste disposal. But is dependent on the effectiveness of pollution management systems at the facilities.	✓ Minimal

OS5	Labour conditions, Health and Safety	The construction and operation stages will involve recruitment of workers on long-term or part-time basis. The decommissioning stage will involve cessation of employment contracts. These aspects will require compliance to ethical recruitment processes, contracts and healthy and safe work conditions within and around the ATCs	✓
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As seen in Table 4.4, the ATC facilities together with the accompanying components – that is the ACs and APH will definitely lead to irreversible changes on the landscape within the sites of construction of the requisite facilities. These impacts are irreversible and need careful assessment. In the process, some impact on the biodiversity and ecosystem services such as water sources may occur. The operational aspects of the facilities may also generate pollution from emissions or waste management systems. Finally, employment practices in all stages of project development are inevitable which will trigger work related conditions. Hence the project is likely to trigger OS 1, OS 3, OS 4 and OS 5.

5.0 PROJECT SITE BASELINE INFORMATION:

This chapter presents a description of baseline information of the three ATC sites of Ng'ombe, (Misungwi DC); Ibologero (Igunga DC) and Bukombe (Bukombe DC), detailing the key physical, biological and socio-economic environments within the contexts of the respective districts. Generally, all three locations for the proposed ATCs are within areas 'officially' owned by the Central Government, and managed by the Livestock Division of respective District Councils, hence, the possibility for resettlement is not envisaged. Also, there is minimal usage by surrounding communities (such as, for seasonal cultivation, grazing), often through arrangements with the respective village authorities, hence it is proposed that relocation should follow similar arrangements.

5.1 Ng'ombe ATC, Misungwi District, Mwanza:

5.1.1 Site description

The proposed Ng'ombe ATC site is located along the Mwanza-Misungwi highway, within the boundaries of Ng'ombe village/Ward. The site is within an area 'owned' by the Livestock Department which hosts a livestock auction for five days of the week except on Wednesday and Saturdays. Within its vicinity. Isolated private residences are on the boundaries of the area, and two government houses resided by individuals overseeing the livestock auction. Next to the site are private cattle 'fattening' facilities that are used by traders to fatten livestock after purchase at the Ng'ombe auction, and before transferring them to more lucrative markets. In addition to the secondary livestock auction centre, the site is also used as a temporary shelter and grazing space by distant traders who use the space waiting for auction days.

Structures that were observed within the site including a functioning Cattle dip; A cattle crush; a brick livestock holding structure used during the Auction, latrine, and a dilapidated crush. These facilities could be integrated into the ATC as needed.

5.1.2 Physical environment

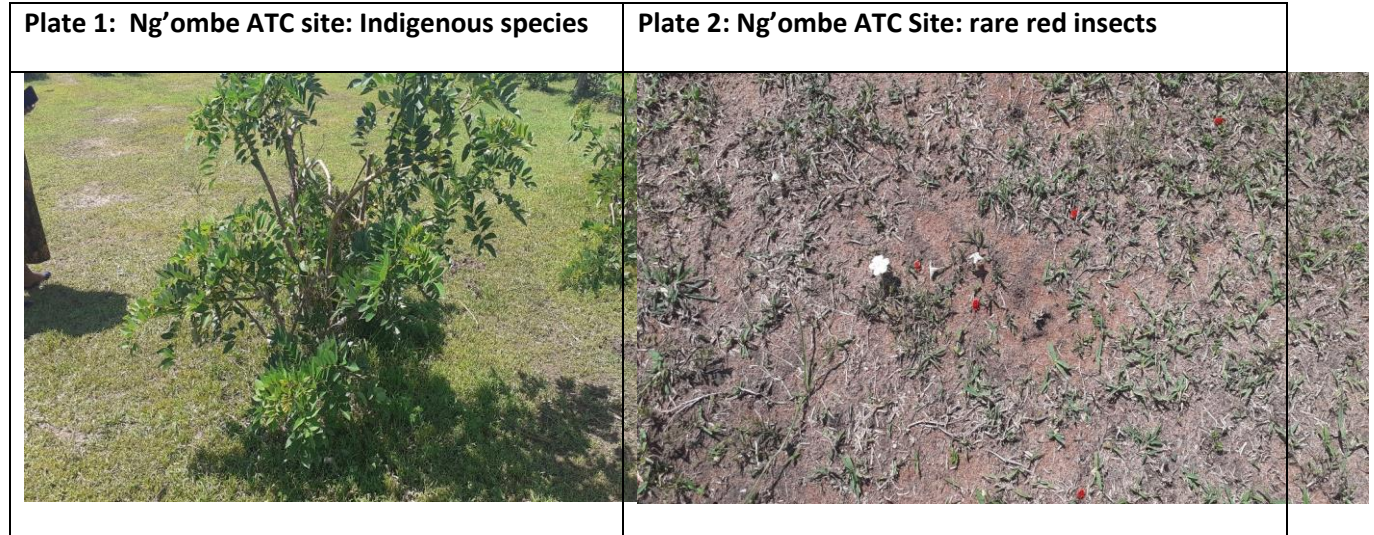
(i) Topography and soils: The location within Misungwi DC receives moderate to unreliable rainfall with an average annual of 850 - 900 mm. The soils are red to yellow-red, gritty sand clay loams which are widely cultivated in other locations but not within the proposed site.

A small seasonal stream is located on the eastern border of the location, whose waters are also used by the local community for domestic purposes and irrigation.

5.1.3 Biological environment

(i) Fauna and flora: The site is sparsely covered by a few shrubs here and there. Some indigenous species are evident in the project area which may be disturbed by infrastructural development such as

construction of ATC facilities and access roads. Small red insects were also noted, identified as a seasonal presence during the rainy season. These natural species may require an in-depth examination for environmental monitoring purposes.

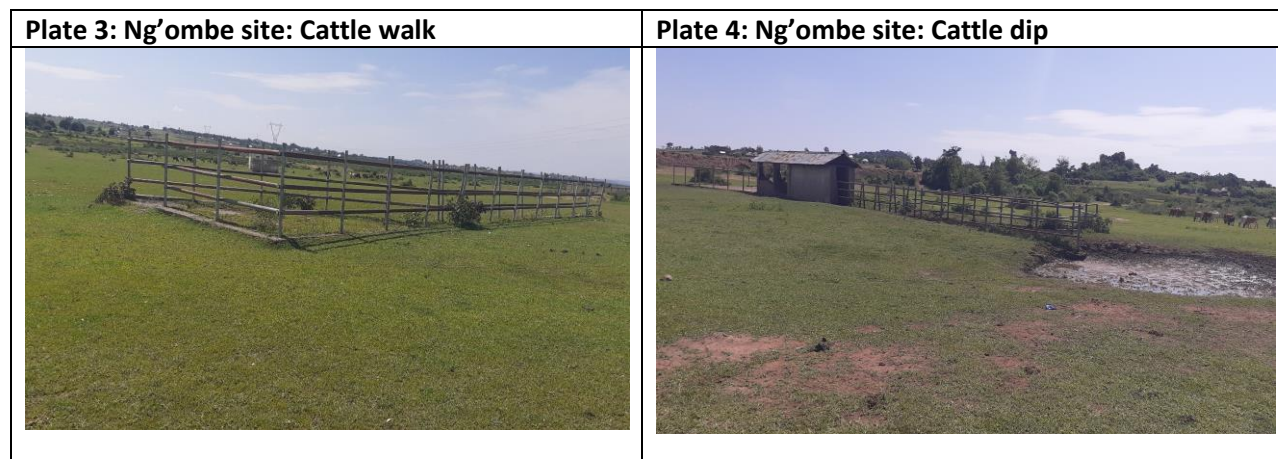


5.1.4 Socio-economic Environment

The Population: The population of Misungwi district in 2019 was 351,607 (177,601 females and 173,997 males). Igokero Ward where the ATC site falls within has 21,683 people (11,419 Females and 10,264 Males). The nearest village to the proposed site, Ng'ombe has 3,517 residents, (1,922 females and 1,605 males)

(i) Livelihoods: Crop farming and livestock keeping are the main livelihood activities practiced by the surrounding populations. Major crops grown in the area are cotton, cassava, maize and yellow gram or chick peas sorghum, and millet. Misungwi DC altogether has the second highest quantity of livestock in Mwanza region after Kwimba. (Pg 14-15, Mwanza Investment Profile, 2017). Livestock fattening

(ii) Land use and Land Cover.: The site hosts a secondary livestock auction which is held on 5 days of the week. Local people practice small-scale seasonal farming on the boundaries of the location on an arrangement recognized by the Village Council.



(iii) Land Tenure: Generally, local people in the area customarily acquire land through inheritance or purchase. Although the exact proposed location of the ATC at Ng'ombe area was not firmly established, much of the land where the site is located is under secondary holding of the District Council, on behalf of the Ministry of Livestock.



(iv) Social service facilities: Igokero Ward that covers the immediate social catchment of the proposed ATC has all basic social service facilities, including Education facilities, a health centre and a dispensary at Ng'ombe village.

(v) Skills Training: Local farmers and livestock keepers in Igokero Ward enjoy frequent extension services on crop production such as tobacco farming, horticulture, and livestock fattening skills.

(vi) Energy: Misungwi DC is already connected to the national power grid, the high tension power line which crosses the proposed location of the ATC. Igokero Ward and Ng'ombe village where the actual proposed site lies within receives power through REA supply.

(vii) Water Supply: Ng'ombe Village receives a reliable supply of water from the main District water supply scheme (from Lake Victoria). The proposed ATC will however have to organize its own water supply connection for sustainability and minimizing conflict.

(viii) Markets: The livestock market in Misungwi district is a thriving local economic venture. Ng'ombe location itself hosts a secondary livestock market that collects livestock from surrounding primary livestock markets, therefore the supply of livestock is steady. Within Igokero Ward there is a government livestock fattening area used for extension purposes and several privately owned fattening units.

<p>Plate 5: Ng’ombe site: Itinerant livestock trader grazing cattle within the site for auction day</p>	<p>Plate 6: Ng’ombe site: Private livestock trader fattening cattle next to proposed site to send to more lucrative markets</p>
	

(ix) Connectivity: Transport and other key Infrastructure: The site is easily accessible though the Mwanza-Misungwi tarmac road that can be used to transport produce to and from the site. Livestock is usually transported by road (trek) from primary auctions to the site. Currently, traders hire trucks to transport livestock to other markets – such as to the border with Kenya or to Dar es Salaam. Rough paths are used to transect the proposed site and which can be upgraded to permanent roads to project site. As indicated above, all key infrastructure is available or within reach. Mobile forms are the main channel for telecommunications.

(x) Waste Management and Sanitation: Traditional systems of waste management are practiced. Haphazard discarding of plastic materials (plastic bottles) was observed. Livestock waste is left without collection. Poor waste disposal may increase with the establishment of the ATC.

(xi) Indigenous Peoples: To a large number, Wasukuma people dominate Misungwi district and practice agro-pastoralism. However, because Igokero Ward the lucrative livestock trading centre, there are many residents from neighbouring regions including Arusha and Mara regions.

(xii) Investment Plans: Misungwi District Council is advanced in terms of industrial establishments which conduct semi-processing of agricultural produce. Most of these are maize milling joints; and a few units involved in food processing and sunflower oil processing. According to the District Council reports, Igokero Ward had been previously identified as an industrial and business investment area. The final land use plans had not been developed. In its Investment profile, it is indicated that in 2016, the District

council designated areas to construct agricultural crop processing industries (chickpeas, sunflower, cotton) livestock products (milk, hides/skin, meat) and fish processing.²

(viii) Women and gender concerns: Women in the district are active participants in vegetable gardening, food retailing and in trade. Some practice food processing at small-scale. They are most active through women’s groups, some supported by the District Council.

5.2 Ibologero ATC, Igunga District Council, Tabora Region:

5.2.1 Site Location

Ibologero ATC is within Ibologero village, Ibologero Ward, about 8 kms from Igunga District Administrative Hq. Igunga DC is one of the eight Councils making Tabora region, namely Igunga, Nzega, Uyui, Sikonge, Urambo and Kaliua District Councils, and, Tabora Municipal Council and Nzega Town Council. The DC covers an area of 6,912 Sq Km. Its is administratively divided into 4 Divisions with 35 Wards and 119 Villages, among which are Ibologero Ward and Ibologero village.

The actual proposed ATC site location lies about 2km from the village center on the north-east. The Ibologero village center is a thriving trade center that hosts the most prominent livestock auction center in the district (cattle and poultry). The livestock auction is held on every Monday and attracts people from beyond Tabora. The proposed ATC site lies within a central government-controlled area of 91 HA.

Current uses: Ibologero settlement is a vibrant, rapidly growing trading Centre, which hosts a weekly Livestock market – every Monday, and is said to be the largest trading center for cattle, goats and chicken in the District Council. It is envisaged that the settlement might even grow bigger with the construction of the EACOP pipeline whose way leave is just 3 km away from Ibologero centre at Mwalamu area.

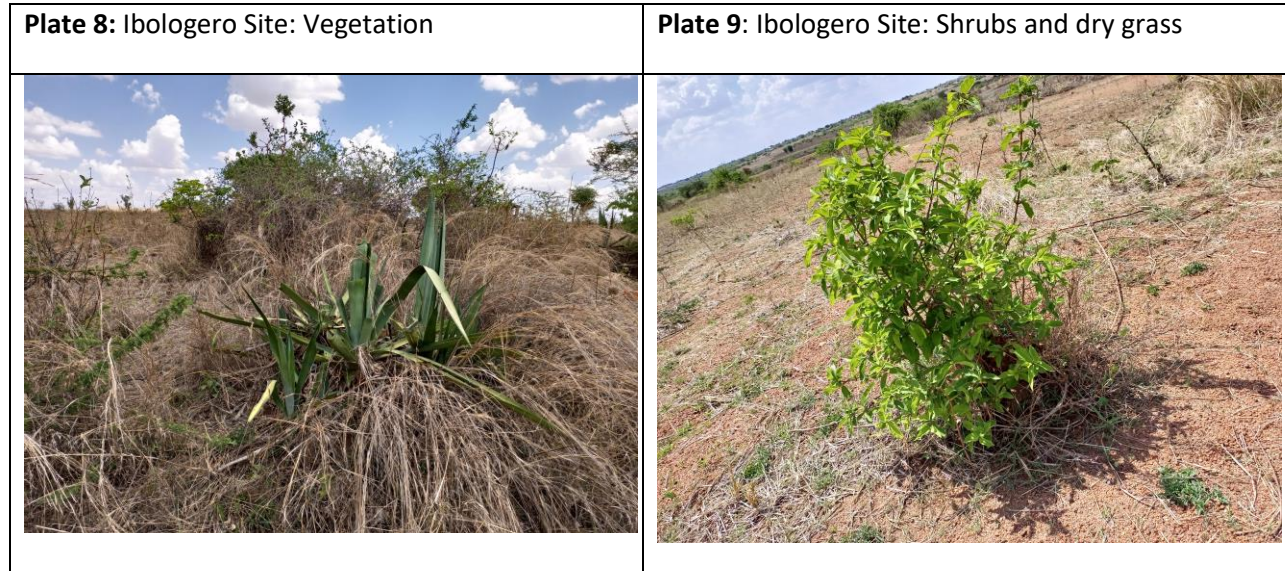
Plate 7: Ibologero: Residential house and structure within proposed site



² <https://misungwidc.go.tz/storage/app/media/uploaded-files/taarifayaeneolauwekezajispiacialeconomiczon21.pdf>

5.2.2 Physical environment: (i) Topography, climate and soils: The area is semi-arid, with sandy soils and is characterized with a sloping terrain towards a seasonal river valley.

5.2.3 Biological environment: (i) Fauna and flora: The vegetation in the area consists of a mixture of scattered scrub bushes, dried grass thickets and a few trees. A few of these are indigenous and some planted when the area was in use.



5.2.4 Socio-economic Environment:

(i) Population estimates: The general population expected to directly benefit from the project is of the whole of Igunga district. By 2019, the population of Igunga DC was estimated to be a total of 519,492 people (Males = 255,200 and females = 264,292).



(ii) **Livelihoods:** Most households are farming households and keep livestock. Crops grown are maize, rice, cotton, cassava, and oil seeds. Igunga DC also has the highest total number of livestock in Tabora region. Although there isn't large scale poultry farming, Igunga District is identified as one of the potential areas to invest in such farming.

(iii) **Land use and Land Cover.:** The area is basically not used for human activities and no compensation is expected. In addition, the area does not host any spaces for cultural rights. There are 5 residential houses on the area within were the site has been proposed, an unused cattle shed and a derelict water pump. The residential houses are resided by local people who have been granted temporary residence, free of charge by the Village government. Relocation procedures will follow arrangements with Village Government. Currently about 5 Acres of the area has been taken from the construction of secondary school which is currently in session and a small portion is under development for a primary school. The village and ward governments explained that this arrangement was requested from the Local District Council to make use of an otherwise bare land. The village and ward governments expect to be given more space to construct other public social services.

(iv) Land Tenure: The site is within a government owned property under Igunga District Council management, and managed by the Division of Livestock development. No compensation is thus required.

(v) Social service facilities: All key social amenities are available at the Centre except Banking facilities. People rely on Mobile money vendors (Airtel, Voda, Tigo) for daily transactions. Potential increase in the volume of trade after establishment of the ATC will demand more formal financial services.

(vi) Education and training: Igunga district has a number of education facilities and training centres that can be easily accessed. Within the immediate location selected for the ATC, a Secondary School has been constructed and another primary school facility is under construction adjacent to the proposed ATC site. These facilities can be integrated in the social service facility structure that may be developed to serve stakeholders interacting with the ATC.

<p>Plate 10: Ibologero site: Broken down water pump</p>	<p>Plate 11: Ibologero: Secondary school next to proposed ATC site</p>
	

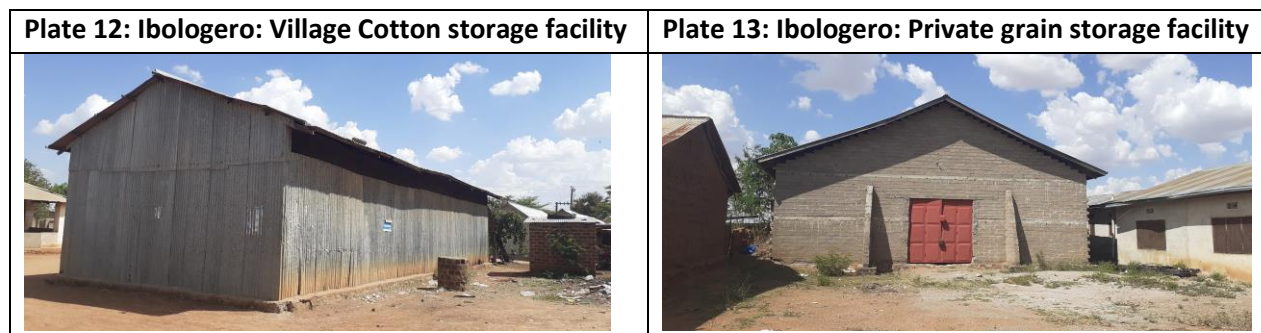
(vii) Energy/Power sources

The Rural Energy Agency (REA) has been contracted to supply electricity in the rural areas of the entire Igunga DC. According to TANESCO regional report, Tabora Region is served 40.5 megawatts by the national grid but it can utilise only 14 megawatts. Therefore, the region has an extra capacity of 26.5 megawatts of electricity³.

³ Tabora Region Investment profile,

(viii) Water Supply: Tap water is available within Ibologero village, but not sufficient for the rising population. Boreholes are a major supply of water for household usage. This is common for the rest of the District where the current supply of water does not meet the demand of the regional population. The regional profile indicates that rural water supply is at thirty-four per cent (34%), while in urban centres, including Tabora Municipality is at fifty per cent (50%). The potential for a sustainable supply in future for project purposes is with the Lake Victoria water supply project which runs 12 km from Ibologero area.

(ix) Markets: Ibologero Ward and the market centre at Ibologero is identified as one of the best locations for such investing in livestock production. Currently, there is a flourishing trade in chicken, some of which is sent to as far as Dar es Salaam. A number of private entrepreneurs (*madalali*) also collect, provide crop storage and conduct primary processing within the catchment.



(x) Connectivity: Road Transport and Infrastructure: Accessibility by road to the proposed site is good. The site is located just off the Nzega-Singida highway and is easily accessible by dust road up to the site. The proposed location is within reach of the main piped-water source and power connection from the bustling trading centre, Ibologero. Three major mobile telephone (Airtel, Vodacom and Tigo) networks are accessible in the area.

(xi) Waste Management and Sanitation: Waste disposal holes (*dampo*) are used within the site, especially on the adjacent market place which is about 1km from the proposed site. –. There is also adequate space for establishing a proper waste management system, but with the caution of controlling pollution to the nearby water ways.

(xii) Indigenous Peoples: The Indigenes are the Wanyamwezi, with a sizeable community of Wasukuma, Waha, Wanyiramba and other people brought by the trade. Other parts of the District have also a few refugees from the neighbouring country of Burundi (pg 14, URT, 2020).

(xiii) Investment Plans: According to the Tabora region Investment profile, the region has identified a sizeable land area noted as ideal for investments, which rhymes with the SAPZ project objectives. The investment potential is identified in small-scale and medium-scale milk processing; Leather products processing; textiles processing and Oil seed processing (sun flower, sesame and groundnuts) where 43.6 ha has been identified within Ibologero Ward.

(xii) Women and Gender issues: Women in Igunga and Ibologero Wards are active in petty trades and farming. Polygamous relationships have pushed many women to seek assets that they own individually.

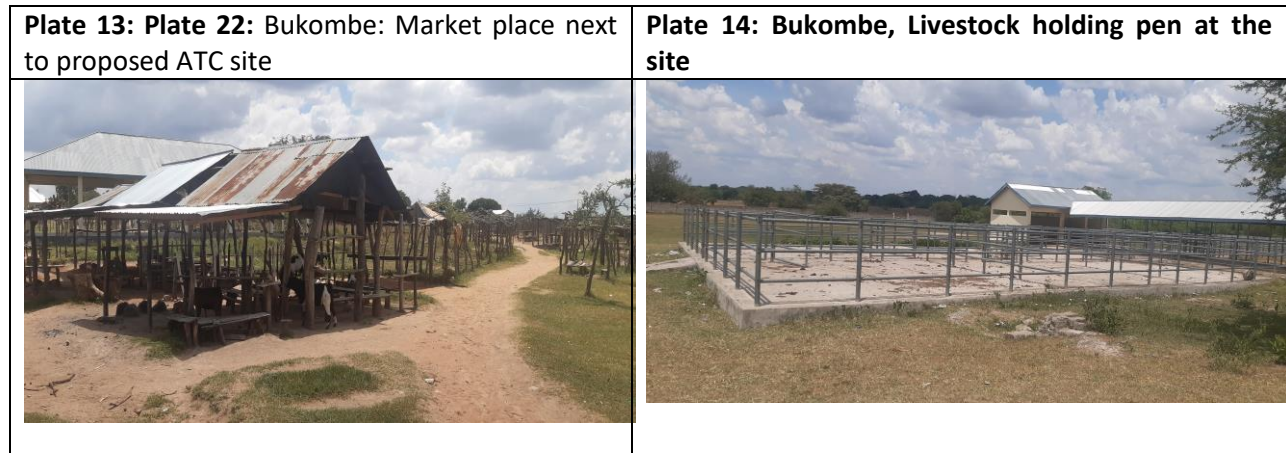
5.3 Bukombe ATC, Bukombe DC, Geita region:

5.3.1 Site Location: The site is located at Bukombe village in Bukombe Ward within the area known as ‘Mnadani’. The area is estimated to be 2.5 hectares. It is located on the right-hand side along the Kahama-Rusumo Highway.

5.3.2 Physical Environment:

(i) Topography – the land gentle slopping towards North western side.

(ii) Land cover – there are structures such as two warehouses, open market shed, manager’s house, fence around the site, cattle loading structure, livestock dip, cereal drying structure, livestock holding space.



5.3.3 Biological environment

(i) Flora and fauna: The proposed location is characterized by dry grass patches. No endangered species or sensitive habitats were observed during the field visit.

5.3.4 Socio-economic Environment

The proposed ATC site is served by education and health facilities within the headquarters of Bukombe DC.

(i) Livelihoods: Crop farming, especially cotton, cassava, paddy, maize, sweet potatoes and sorghum are the main crops cultivated in the district. People also practice livestock rearing, small-scale mining, beekeeping, and small-scale industry and trades.

(ii) Land use and Land Cover: The site is currently used for cattle and goat grazing. There are few temporary structures developed by users of the temporary livestock market that operates there every month. These sheds are used by traders who visit the area during the event. Warehouses used to store cotton and also paddy were also evident.

(iii) Land Tenure: The land has been zoned for agricultural activities and investment. Customary tenure is common in Tanzania for many rural areas. The land belongs to the village council but there is no land title because it had not been officially surveyed.

(iv) Energy: Electricity is supplied from the TANESCO main line and passes along the site.

(v) Water Supply: Piped water is available for household usage. A more reliable supply of water will be necessary for ATC operations and the envisaged influx of people.

(vi) Markets: Small-scale marketing of livestock and crops is practiced through local auctions and markets. There is a growing potential in the marketing legumes, given the rising demand. Although agro-processing is almost absent, currently raw and semi-processed cassava is exported in large quantities to neighbouring countries (Burundi) and other regions such as Dar es Salaam.⁴

(vii) Connectivity: Road Transport and Infrastructure: The proposed site is close to the highway, hence, the connection by road to and from the proposed ATC site is good. Being in proximity to the district administrative headquarters, the site enjoys availability of and power supply. The mobile telephone network is the common means for telecommunications.

(viii) Waste Management and Sanitation: These are based on the traditional system however, the plan in the proposed ATC design will charge of this during the construction.

(ix) Indigenous Peoples: The main residents of the area within the catchment of the project site are mix of Wasukuma, Wasumbwa, Wazinza and Waha people.

(x) Investment Plans: Bukombe district had plans for investing in agro-processing industry. The agreed land use plan for the proposed ATC site is agricultural and livestock development process with warehouses and livestock processing area.

⁴ Geita Regional Investment Profile, 2019.

6.0 POTENTIAL IMPACTS AND IMPACT ANALYSIS

This chapter presents the analysis of the potential impacts as a result from the project implementation and which have been identified by type, phase, duration and possibility of reversibility. Both positive and a few negative issues and concerns were raised by Stakeholders on the proposed projects to the communities and the surrounding environment. On the overall, benefits were envisaged in terms of increased employment opportunities, enhanced agri-business for local livelihoods and incomes, improved quality of local products due to the possibilities of more intensive extension and outreach.

Social-related concerns were obtained from stakeholder consultations and in all phases, the most important concern was related to employment and livelihood opportunities, but also Gender-related abuses that could be experienced in all phases.

6.1 Potential Positive impacts

Table 6.1: Positive impacts

	Type of Impact	Duration		Reversibility	
		Short term	Long term	Yes	No
Phase: Mobilization					
1	Potential employment opportunities	✓			
Phase: Construction					
1	Potential employment opportunities		✓		✓
2	Enhanced farming and livestock keeping skills		✓		✓
3	Enhanced women's empowerment		✓		✓
4	Advanced trade linkages		✓		✓
5	Enhanced District economy and incomes		✓		✓
Phase: Operation					
1	Potential employment opportunities		✓		✓
2	Enhanced farming and livestock keeping skills		✓		✓
3	Enhanced women's empowerment		✓		✓
4	Advanced trade linkages		✓		✓
5	Enhanced District economy and incomes		✓		✓
Phase: Decommissioning					
1	Enhanced farming and livestock keeping skills		✓		✓

2	Enhanced women's empowerment		✓		✓
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The potential negative impacts are largely envisaged during the construction and operational phases as illustrated in Table 6.2.

6.2 Potential negative impacts

Given the nature of the project environment and locations, it is not expected that serious negative impacts such as resettlement and loss of livelihoods will be experienced due to land acquisition. The environmental related negative impacts are expected during the construction phase and operational phases. It is expected that impacts on the physical landscape will be significant because of construction of facilities for the ATCs, and minor access roads that branch off from the main highways to the actual facility sites. The possibility of disturbance to flora and fauna and existing water sources is highly likely during these stages.

Table 6.2: Negative impacts

	Type of Impact	Duration		Reversibility	
		Short term	Long term	Yes	No
Phase: Mobilization					
1	Limitations in access to employment	✓		✓	
Phase: Construction					
1	Limitations in access to employment	✓		✓	
2	Conflict/competition in basic resources threatening sustainable water access/supply for project and surrounding communities	✓		✓	
3	Dust pollution during construction phase	✓			
4	Bio-diversity loss (degradation of vegetation and disturbance of insects)		✓	✓	
5	Increase in waste generation (solid, liquid)		✓		✓
6	Contamination of water sources	✓		✓	✓
7	Spread of infectious diseases – HIV, STIs		✓	✓	
8	Gender-based Violence (GBV)		✓	✓	
9	Child abuse		✓	✓	
10	Worker's health and safety		✓	✓	
Phase: Operations					
1	Limitations in access to employment		✓	✓	
2	Conflict/competition in basic resources threatening sustainable water access/supply for project and surrounding communities		✓	✓	

3	Decline in business by some traders		✓	✓	
	Loss of competitive edge by local producers		✓	✓	
4	Environmental pollution due to increased agricultural production activities – increased chemical use, etc		✓	✓	
5	Bio-diversity loss (degradation of vegetation and disturbance of insects)		✓	✓	
6	Increase in waste generation (solid, liquid)		✓	✓	
7	Contamination of water sources		✓	✓	
8	Spread of animal pathogens		✓	✓	
9	Potential of aflatoxins in maize		✓	✓	
10	Spread of infectious diseases – HIV, STIs		✓	✓	
11	Limitations in access to employment Gender-based Violence (GBV)		✓	✓	
12	Child abuse		✓	✓	
13	Workers health and safety		✓	✓	
			✓	✓	
Phase: Decommissioning					
1	Limitations in access to employment		✓	✓	

6.3 ANALYSIS OF IMPACTS

An in-depth analysis of the identified impacts indicate that some impacts may generate from the local social and economic setting, which may in many ways have significant costs on the social, economic and environmental settings related to the proposed ATC projects. Other impacts are phase specific, but each has different levels of significance indicating that those most severe demand attention for the sustainability of the project. The significance of these impacts is summarized in Table 5.3.

Table 6.3: Impact assessment

Impact	Description	Impact assessment
Potential employment opportunities	<ul style="list-style-type: none"> ▪ It is envisaged that employment opportunities will increase for local communities during both construction and operational phases. This will be mostly in manual, skilled and unskilled work (excavation, security guards, cleaners). ▪ Technical works (plant/machine operators) will require training, capacity building. 	Significant impact, particularly on individual and local economies

Enhanced farming and livestock keeping skills	<ul style="list-style-type: none"> The proposed strategy for extending extension services to local producers will enhance their skills and eventually their competitiveness in terms of supplying quality products in the long run. 	Significant
Enhanced women's empowerment	<ul style="list-style-type: none"> Women's trades such as in food vending and food processing will have a larger market/clientele during both project construction and operational phases. This opportunity will increase their incomes and ability to enhance their livelihood status. 	Significant
Advanced trade linkages	<ul style="list-style-type: none"> There is the potential of increased involvement of local traders in the value chain associated with ATCs 	Significant
Enhanced District economy and incomes	<ul style="list-style-type: none"> Once project management structures are clearly shared, District/Municipal authorities will receive revenues from the ATC operations 	Significant
Limitations in access to employment	<ul style="list-style-type: none"> Possibility of favouritism or discrimination in recruitment which may affect local people's opportunity for employment within the ATCs' catchment. This may be because of recruitment policies, or, targeting of individuals with special skills. 	Significant impact, could affect social acceptability of project, threaten security
Conflict/competition in basic resources	<ul style="list-style-type: none"> Project development may threaten availability or water access/supply for project and surrounding communities 	Significant, during both construction and operational phases
Decline in business by some traders	<ul style="list-style-type: none"> Possibility of more attractive terms of trade offered by the ATC facility can minimize the ability of locally established private entrepreneurs to get adequate supply of products for their business 	Not significant, will depend on the conduciveness of business run by the ATC
Loss of competitive edge by local producers	<ul style="list-style-type: none"> The degree of quality demanded by the ATC may shelve out certain products and hence the incomes of local producers who cannot maintain certain standards. 	Medium impact, can be mitigated by concerted extension services to producers
Dust pollution during construction phase	<ul style="list-style-type: none"> Frequent movement of construction vehicles and piling of construction materials, sand, gravel will definitely cause dust emission beyond normal levels. 	Significant, but short term,

Bio-diversity loss (degradation of vegetation and disturbance of insects)	<ul style="list-style-type: none"> Vegetation clearance during construction phase is inevitable given the proposed designs of the facilities. This will definitely disturb the natural environment and fauna dependent on it (Ng'ombe, Misungwi). 	Significant, low scale depending on area to be covered by the facility.
Increased road traffic	<ul style="list-style-type: none"> Increased volume of vehicles going in and out of the facility to bring products or transport products to the APH is expected particularly on the access road to the facility. Depending on volume of traffic this may impact on the safety of traders and residents. 	Low significance,
Increase in waste generation (solid, liquid)	<ul style="list-style-type: none"> A large volume of solid and liquid waste is likely to be generated during the operational phase, and is likely to increase as the volume of products also increases over time. This includes waste water for processing. 	Significant,
Spread of animal pathogens	<ul style="list-style-type: none"> Transmission of diseases from livestock to humans is likely to occur especially if livestock are not effectively immunized. The probability is greater when increased volume of livestock are brought to the facility premises. 	Significant, small-scale
Potential of aflatoxins in maize	<ul style="list-style-type: none"> Poor quality of storage facilities at initial collection points (household and ACs) may expose harvested produce to aflatoxin contamination 	Significant, small-scale
Contamination of water sources	<ul style="list-style-type: none"> Accidental spillage of liquid waste, solid matter or facility debris into water sources 	Likely to occur during both construction and operational phases
Spread of infectious diseases – HIV, STIs	<ul style="list-style-type: none"> Population increase, increase in money transactions due to increase in trade and other opportunities may encourage multiplication of transactional relationships and sex. Possibility of lowly-resourced females to succumb to unsafe sex is likely. 	May occur during both construction and operational phases
Gender-based violence (GBV)	<ul style="list-style-type: none"> The abuse of women and young girls is likely to happen in the manner of sexual abuse or sexual exploitation. 	Medium intensity because it may be mitigated by sensitization and punitive action
Child abuse	<ul style="list-style-type: none"> There is a high likelihood of individuals taking advantage of children seeking 	Medium intensity because it may be mitigated by

	<p>employment in an environment of lucrative business interaction such as that expected of the ATCs. This is because they are easier to exploit.</p>	<p>sensitization and punitive action</p>
<p>Occupational and Workers health</p>	<ul style="list-style-type: none"> ▪ Project (facility) workers may be exposed to a number of health and safety hazards during both the construction and operation phase due to work-related hazards, including pollution, or accidents. ▪ There is also the possibility that other individuals may be affected by pollution owing to the increase in number of products transacted within the facility's catchment. 	<p>Significant, depending on the quality of safety measures put in place.</p>

7.0 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

This chapter presents the Environmental and Social Management Plan (ESMP) which is drawn in line with the Government of Tanzania's policy and legal considerations to guide the implementation of projects and mitigate arising environmental and social impacts. The ESMP also fulfils the lender's, the AfDB's environmental and social safeguards policy on borrower requirements to prepare a framework for Environmental and Social Management Plan (ESMP).

The ESMP presents recommendations for mitigation and monitoring measures to address the envisaged negative impacts expected to be generated in the development of the proposed ATC projects. The proposed mitigation measures is based on the assessment of the ESIA process whose analysis is presented in Table 7.1. It is necessary that these mitigation measures are integrated in the implementation of the different phases of the project, that is project mobilization, construction and operation phases, and decommissioning phase. The aspects of this management plan should be incorporated in the detailed engineering design and be part of the Bidding documents. The estimated costs for implementing the mitigation measures are just indicative to enable project proponent budget the necessary funds.

The objective of this ESMP is to describe measures to be followed by the main parties involved in the implementation of the ATC projects accordingly. Generally, the objective of the ESMP is to guide the Contractor, the Project Management Team and other implementing partners to adhere to the following:

- (i) Comply with applicable national policy, legal and institutional procedures as provided by the EMA (2004), and the AfDB environmental and social safeguard standards;
- (ii) Provide relevant and applicable mitigation measures in order to prevent, minimize or mitigate negative impacts
- (iii) Enhance the intended benefits of the ATC projects to the community and nation by ensuring that envisaged impacts on the biophysical and social environment are avoided during project implementation.

Table 7.1: Environmental and Social Management Plan

Anticipated impact	Proposed measures	Mitigation	Monitoring indicators	Responsible institution	Cost estimate (USD)
Mobilization phase					
Employment opportunities					
Incompatible expectations on project ownership among stakeholders	<ul style="list-style-type: none"> Stakeholder consultations regarding project 		Public awareness and sensitization activities on project	PMOs	Not indicated (<i>ni</i>)
	<ul style="list-style-type: none"> 				
Anticipated impact	Proposed Mitigation measures	Mitigation	Monitoring indicators	Responsible institution	Cost estimate (USD)
Construction Phase					
Land use changes in project site	<ul style="list-style-type: none"> Designation of alternative passage 		Facility passage outlined for use of vehicles, community paths outlined	Project Supervisor Local Village/Mtaa governments	<i>ni</i>
Limited access to employment:	<ul style="list-style-type: none"> Design recruitment strategy with respective District and Ward/ Village council to ensure local people are given priority Technical positions to be recruited on professional merit, with special consideration of local experts Recruitment strategy to stipulate 50% of all non-professional occupations to be given to females 		Transparent recruitment strategy in place which stipulated gender considerations, locality and skills	Project Supervisor Local Village/Mtaa governments	<i>ni</i>
Conflict/competition in basic resources threatening sustainable water access/supply for project and surrounding communities	<ul style="list-style-type: none"> Establish secure and separate water supply connection with Municipal Water supply source. Project should have its own water source. 		Water supply sources for community and facilities identified. Community-facility platforms for GRM in place and meeting	Municipal water authority	<i>Ni</i>
Dust pollution during	<ul style="list-style-type: none"> Minimize dust generation by using 		Workers and truck divers	Site environmental	<i>Ni</i>

construction phase	<ul style="list-style-type: none"> ▪ sprinklers ▪ Put speed limits to control construction vehicle speed ▪ Workers should use respirators ▪ . 	sensitized on speed	officer Municipal environmental Division	
Bio-diversity loss (degradation of vegetation and disturbance of fauna)	<ul style="list-style-type: none"> ▪ Enhance natural environment by planting indigenous trees, shrubs, and grass around project site. ▪ Ensure re-vegetation around project site, by planting indigenous trees and shrubs to stimulate natural regeneration 	Facility environmental management policy	Site Environmental Officer Ward/District Forestry Division	<i>Ni</i>
Increase in waste generation (solid, liquid)	<ul style="list-style-type: none"> ▪ Ensure that effective solid waste collection and disposal systems are in place during operations, ▪ Ensure that all waste water is treated before disposal ▪ Ensure debris generated during construction is disposed off appropriately to minimize pollution 	Facility Waste management policy Sensitization of workers on environmentally sound waste disposal	Facility supervisor	
Contamination of water sources	<ul style="list-style-type: none"> ▪ Construct facilities for storage of contaminated water. Maintain facilities to prevent overflow ▪ Ensure waste and other debris is not disposed near water sources. ▪ Protect nearby water sources, rivers and streams from degradation due to project activities. 	Protocols for water source protection in place and disseminated	Project supervisor Municipal Environmental Division	<i>Ni</i>
Spread of infectious diseases – HIV, STIs	<ul style="list-style-type: none"> ▪ Sensitize workers and community members on protective sex 	Frequency of sensitization campaigns on infectious diseases and	Local Health facilities Municipal Community Development	<i>Ni</i>

		material distributed	Officer (CDO)	
Gender-based violence (GBV)	<ul style="list-style-type: none"> ▪ Introduce anti-GBV protocols in workers' employment contracts ▪ Promote GBV support services with local Community Development (CD) and Social Welfare (SW) authorities ▪ Support community sensitization on GBV and Violence against Women and Children 	<p>Frequency of Sensitization seminars to workers and Community on GBV</p> <p>Facility anti-GBV policy</p>	Project authorities CD and SW authorities	<i>Ni</i>
Child abuse	<ul style="list-style-type: none"> ▪ Introduce child abuse protocols in workers' employment contracts ▪ Promote GBV support services with local Community Development and Social Welfare authorities ▪ Support community sensitization on GBV and Violence against Women and Children 	Facility Child protection policy	Project authorities CD and SW authorities	<i>Ni</i>
Occupational and Workers health	<ul style="list-style-type: none"> ▪ Establish workplace health and safety procedures and train workers and management to avoid, minimize exposure to infections and accidents. ▪ Provide quality respiratory protection to capture dust and micro-organisms ▪ Ensure proper storage of chemicals within production or processing sites ▪ Ensure that first aid facilities are in place in designated 	<p>Frequency of training sessions on workplace health and safety standards</p> <p>Workplace occupational health and safety policy in place</p> <p>First Aid Kit in accessible locations within facility</p>	Project Supervisor Municipal OSHA	<i>Ni</i>

	<ul style="list-style-type: none"> locations and easily accessible. Design training and sensitization sessions to the general public on the possible health hazards generated by project operations and how they can mitigate or avoid them. 			
	<ul style="list-style-type: none"> 			
OPERATIONAL PHASE				
Anticipated impact	Proposed Mitigation measures	Monitoring indicators	Responsible institution	Cost estimate (USD)
	<ul style="list-style-type: none"> 			
Limited access to employment:	<ul style="list-style-type: none"> Design recruitment strategy with respective District and Ward/ Village council to ensure local people are given priority Technical positions to be recruited on professional merit, with special consideration of local experts Recruitment strategy to stipulate 50% of all non-professional occupations to be given to females 	Transparent recruitment strategy in place which stipulated gender considerations, locality and skills	Project Supervisor Local Village/Mtaa governments	Ni
Conflict/competition in basic resources threatening sustainable water access/supply for project and surrounding communities	<ul style="list-style-type: none"> Establish secure and separate water supply connection with Municipal Water supply source. Project should have its own water source. 	Water supply sources for community and facilities identified	Municipal water authority	Ni
Decline in business by some traders	<ul style="list-style-type: none"> Establish trading and marketing linkages along the value chain of each product Deliberate promotion of local private investors to 	Equal rights policy in trade and procurement Mobilization for networking and farmers' and Livestock keepers	District Councils Municipal Trade Sections	Ni

	collaborate in the marketing linkages of targeted products to ATCs	organizations or platforms		
Competitive edge by local producers	<ul style="list-style-type: none"> ▪ Establish local centers for developing skills such as value addition for crops and livestock for local producers, and women. ▪ Link collection with farm-based extension to improve quality of produce 	Capacity building and training to local producers	District Council Agricultural and Livestock Training Centers in catchment	<i>Ni</i>
Dust pollution during construction phase	<ul style="list-style-type: none"> ▪ Minimize dust generation by using sprinklers ▪ Put speed limits to control construction vehicle speed ▪ Workers should use respirators ▪ Ensure debris generated during construction is disposed off appropriately to minimize pollution. 	Workers and truck divers sensitized on speed	Site environmental officer Municipal environmental Division	<i>Ni</i>
Bio-diversity loss (degradation of vegetation and disturbance of fauna)	<ul style="list-style-type: none"> ▪ Enhance natural environment by planting indigenous trees, shrubs, and grass around project site. ▪ Ensure re-vegetation around project site, by planting indigenous trees and shrubs to stimulate natural regeneration 	Facility environmental management policy	Site Environmental Officer Ward/District Forestry Division	<i>Ni</i>
Increase in waste generation (solid, liquid)	<ul style="list-style-type: none"> ▪ Ensure that effective solid waste collection and disposal systems are in place during operations, ▪ Ensure that all waste water is treated before disposal ▪ Ensure debris generated during construction is 	Facility Waste management policy Sensitization of workers on environmentally sound waste disposal	Facility supervisor	<i>Ni</i>

	disposed off appropriately to minimize pollution			
Spread of animal pathogens	<ul style="list-style-type: none"> ▪ Establish Veterinary Services Unit in collaboration with District Council to ensure daily inspection and treatment outside and within facility ▪ Establish sanitization strategy ▪ Train local veterinary assistants 	<p>Facility policy on handling livestock</p> <p>Training of livestock keepers</p>	Municipal Veterinary Division	<i>Ni</i>
Potential of aflatoxins in maize	<ul style="list-style-type: none"> ▪ Educate farmers and monitor the process and quality of all harvesting, handling and drying equipment and storage bins prior to harvest, and during post -harvest to control contamination of aflatoxins. 	Household level training on proper crop storage	Municipal Agricultural Officer, Municipal CDO	<i>Ni</i>
Contamination of water sources	<ul style="list-style-type: none"> ▪ Construct facilities for storage of contaminated water. Maintain facilities to prevent overflow ▪ Ensure waste and other debris is not disposed near water sources. ▪ Protect nearby water sources, rivers and streams from degradation due to project activities. 	Protocols for water source protection in place and disseminated	Project supervisor Municipal Environmental Division	<i>Ni</i>
Spread of infectious diseases – HIV, STIs	<ul style="list-style-type: none"> ▪ Sensitize workers and community members on protective sex 	Frequency of sensitization campaigns on infectious diseases and material distributed	Local Health facilities Municipal Community Development Officer (CDO)	<i>Ni</i>
Gender-based violence (GBV)	<ul style="list-style-type: none"> ▪ Introduce anti-GBV protocols in workers' employment contracts ▪ Promote GBV support services 	Frequency of Sensitization seminars to workers and Community on GBV	Project authorities CD and SW authorities	<i>Ni</i>

	<p>with local Community Development (CD) and Social Welfare (SW) authorities</p> <ul style="list-style-type: none"> Support community sensitization on GBV and Violence against Women and Children 	Facility anti-GBV policy		
Child abuse	<ul style="list-style-type: none"> Introduce child abuse protocols in workers' employment contracts Promote GBV support services with local Community Development and Social Welfare authorities Support community sensitization on GBV and Violence against Women and Children 	Facility child protection policy	Project authorities CD and SW authorities	<i>Ni</i>
Occupational and Workers health	<ul style="list-style-type: none"> Establish workplace health and safety procedures and train workers and management to avoid, minimize exposure to infections and accidents. Provide quality respiratory protection to capture dust and micro-organisms Ensure proper storage of chemicals within production or processing sites Ensure that first aid facilities are in place in designated locations and easily accessible. Design training and sensitization sessions to the general public on the possible health hazards generated by project 	<p>Frequency of training sessions on workplace health and safety standards</p> <p>Workplace occupational health and safety policy in place</p> <p>First Aid Kit in accessible locations within facility</p>	Project Supervisor Municipal OSHA	

	operations and how they can mitigate or avoid them.			
	▪			
DECOMMISSIONING PHASE				
Anticipated impact	Proposed Mitigation measures	Monitoring indicators	Responsible institution	Cost estimate (USD)
Loss of employment due to cessation of contracts	<ul style="list-style-type: none"> Ensure facility workers are prepared for decommissioning 	Trainings on alternative income generation to workers	Municipal Labour Office	<i>ni</i>
Inadequate waste management (debris from facilities)	<ul style="list-style-type: none"> Ensure that effective solid waste collection and disposal systems are in place during operations, Ensure that all waste water is treated before disposal 	Facility waste management protocol to include decommissioning phase	Facility supervisor	<i>ni</i>
TOTAL COSTS (projected)	▪			22.6million

7.1. Proposed budget for ESMP implementation

The ESMP implementation budget refers to all costs that will be incurred to implement the recommendations for mitigating or addressing environmental and social concerns raised in a ESIA process. This budget will have to consider issues of Training and Capacity building; Awareness raising and Monitoring aspects as proposed in the ESMP.

The budget for the implementation of this project’s ESMP is hereby estimated on arbitrary considerations because of the difficulty of making real estimates at this stage. Hence for this ESIA, 5% of the project budget **mentioned to be USD 459 million (of which USD 343 million is expected from the Private Sector)** is given as a practice to cover mitigation costs. This is estimated to USD 22.6 million

7.2 Environmental Monitoring Plan

This monitoring plan outlined here is developed in accordance to the ESIA guidelines that demands that mitigation of impacts should be monitored to ensure ethically and environmentally sound practices are ensured during project implementation, and for sustainability of project operations. The overall objective of this monitoring plan is to ensure that the proposed mitigation measures are implemented for project viability. The aim of the Monitoring Plan is also to promote the effectiveness of measures that will be taken to mitigate or enhance project related impacts. Specifically, the monitoring activities will be conducted to:

- Ensure regulatory requirements and national environmental and safety standards are adhered to,
- Verify the effectiveness of mitigation measures proposed
- Give reliable projections on the development of mitigation measures across time
- Provide timely information on environmental and social impacts
- Provide information to other projects of similar settings.

It is recommended that the activities and indicators recommended for monitoring will be conducted in each phase as follows:

Table 7.2: Monitoring indicators checklist

	Monitoring activity	Phase		
		Mobilization	Construction	Operational
1	Recruitment protocols to ensure employment of local people within the immediate catchment are developed and followed, including employment quota for females.	✓	✓	✓
2	Capacity enhancing skills for quality produce are in place for local traders, farmers and livestock keepers and training programmes developed.		✓	✓
3	Regular facility and environmental sanitization systems are in place to prevent spread of animal pathogens		✓	✓
4	Gender-sensitive employment protocols have been integrated in employment contracts and sensitization programme is in place	✓	✓	✓
5	Planting and maintenance of trees and grasses are done around project site		✓	✓
6	Speed warning and other hazard warning signs to be placed in all strategic and accessible areas		✓	✓
7	Training programmes for facility employees on GBV, Child protection, health hazards and safety at work in place		✓	✓
8	Facility protocols on Waste management, Water source protection, GBV and Child protection		✓	✓

Since the ATCs will be partly a government run enterprise, monitoring of these activities will be the responsibility of the Project/Facility Supervisor and respective Municipal authorities. They will also be responsible to design routine monitoring and reporting system to verify the implementation of effective environmental and social systems.

The Facility supervisor will in collaboration with local Municipal authorities to conduct the following activities:

- (i) Inspection on a regular basis to check if mitigation measures are implemented
- (ii) Compliance monitoring to check if mitigation measures do not comply to environmental and social safety standards.

8.0 STAKEHOLDER ENGAGEMENT AND ANALYSIS

This chapter presents the findings drawn from stakeholder consultations which have been used to inform the impact identification and analysis, and subsequently the mitigation and monitoring plans.

8.1 Stakeholder Consultations: Different methods were employed by the ESIA team during the stakeholder’s consultation process. These include consultative and public participatory meetings; One-to-One interviews and focus group discussion. Consultations were held with Regional and District level functionaries in the relevant technical divisions, and with community leaders. Also, public consultative meetings in the villages were conducted to probe for the environmental, social, and economic implications of the proposed project.

8.2 Identified Stakeholders

Identified stakeholders included people and groups who are likely to interact with the SAPZ project. Two broad categories of stakeholders are identified: (i) stakeholders affected or likely to be affected by the SAPZ project directly or indirectly, positively or negatively; (ii) stakeholders that may have interest in the SAPZ project. (iii) individuals or groups who due to their activities may likely be affected negatively or positively from the project.

Table 8.1: Stakeholders identified

	Category/Level	Institution/Organization and location
1	Government Ministries	Prime Minister’s office Department of Community Development (MoHCDGEC)
2	Regional Administrative Secretariat, ▪ Mwanza, Tabora and Geita	Technical persons - Economic and Productive Sector [Livestock, Agriculture, Fisheries, Trade, Environment) - Community Development Division
3	District Council Authorities ▪ Misungwi, Nzega, Bukombe	District Executive Director (DED) Technical persons of the District Management Teams
4	Community level Ward and Village leadership and members	Ng’ombe, Ibologero, Bukombe community members
5	Individual stakeholders	Itinerant livestock traders (Ng’ombe site); Food processing establishments (Ibologero)

The consultations took into considerations precautions related to COVID-19 protocols (in light of the threat of another wave of infections). One-to-one interviews and focus group discussions observed the required distance. In other case, telephone interviews were used.

The main objectives of these stakeholder consultations were to:

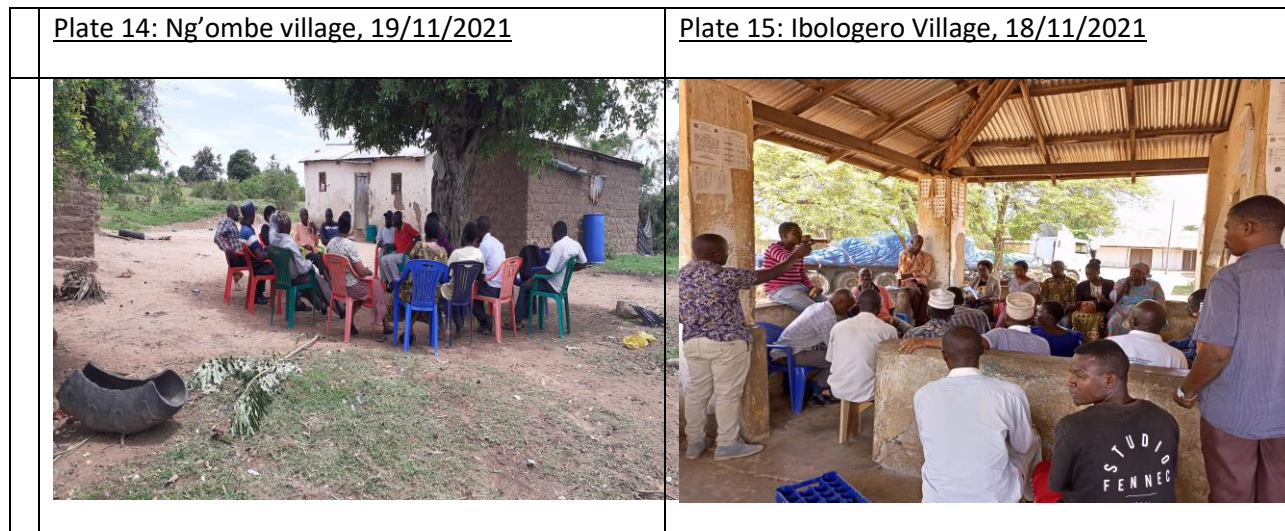
- (i) Further consult with Regional and District level stakeholders on the objectives of the projects
- (ii) introduce the projects to community-level stakeholders and potential affected persons;
- (iii) document stakeholders' concerns and opinions on the project proposals;
- (iv) elaborate and clarify issues regarding stakeholder expectations in relation to project intentions

8.3 Information Dissemination and Disclosure Mechanisms

Information sharing was organized according to each stakeholder interaction, thus depending on interests and stakes. Specifically, the following issues were disseminated and/or disclosed to all stakeholders.

- (i) Project objectives, scope and activities; expected outcomes and benefits,
- (ii) Project's potential risks and impacts
- (iii) Interventions to mitigate impacts & address the gaps
- (iv) Elements of the existing environmental and social management policy, legal, guidelines, directives, procedures other management instruments (impacts assessments, standards, economic, education & awareness, grievance mechanism procedure etc.)

Plate : Stakeholder's meetings



8.4 Stakeholders' views, expectations and concerns

8.4.1 Stakeholders' views – Ngombe ATC

	Stakeholder level	Views, expectations and concerns
1	Mwanza Regional Secretariat	<ul style="list-style-type: none"> ▪ The biggest challenge with Mwanza is securing a reliable market for crops and livestock, and for further processing for value addition. Having ATCs supported by a network of ACs within the region will offer the desired opportunity for local people. ATCs will also promote innovativeness in local production systems. ▪ Concerned on whether commitment letters from respective District Council have been obtained on the use of these areas in the context of multiple or concurrent development plans (eg: development of school infrastructure or local trading centres). • The Ng'ombe ATC is ideally located in an area already with marketing and semi-processing experience. Ng'ombe ATC is also ideally located to receive livestock from Kisesa livestock keeping centers. It will thus have positive implications in the following ways: <ul style="list-style-type: none"> ▪ Boost the existing livestock market by attracting a higher supply of livestock and hence more competitive prices ▪ Improve crop production. ▪ Stimulating the development of other social services in the district including the road network, and other services such as education, health care <p>However: It is important to:</p> <ul style="list-style-type: none"> ▪ Facilitate local stakeholder involvement in project development, after these consultations ▪ Protect water sources to prevent pollution during project development, and to minimize conflict with local users
2	Misungwi District Council	<p>The ATC project is welcomed and will add to the Council 's efforts to enhance the local economy and livelihood standards of the people</p> <ul style="list-style-type: none"> ▪ Ng'ombe ATC also has the potential to become an exemplar facility for training in quality crop and livestock

		<p>production and marketing because of its location in proximity to training centres (in Misungwi, Ukiriguru, Nyegezi etc) that can be accessible for training farmers and livestock keepers in modern methods for their economic benefit. The government should make sure that these centres are utilized to support the ATC facility</p> <ul style="list-style-type: none"> ▪ General concerns ▪ Ownership status of areas currently used by surrounding population however temporarily, has allowed user access some which is sanctioned by surrounding local government some which is not. It gives indications of potential grievances. ▪ The importance of communicating project intentions and project area to local government authorities and surrounding community to minimize possibility of conflicts in local development plans. ▪ Crop marketing and semi-processing in the District has been conducted widely, but is of small-scale and sometimes of low quality. The ATC will come to fill a felt need in the entire catchment. ▪ One ATC will not however suffice the demand, given the envisaged increase in volume of produce from its catchment of ACs ▪ Under the envisaged PPP operations, it will be important that decision making on pricing or market operations are harmonized because experience shows that the government sector usually lags behind while the private sector operates on competitive basis, and changes as the market environment changes. The concern was that people may be discouraged and resort to the traditional traders, semi-processors for their products.
3	<p>Community level consultations</p> <p>Ng'ombe Ward and Ng'ombe Village</p>	<ul style="list-style-type: none"> ▪ Expects a secure market for local produce ▪ Stimulate production of crops whose markets are faltering in the area ▪ Ng'ombe location is one of the major centres of livestock marketing in Misungwi, and attracts traders from different corners. Successful operations of the ATC will thus depend

		<p>on how attractive it is to the surrounding ACs. <i>Kiwanda kikilipa, mazoea yatajengeka</i></p> <ul style="list-style-type: none"> ▪ The community will benefit greatly from the facility and will boost the crop and livestock trade, especially of those products whose market is struggling, such as cassava. <i>kunde</i>. ▪ Products such as skins/hides are left to rot because they do not fetch a good prices. They are purchased with throw away prices. A semi-processing centre is thus a welcome opportunity for such products in the locality. ▪ The ATC should have facilities that enable local producers to add value to their produce, such as modern livestock fattening techniques. ▪ The ATC should offer better prices of goods than private traders, since even for livestock, we encounter the same traders every auction, who take advantage of the situation to lower prices. <p>Concerns</p> <ul style="list-style-type: none"> ▪ The need to understand better how different this ATC will be to local transactions, because people are used to crop collection and storage, especially for rice and sunflower, which they store for a price. ▪ Final selection of project location should involve local communities
4	Individual operators	<ul style="list-style-type: none"> ▪ Livestock traders do not prefer the Ng'ombe auction because the price of livestock is too high. We prefer primary livestock auctions such as at Bungurwa where we trek for 12 hrs to Ng'ombe village, only to have access to livestock traders, not middle persons (madalali) ▪ Currently Ng'ombe area is important for feeding and connecting to Traders who transport livestock to Dar , or who connect you to transport and travels with them to Dar and sell them. The ATC will not offer this opportunity, unless the price is right. ▪ Transport cost to Dar is 50,000/- per head and one head of cattle will costs 700,000 at the Dar market ▪ Supportive of the Ngombe ATC because we expect a

	<p>better price than using Middle persons</p> <ul style="list-style-type: none"> ▪ The centre could reduce the cheating of prices on milk, meat and livestock by middle persons (madalali). If a head of cattle will be sold on weight, not a unit animal, the price will be higher. ▪ Livestock traders will get used to selling at one centre identified by the government but it may not be enough, and it may end up being bureaucratic ▪ Local populations will also benefit more from employment opportunities at the ATC eg: security guards
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8.4.2 Stakeholders' views, Ibologero ATC

	Stakeholder level	Views, expectations and concerns
1	TABORA Regional Administrative Secretary (RAS) – Economic and productive section	<p>The region has a long experience in cotton processing and oil ginneries. TABOTEX industry has stopped production because of inadequate supply of raw materials although the region produces a lot of cotton. Most produce is taken by ginneries. The region also has identified 5 Acres at Mbutu for the construction of a cotton processing factory. How will the ATC make a difference in maintaining sustainable cotton supply.</p> <p>Local producers (farmers and livestock keepers) need to be supported to enhance their level of production.</p> <p>More information and sensitization on the SAPZ and ATC to local producers is needed so that they are prepared to engage in the process.</p> <p>Some marketing systems do not attract producers or traders because of low prices. The ATC should offer attractive prices to sustain supply.</p> <p>Population increase and poor land use systems are affecting crop production and causing conflicts between livestock keepers and farmers in some areas. For a sustainable supply to ACs and then ATCs such conflicts need to be addressed.</p>
2	Igunga District Council	<p>Clarification is needed on the role of the District Council in the operations of the project</p> <p>The land which has been identified for the proposed ATC site has been left idle for too long, and the Ward government has taken a portion of it for the construction of a Secondary school and a Primary</p>

		<p>School. A land-use plan for the proposed ATC site should thus be developed as soon as possible so that activities are harmonized.</p> <p>The ATC will make an important intervention to social development, and may change local perceptions on wealth (as having many heads of cattle), and to translate this wealth into assets for further investment.</p> <p>The local cotton marketing system may offer the greatest competition to the ATC. It will be necessary to clarify how the facility will link up with the existing 52 AMCOS.</p>
		<p>The Centre should give first priority to the improvement of quality products by serving the current needs of livestock keepers and farmers which include:</p> <ul style="list-style-type: none"> ▪ Establishing efficient veterinary services that are accessible widely ▪ Training on proper livestock feeding practices, including water sources for livestock to cope with long dry periods in the District
	Ibologero Community level	<p>Generally, it was appreciated that the ATC would facilitate the following advantages:</p> <ul style="list-style-type: none"> ▪ Increase in the volume of trade due to increased number of livestock to be traded ▪ Improved animal husbandry because livestock keepers will be compelled to adopt better husbandry methods for their stock to be competitive ▪ A better price for livestock <p>Land use plan for the proposed site should be urgently developed so that other uses are accommodated – such as the two schools.</p>
		<p>Clarity is needed on the structure and technology to be installed for the ATC, in consideration of the different products indicated in the project feasibility plan.</p> <ul style="list-style-type: none"> ▪ More clarity is needed on the actual project activities so that people can appreciate the added advantage of having an ATC within their locality ▪ More information was needed on the marketing structure, eg who will sell to whom? ▪ How will the facility accommodate different products that demand different management systems (eg: sunflower, cotton, rice and livestock at the same facility) ▪ Increase the number of Extension staff

Plate 16: Bukombe: Stakeholder consultations 18/11/2021



8.4.3 Stakeholder's views – Bukombe ATC

Stakeholder level	Views, expectations and concerns
Geita Regional Secretariat	<ul style="list-style-type: none"> • The proposal is acceptable; it seems to have been delayed. • It is increase sustainable markets for targeted raw materials. • Stable prices for raw materials. • Engage all stakeholders effectively to understand the approach.
Bukombe District Council	<ul style="list-style-type: none"> • Approach highly acceptable and appropriate • Device the mechanism for controlling quality of raw materials to be purchased for the industry • Let the Government think for bringing the processing industry in the locality because of abundance of raw materials • Support climate smart agriculture –inputs for biogas, • It will add value to the targeted products • Crop cess as revenue will increase • It will stimulate expansion of agro-production • Risks include increased transportation costs from AC to ATC and APH; • Air Pollution due to increased movement of vehicles
Bukombe Ward/Village	<ul style="list-style-type: none"> • It is highly acceptable and community members have been engaged adequately. • More support should be given to the irrigation system to increase production • The proposed ATC will trigger improved delivery of agro-inputs; • Include Rehabilitation of the charcoal dam which is the source of water for various horticulture activities.

9.0 GRIEVANCE REDRESS MECHANISM (GRM)

This chapter outlines proposals for grievance redress that may be followed in the course of project implementation. It is envisaged that grievances may arise from the different stages of project development and operations, but it is imperative that an amicable understanding is developed for project sustainability and beneficiaries' commitment to its overall objectives. Such grievances may arise, *inter alia*, from the intended beneficiaries' perceptions on wrong-doing, unexpected challenges and constraints, possible GBV-related matters or low benefits contrary from the expected. According to the AfDB, developing a mechanisms to address such grievances is important. A project related Grievance Redress Mechanisms (GRM) is described as a systematic process for receiving, evaluating and facilitating resolution of affected people's project-related concerns, complaints and grievances about the borrower's/client's social and environmental performance on a project

The project developers or proponents are thus obliged to develop a mechanism for receiving, assessing and resolving such grievances. In order to monitor these grievances and mitigate long-term effects, the project will develop a grievance register. The objectives of the Grievance redress mechanisms will thus be as follows:

- Identify a transparent, accessible and gender-sensitive process for grievance redress
- Outline roles and responsibilities of GRM officials
- Outline and publicize the process for receiving, acknowledging, investigation and resolution of grievances
- Maintaining a grievance register for monitoring purposes.

9.1 Establishment of GRM structures

Guidance for the development and implementation of a GRM is provided by the AfDBs (ESIA) Guidelines Notes. Each ATC will have to establish a culturally relevant system of grievance redress, hence this ESIA does not propose a blueprint for all ATC settings. The project GRM needs to be an independent structure that can fully respond to all claims as they arise in a timely manner throughout the implementation of the project.

It is proposed that the following considerations for establishment will be considered:

- Delineating levels of grievance redress from the primary – project level to higher points of referral. This will entail making decisions on a structure, such as Committees
- Identification and appointment of members of the committees focusing on their representativeness (by gender, office), knowledge of the project.
- Delineating terms of reference, rules of operation and roles of each member, and their claimants.

9.2 Implementation of the GRM process

According to the laws of the Government of Tanzania, grievance redress systems exist at all levels from the Village/Mtaa level up to National Structures, such as the Ministry level, and at Industry/Work place level. It is thus recommended that the project implementer/proponent will coordinate with existing structures to establish a project-relevant structure for the ATC projects and be able to make timely attention to any project-related grievance that arises. This is because it may be more effective to share complaints within particular cultural contexts. Such processes will be coordinated by the PMOs but given implementation mandate to local authorities, ie, at the respective District Councils and Village/Mtaa levels.

The process will abide to the following steps:

- Grievances will be tabled the immediate structure to the claimants. The manner of tabling grievances should be locally relevant, where cultural contexts and customs allow. Hence this ESIA does not prescribe a uniform format. However, it will also mean that GRM committee members to be pro-active in reaching out to possible points or issues of conflict to assist those who cannot adequately access GRM committees.
- Assessment of complaint/grievance will be conducted in a transparent manner, involving both parties
- Design or formulate a response
- Monitor outcomes of decisions given on grievance and report on such progress.
- Claimants not satisfied with outcomes will be guided to appeal to other referral points, including courts of law if needed.
- Feedback will be given to claimants at all levels of decision making

9.3 Reporting on GRM outcomes

Each Committee will be required to keep a GRM register that documents all cases and will be the source of monitoring, tracking and reporting. In addition for the projects to have a sustainable and acceptable system for GR, it is recommended that an elaborate Stakeholder Engagement Plan should be drawn at the onset of project activities within which proposals for a realistic GRM will be drawn.

10.0 SUMMARY AND CONCLUSIONS

This ESIA study report presents results of the assessment of the three ATC sites of Ngo'mbe site (in Misungwi District); Ibologero (in Igunga District) and Bukombe (in Bukombe District). The results show that SAPZ-ATC project activities will have several positive and negative impacts on the social, economic and bio-physical environment in the catchments of the proposed project sites.

Positive impacts are expected to be long-term and with potential multiplier effects on the overall social and economic context, with significant national level economic impacts. The major negative impacts will arise from the construction and operational phases of the proposed projects. The study also shows that most negative impacts can be effectively mitigated if measures are put in place on a timely basis. Those impacts that will directly affect people will also be addressed through a grievance redress mechanism which will be fully developed during the proposed stakeholder engagement plan (SEP).

10.1 Recommendations:

It is generally recommended that the project implements the proposed mitigation and monitoring plan in order to minimize extensive adverse impacts on the social and bio-physical environment. However, it is strongly recommended that an ideal management structure to guide operations of the project will be mostly effective in ensuring that these plans are implemented, Hence the following recommendation is made to enhance the viability of the project:

- (i) The management structure of the proposed ATCs should clearly stipulate the contribution, roles and responsibility of the key stakeholders at the project implementation level, who are District/Municipal authorities in order to maintain ownership and commitment in implementing the proposed mitigation and impact enhancement measures.
- (ii) The project should openly disseminate information on the roles and responsibility of community members who are located differently within the crop/livestock products value chain, including the envisaged opportunities for livelihood enhancement to promote accountability and compliance to the SAPZ concept.
- (iii) It is imperative that the ATC projects have long term acceptability and sustainability within their geographical areas of influence and beyond, given the nature of beneficiaries. Hence, it is recommended that project developers should develop a Stakeholder Engagement Plan (SEP) in line with a Grievance Redress Mechanism (GRM) that will address issues demanding consultations, corrections or further referral as need demands.
- (iv) Design mechanisms to monitor the ESMP and the implementation of proposed mitigation measures.

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TERMS OF REFERENCE

UNITED REPUBLIC OF TANZANIA
THE AGRO-INDUSTRIAL DEVELOPMENT PROGRAM,
Standard Terms of Reference
Environmental and Social Impact Analysis

September 2021

1. Introduction

The African Development Bank supports the Agro-industrial Development Program which is a comprehensive program that is geared to create an enabling environment in which the private sector, young men and women will be capacitated to undertake agricultural value additions activities along the entire value chain ecosystem. The latter is expected to improve program beneficiaries' income level as well as address the youth unemployment challenge. The Government of the United Republic of Tanzania (URT) is among the countries on the continent that expressed strong interest in participating in agro-industrialization development through Special Agro-industrial Processing Zones and requested Bank's support for financing.

The main objective of the proposed SAPZ in Tanzania is to support structural transformation of Tanzanian economy through agro-industrialisation with a view to increasing production and productivity, adding value, household income, generating employment, and increasing domestic consumption and exports. Specifically, the program will support the establishment of the integrated Lake Zone Special Agro-industrial Processing Zone comprising: i) a main agro processing hub (APH) located in Shinyanga; ii) three major agricultural transformation centres (ATCs) tentatively located in Geita, Tabora and Mwanza regions; and iii) a network of Aggregations centres (ACs) and Fish Aggregation Centres (FACs) to located in the procurement zones around the ATCs.

In other words, the proposed SAPZ will be developed in accordance with best industry practices and using eco-industrial parks standards. To ensure its social, economic and environmental sustainability, the proposed design will take into account all external dependencies and will seek to (i) establish agro-industrial infrastructure; (ii) build capacity of stakeholders in entrepreneurship; (iii) strengthen institutional capacity and develop innovative marketing incentives; (iv) identify

potential and existing risks for development of sustainable agribusiness; (v) enhance the quality of procurement zone in terms of youth employment and skills development; (vi) create youth employment opportunities; (vii) create feasible business opportunities for SME's; (viii) help towards achieving food security; and (ix) leverage private sector resources for investments within the SAPZ.

The Project will be implemented in selected districts through the development of APH, ATC, AC and FAC with, Shinyanga, Tabora, Geita, Simiyu, Mwanza, Mara, Singida, Kagera, Arusha, Kigoma and Manyara to be considered as procurement zones for the programme. The beneficiaries will include; crop farming households, livestock farm households, fisherfolks, Small and Medium Enterprises (SMEs) involved in crops, livestock and fisheries processing, other agro-allied industries, traders, transporters, consumers, youth & women entrepreneurs, among others. Other beneficiaries are expected to include; agricultural extension workers, research institutions, government institutions, traders; financial institutions and private sector companies dealing in agricultural technologies and inputs; veterinary extension workers, consumers, local government through enhanced revenue, contractors, input suppliers and the general public.

NOTE: see annex one for detailed description of project components, sub-components and activities and annex two for the SAPZ concept note.

Based on the AfDB's quality at entry requirements and in line with the environmental and social assessment procedures (ESAP), the United Republic of Tanzania (the borrower) is required to ensure the proposed program comply with the environmental regulations and policies of the United Republic of Tanzania and the African Development Bank's Integrated Safeguards System.

Hence, the United Republic of Tanzania with support from AfDB, is seeking to engage 3 National Environmental and Social Safeguards Consultants to carry out the detailed Environmental and Social Impact Assessment with respect to the safeguards requirements of the program.

2. Study Description

This being a category 1 project in accordance with the AfDB E&S risk categorization procedures, the consultants will conduct a full Environmental and Social Impact Assessment (ESIA) and prepare an Environmental and Social Management Plans (ESMPs) in accordance with the lenders' policies and Environmental and Social Assessment Procedures. This will comprise all the tasks that are required for a full environmental assessment, as described hereafter. The Consultants will be responsible for gathering, reviewing and analyzing all necessary data and information. Where these are insufficient, the Consultants shall make all practical efforts to produce the missing information/data including professional estimates and predictions based

on the most likely conditions at the project area, reliable information and data from similar situations and conditions, etc.

The Consultants shall characterize the extent and quality of available data and describe the key data gaps and the uncertainties associated with estimates, predictions, and data used from similar situations. The methods of accommodating these gaps and uncertainties in the ESIA should be well stated and presented by the Consultant. When estimated values are used in place of data, the Consultant will be required to provide the uncertainty limits associated with these values and perform an appropriate sensitivity analysis. The work will also include thorough consultations and meetings with all parties concerned affected population or their representatives; local, regional, and national authorities; representatives of the scientific community; NGOs; etc.); in strict accordance with the requirements of the Palestinian Authority the (donor name or other) policies and procedures.

a. structure and scope of the ESIA's

Because of the nature, structure and scope of the proposed activities, the ESA work will be divided into three volumes as follows;

No.	Document	Area of coverage/Scope
1.	ESIA Volume 1	APH & Connectivity Infrastructure
2.	ESIA Volume 2	3 ATC's & Connectivity Infrastructure
3.	ESIA Volume 3	AC's/FAC's & Connectivity Infrastructure

Each of these work streams will be assigned to one individual consultant.

3. Scope of the Consultancy Services

The consultants are expected to undertake investigations on social aspects, economic activities, and conservation of natural resources, historical and anthropological heritages, public consultations and disclosures. The proposed project site and associated facilities will be provided to give a guideline of the facilities to be studied. The scope of services to be undertaken by each Consultant shall include the following tasks.

Task 1. Detailed Desktop Review

The Consultant will review all existing documentation, and any previous feasibility reports, EIA, RAP and ESMP reports. The consultant shall further undertake a detailed study of the proposed (project), mapping on actual map of appropriate scale. The Consultant shall then concisely describe each facility assessed, its geographic, ecological, general layout of facilities including

maps at appropriate scale where necessary information on size, capacity, facilities and services should also be provided

Task 2. Description of the Baseline Environment

The Consultant is required to collect, collate and present baseline information on the environmental characteristics of the existing situation around each facility. This description should involve but not limited to:

- i. Physical environment (topography, land cover, geology, climate and meteorology air quality, hydrology, etc.)
- ii. Biological environment (i.e., flora and fauna types and diversity, endangered species, sensitive habitats etc.)
- iii. Social and cultural environment, including present and projected. Where appropriate (i.e., population, land use, planned development activities, community social structure, employment and labor market, sources and distribution of income, cultural/religious sites and properties, vulnerable groups and indigenous populations etc.)
- iv. Economic activities, agriculture, livestock, fisheries, small scale industries etc.

Task 3. Legislation and Regulatory Framework

The Consultant shall identify and describe the pertinent regulations and standards – both local and international, governing the environmental quality, health and safety, protection of sensitive areas, land use control at the national and local levels and ecological and socioeconomic issues. Thereafter, the Consultant shall identify the project activities that should comply with the identified regulations.

Task 4. Determination of impacts of project facilities and activities

From the detailed field study, the Consultant shall analyze and describe all significant changes brought about by each facility/activity. These would encompass environmental, ecological and social impacts, both positive and negative, as a result of each facility/activity intervention that are likely to bring about changes in the baseline environmental and social conditions discussed in Task 2.

The Consultant will make a prioritization of all concerns identified and differentiate between short, medium, long-term and cumulative impacts during construction, operation and decommissioning. The Consultant shall also identify both temporary and permanent impacts. A detailed outline and discussion of specific conditions that might affect the environment which are unique to the type of facility and/or operation being audited should be provided.

Task 5. Occupational health and safety concerns

The Consultant shall analyze and describe all occupational health and safety concerns brought about by activities during all the phases of the project. The Consultant shall make recommendations on corrective and remedial measures to be implemented under the environmental management plan.

Task 6. Development of management plan to mitigate negative impacts

The Consultant shall develop a comprehensive environmental management plan. The plan should recommend a set of mitigation, monitoring and institutional measures to eliminate, minimize or reduce to acceptable levels of adverse environmental impacts and/or maximize socio-economic benefits. The Consultant should provide cost outlays for the proposed mitigation measures as well as their institutional and financial support, time frame and responsibility. This shall be provided for all the project phases.

Task 7. Development of monitoring plan

The Consultant is required to give a specific description, and technical details, of monitoring measures for both ESMP and RAP, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, definition of thresholds that will signal the need for corrective actions as well as deliver a monitoring and reporting procedure. The Consultant should provide a time frame and implementation mechanism, staffing requirements, training and cost outlays

Task 8. Comparison

The consultant shall undertake a comparison of any other options that have been considered and studied. These other alternatives shall be compared to the proposed final concept; and pros/cons of each proposal detailed.

Task 9. Study Reports

The output will be an Environmental and Social Impact Assessment report prepared in accordance with the regulatory provisions. The report shall be in the English and be clear and concise. The report/s should be in a format acceptable to local competent authorities, international environmental standards and development partners. In coordination with the Prime Minister's office, the Consultant shall present the reports to relevant environmental authorities for approval in the required number of copies. The costs associated with registration of the project with NEMC and seeking all the necessary approvals from the relevant environmental authorities shall be met by the Prime Ministers office, who are the executing and coordination agency for this project.

Task 10: Approvals

The Consultant shall present the report prepared under Task 9 for approval by the relevant authorities. The Consultant shall be responsible for making any modifications that the authorities may demand before approval of the report.

Counterpart Staff

For the purpose of capacity building the Consultant shall undertake the study together with counterpart staff seconded by the United Republic of Tanzania.

4. Additional Details on Tasks

ESIA Methodology used

As a chapter of the ESIA report the consultant will describe the methods used for conducting the ESIA (scoping and bounding, impact analysis and public consultation process, etc.). The consultant will include a public participation plan to include stakeholder identification process, stakeholders identified, stages within the ESIA process where stakeholders have participated, and the different levels of participation used. Identification of impacts will include the identification of the important environmental components, and selection criteria used for identifying the significant impacts (positive and negative) whenever possible. Significant levels may be determined through the application of scoring system if the consultant is of the opinion that such an approach is warranted. The consultant will employ environmental economic analysis where applicable, particularly to justify significant impacts to be mitigated.

Public consultation process : The consultant will:

- Identify all affected people (e.g. people affected by construction activities and during operation) and will facilitate dissemination of information to relevant authorities and interested and affected parties (IAPs) concerning the proposed project NGOs and government departments and agencies that may have a stake in the Project and its effects should be consulted.

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- Prepare a Stakeholder Consultation Plan, providing an opportunity for the relevant authorities and IAPs to raise issues and concern pertaining to the proposed project and allow the identification of the additional alternatives and recommendations.

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- Describe a schedule for public consultation with these different groups, including number and timing of public input, and the methods to be employed (e.g. media announcements. town hall meetings questionnaires, one-on-one meetings, public EA steering committees). Public consultation should occur, at least, during the inception

and collection of baseline information, and at the draft report stage. An annex of ESIA should summarize the Public consultation process and the results of the consultation process.

- Gather more detailed information through which the study team could anticipate issues not raised by the IAPs that will be addressed by the environmental impact assessment report.
- Focus the study on relevant issues and recommend specific investigations, such that the resulting ESIA is useful to decision makers and it addresses the concerns of IAPs

Legal and Administrative Framework

- The Consultant will describe the pertinent regulations and standards governing environmental quality, health and safety, protection of sensitive areas, protection of endangered species, land use control, etc., at national and local levels.
- Describe the current administrative arrangements for environmental regulation, enforcement and management in the Palestinian Authority, and more specifically, within (name governorate or other government agency)
- Provide a general assessment of the (name of agency who will be managing the project) and relevant government agencies involved in environmental and social management issues, to ensure that the EMP will be effectively implemented. The agencies may need strengthening through capacity building measures to be specified in the Environmental management Plan.

Description of the environment/project setting

The Consultant will assemble, evaluate and present baseline data on the relevant environmental and social characteristics of the study area. In addition to the data being used for determining and assessing impacts it will be used as a baseline against which future changes caused by the Project can be measured and monitored. The data should include any information on changes anticipated before the Project commences. The description should contain relevant descriptions of the following:

- Physical environment: geology, topography, soils, climate and meteorology; ground water and surface hydrology
- Biological environment: flora; fauna; forests; rare or endangered (maybe name anything specific, if known, or create Appendix) significant natural sites, etc.; species of commercial importance, and species with potential to become nuisances, vectors or dangerous.

- Socio-cultural environment: (include both present and projected where appropriate); population affected (numbers and subsistence systems), land use where appropriate and property (including houses, crops trees, plants, other properties. etc.); planned development activities; public health; cultural characteristics (including cultural property and heritage); and gender differentiation.
- Economic activities: livelihood; employment; gender composition
- Some examples of the specific activities are: recording plant species that may be affected, based on field surveys; identification of any species of special concern, namely species with conservation status or endemic to the area; commentary on conservation status of specific species; compilation of a broad scale vegetation or habitat map of the area indicating the extent to which the project would affect each vegetation or habitat type; description of current land use and compilation of a broad land use map.

The Consultant will take a systematic approach to identification mitigation and evaluation of all impacts and will identify potential changes which the Project may cause. These would include, but not be limited to, changes in the following:

- Physical environment
- Biological environment
- Socio-cultural environment
- Economic activities.
 - Employment opportunities
- Safety issues, including (i) measures to assure safety of local residents with respect to exposure to electromagnetic radiation, (ii) measures to ensure transformers and equipment at the substations do not contain PCBs; (iii) ensure that the safety and health concerns of temporary and migrant workers are addressed, and (iv) an HIV,AIDS program for workers and affected communities.
- Construction phase impacts
 - Impacts of work camps.
- Waste management for the entire project, including the work camps and construction sites. Changes in land use, land tenure patterns and land grabbing as a consequence of improved access: (i) residential patterns; (ii} agricultural practice; (iii) livestock management (pastoralism); (iv) commercial use; (v) traditional use (herb, firewood collection, sacred sites etc.); (vi) access to public services (health, education etc.).
- Impacts of access roads and how to manage these impacts and if needed closure or immobilization of access roads. In case of improved access to sensitive natural and critical natural habitats through access road to be constructed under the project, an Induced Access Management Plan needs to be prepared, in order to manage longer term impacts on natural habitat.

- Traffic density, safety and dust control
- Land acquisition and settlement and per (donor /Bank) Guidelines
- The Consultant will analyze

Analysis of Positive and negative impacts

- Direct and indirect impacts, short term and long term
- Impacts those are avoidable/unavoidable - reversible/irreversible
- Pre-construction actions to avoid or minimize negative impacts
- Construction and operational phase impacts
- Cumulative impacts occurring as a consequence of other activities in the project area: existing activities, projects under construction or planned activities within a reasonable time frame.
- Impacts in critical and non-critical habitats.
- Identify the potential risk of the spread of HIV/AIDS and other sexually transmitted diseases during the construction period, and prepare a detailed plan for awareness and prevention including resource implications

Wherever possible, the consultant will describe impacts quantitatively. In terms of environmental costs and benefits, and assign economic values when feasible. Impact analysis should be divided between construction and operation impacts.

Environmental and Social Management Plan An Environmental and Social Management Plan (ESMP) that addresses the following aspects should be prepared and should include:

Predicted adverse environmental and social impacts (and any uncertainties about their effects) for which mitigation is necessary should be identified and summarized. Effective measures to prevent or reduce significant negative impacts to acceptable levels during (i) construction and (ii) operation. Estimate the impacts and costs of those measures. Estimate the costs of any residual impacts. Another area of impacts that could contribute substantially is the cumulative effects of construction and operational phases of the Project. Most of these, if not all, can be avoided by following a set of best practices that the consultant will prepare

Description of implementation and monitoring program

Prepare detailed institutional arrangements (responsibilities) for implementing and for monitoring implementation of mitigation measures and the impacts of the project during construction and operation and maintenance. This will include a description of monitoring methodology, specific operations and features to be monitored, monitoring reporting relationships, and arrangements to ensure that monitoring is effective and leads to

modifications where required to ensure minimal impact on the environment. Include in the plan an estimate of costs and description of other inputs such as training and institutional strengthening to ensure effective monitoring. An indication of what performance indicators to be used is to be provided.

Institutional strengthening and training

Identification of institutional needs to implement environmental recommendations: Review the authority and capability of (implementing agent) and other relevant institutions and recommend steps to strengthen or expand these institutions to ensure that effective environmental management and monitoring will occur.

Reports

The consultant will produce the following reports in draft and final versions:

1. Inception Report including a detailed work plan (if completed)
2. Environmental and Social Impact Assessment
3. Induced Access Management Plan (If needed)
4. Environmental Management Plan
5. Resettlement Action Plan (if needed)
6. Stakeholder Consultation Plan
7. Others (to be specified)

Additional Information

Project Components: The proposed components of the Project are: (i) Development of infrastructure for agro-industrialisation including; the APH, ATC and AC/FAC, (ii) External infrastructure & linkages to the APH, ATC, AC) and FAC) (iii) Ecosystem development/SAPZ program enablers; and (iv) Project Coordination and Management. Thus, the following provisions under these components have been agreed for implementation under the Program:

Component 1: Development of infrastructure for agro-industrialization (Budget US\$ 96.22 Million): The components include the development of infrastructure including all APH, ATC, AC and FAC as well as rehabilitation of the existing abattoirs and meat processing factory as detailed below.

Agricultural Processing (Hub) APH: The Project will establish an APH along the Old Shinyanga road. The site is spread across an area of 426.08 ha and it is located within the Tanganyika Parker, Shinyanga District, Shinyanga region.

Agricultural Transformation Centre (ATC): Three ATCs are planned to be established at Ng’ombe, Iborogero and Nyamigota in Mwanza, Tabora and Geita regions respectively and the detailed indicative locations is shown below:

Particulars	Nearest town/village/division	District	Region	Distance from APH in Shinyanga (kms)
ATC – I	Nyamigota	Geita	Geita	253 km from TP-APH
ATC – II	Ng’ombe	Misungwe	Mwanza	105 km from TP-APH
ATC – III	Ibologero	Igunga	Tabora	122 km from TP-APH

However, the Tabora regional administrative government requested to be given time to carry out additional consultations in view to proposing an alternative ATC site. The final site will be communicated to the PMO’s office as soon as possible.

Aggregation Centres (ACs): For ensuring adequate supply of raw material to the proposed APH, it is required to create a network of ATC’s and AC’s/FAC’s in the production zone. The indicative locations of ACs, which will be verified during field visits to take place in the coming weeks are proposed below:

Sn.	Nearest town/ village/ Traditional authority/Sub chief	District	Region
1	Ushirombo	Bukombe	Geita
2	Ruhuma	Chato	Kagera
3	Kalebezo	Sengarema	Mwanza
4	Bunda	Bunda	Mara
5	Bariadi	Bariadi	Simiyu
6	Nyankurukuru	Ilemea	Geita
7	Kisengi	Uyui	Tabora
8	Iguguno	Iramba	Singida
9	Igombe	Kahama Rural	Shinyanga
10	Mbalagane	Maswa	Simiyu

Fish Aggregation Centre (FACs) - The concept of FAC is uniquely configured for leveraging the enormous potential of the fisheries sector in Tanzania and the locations are as below: The PMO’s office requested the mission for sometime to confirm if the fisheries sector will be covered under this program, given the limited resources under this program but also given that the government is already working with the IFAD funded AFDP project targeting the fisheries sector.

Sn	Nearest town/ village/ Traditional authority/Sub chief	District	Region
1	Kasalazi	Buchosa	Mwanza
2	Kayenze	Magu	Mwanza
3	Masahunga	Bunda	Mara

Component 2: External Infrastructure & linkages to APH, ATC, AC and FAC (Budget US\$ 2 Million): The external infrastructure is one of the pre-requisites for the development of an SAPZ and the required linkages are envisioned to be provided by the government through their nodal agencies which includes enhancing and improving (i) road connectivity (ii) water connectivity (iii) telecommunication and (iv) power connectivity to the APH, ATC, FAC and AC.

Component 3: Ecosystem development/SAPZ program enablers (Budget US\$ 18 Million): This component will (i) enhance production, productivity and support the development of agricultural value chains, (ii) enable policy environment, institutional capacity smallholder farmers and TVET skills/agripreneurship development for youth employment, and (iii) provide for governance.

Component 4: Program Management and Coordination; a PCU with dedicated staff will be established within the PMO's office for project implementation including monitoring and evaluation, procurement, financial management and a project coordinator. Investment promotion will also be coordinated through this component.

Investment by private sector within APH, ATC, AC and production farms (Budget USD 343 million) – This component depends on the outcome of the previous components in order to achieve the required investment by the private sector. However, the budget is an estimate and can vary with the extent of branding and marketing done for the project as well as depending upon the extent of incentives offered to attract the private sector into the SAPZ.

Appendix ii

List of persons consulted

Name	Organization	Comments
ISAAC S. NDASSA	Regional Secretariat - MWANZA	RCDO
REHEMA MKINZE	RS-MWANZA	SCDO
JANETH SHISHILA	RS-MWANZA	CDO
OBWAGO L. SOSPETER	BUCHOSA District Council	Council Agricultural Officer
AMINIEL S. JOHN	BUCHOSA	Council Livestock Officer
PIUS Z. NKUNDA	BUCHOSA	Council Agricultural Officer
MASALU KASWA	BUCHOSA	Council Comm Dev Officer
AMWORO N. A	BUCHOSA	District Environ Management Off
WALTER A. NJAU	BUCHOSA	Asst Beekeeping Off
MARTIN S. KIMISHA	BUCHOSA	District Cooperatives Off
NESTORY MJOJI	BUCHOSA	DAICO (AG)
LINUS Y. VENUS	BUCHOSA	DTO (AG)
SHIJA L. LYELLA	BUCHOSA	DLEO
PAULO S. MAKOKA	BUCHOSA	DED
CANDIDAH KYAMANI	RS-MWANZA	Livestock Advisor
MAKENZI INNOCENT KEYA	RS-MWANZA	Agricultural Advisor
TITUS KILO	RS-MWANZA	Fisheries Advisor
MANGABE MNILAGO	RS-MWANZA	Regional Fisheries Officer
EMIL KASANGARA	RS-MWANZA	Advisor – Economics
YUSUPH F. BUSUMBA	BUKOKWA	Councilor
JOSEPH T. BAHENGWA	BUKOKWA	WEO
YUUELT MBEPERA	MISUNGWI DC	Agricultural Officer
PHILEMON F. KATABAZI	MISUNGWI	Livestock Officer
DR. CHRISPINE SHAMI	MISUNGWI	DLFO
ESTHER MCHARI	MISUNGWI	AG. DAICO
SAGIRE SAMUEL	MISUNGWI	Agricultural Officer
UPENDO NAPIALI	MISUNGWI	DCDO
MARIAM M. SIMON	MISUNGWI	Environmental Officer
ZAKAYO PAULO MAGONGO	NG'OMBE	Village Chairperson
DAUD LUBANGO	NG'OMBE	Village Exec officer
SHIGONGO LEONARD	WANZAMISO	Sub Ward Chairperson
DOMISIAN BUNEGE	WANZAMISO	Community member
WILLISONI BULABO	NG'OMBE	Community member
MARCO KASWAHILI	WANZAMISO	Community member
SHIJA MALENDEJA	WANZAMISO	Community member
GRACE M. MYAMLANJI	IGUNGA DC	District Agri, Irrigation AICO
ANTHONY MAGANGA MAREO	IGUNGA DC	District Trade Officer
HERMAN WAMBURA KICHEZE	IGUNGA DC	Livestock Officer

JASHULULA E JASHULULA	IGUNGA DC	DLNRO
GODFREY CHEZUE	IGUNGA DC	AG. DCDO
DICKSON R. KANYANKA	IGUNGA DC	Council Agricultural Officer
FREDERICK MNAHELLA	IGUNGA DC	District Environ Management Off
YUSUPH PANDO	IGUNGA DC	AG. District Trade officer
ROMWARO MARKO AMANDO	IBOLOGERO	Ward Executive Officer
EMMANUEL BUSLONGO SHIMWANZI	IBOLOGERO	Councilor
EVA BENARD GODFREY	IBOLOGERO	Councilor Special seats
VERA PASCHALE GODFREY	IBOLOGERO	Livestock officer
AZIZ J. MUHANGE	IBOLOGERO	Agricultural Officer
JUMA MAYUNGA MWANDU	IBOLOGERO	Village Executive officer
KISHIWA LUKELESHA	IBOLOGERO	Sub-Ward Chairperson
SEIF MAULIDI	IBOLOGERO	Village Government member
SITTA NTEZI	IBOLOGERO	Sub-ward - CHairperson
SHIJA M. BUDOHYA	IBOLOGERO	Sub-=Ward Chairperson
ALLY K. MSHINYANGA	IBOLOGERO	Ward Chairperson
YOHANA I. ELIAS	IBOLOGERO	CCM Branch Chairperson
NCHIMANI MAGUTA	IBOLOGERO	Member Village Government
BERNARD E. MGUNDA	IBOLOGERO	Community member
NZILE SHIJA	IBOLOGERO	Community member
JOHN FUNDIKILA	IBOLOGERO	Community member
RAMADHANI RAJABU RAMADHANI	IBOLOGERO	Community member
JOHN MAGIDI MAGUMA	IBOLOGERO	Chairperson
MAGANGA MALENDEJA	IBOLOGERO	Community member
RAMADHANI ILANGA	IBOLOGERO	Community member
SHIJA KANIKI	IBOLOGERO	Community member
WAZIRI ZENGO	IBOLOGERO	Community member
ISACK JOHN	IBOLOGERO	Community member
TELEZA KASTOR	IBOLOGERO	Community member
KAZUMBA KULOLWA	IBOLOGERO	Community member
RAPHAEL JOSEPH NYANDA	TABORA RS	Deputy RAS, Economic Affairs and Productivity
MODEST R. KAIJAGE	TABORA-RS	Regional Agricultural Advisor
MUSSA H. M.	TABORA-RS	Regional Livestock Development Advisor
SAIDI BABU	TABORA-RS	Agricultural Officer
ROBERT MACHIBYA	TABORA-RS	Livestock Officer
ABRAHAMAN H. MNDEWE	TABORA-RS	Environment Management
ALEX F. MHANGA	TABORA-RS	Trade offices
NYASSARY GOSHASHY	TABORA-RS	Wildlife Officer
VINCENT CHACHA	UYUI- DC	Council Livestock Dev Officer
SHABANI A. KIGUMI	UYUI- DC	Council Agricultural Officer

AMINA ATHUMANI KULOGWA	KIZENGI Ward/Village	Community member
RAMADHANI HAMADI	KIZENGI	Community member
MHE. MAGIDINGA L. MASAGA	KIZENGI	Councilor
NASSOR O. KASHESHELA	KIZENGI	Chairperson
HAUSA S. MGASA	KIZENGI	Ward Executive Officer
BONIPHACE N. MTEMBEZI	KIZENGI	Village Executive Officer
MARUNDE SHABANI	KIZENGI	Sub/Ward Chairperson
ROSE M. MTEMBEZI	KIZENGI	Community member
NITE KALEBE NTENGULE	KIZENGI	Community member
SAIMON W. CHISAWAN	KIZENGI	Community member
MUSSA O. KASHELELA	KIZENGI	Community member
GEORGE J. KAGOMA	KIZENGI	Community member
TAUSI M. MRISHO	KIZENGI	Community member
LUCAS P. MKUKI	RS-SINGIDA	Acting Coordinator – Economic Affairs, Planning
DR. DAVID E. MRIMA	RS-SINGIDA	Regional Livestock Advisor
FAUSTINE F. KIYUI	SINGIDA-Municipal Council (MC)	Municipal Agricultural Officer
DR. ADRIANUS R. KALEKEZI	SINGIDA- MC	Municipal Agricultural Officer

