

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) FOR THE PROPOSED 400kV UGANDA-TANZANIA INTERCONNECTOR POWER (UTIP) FROM IBADAKULI SUBSTATION IN SHINYANGA REGION VIA GEITA REGION, NYAKANAZI AND KYAKA SUBSTATIONS IN KAGERA REGION TO MASAKA WEST IN UGANDA

PART 4 - Annexes 12 to 16



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Annex 12 – Detail of the TLs Passing through Stretches with Houses

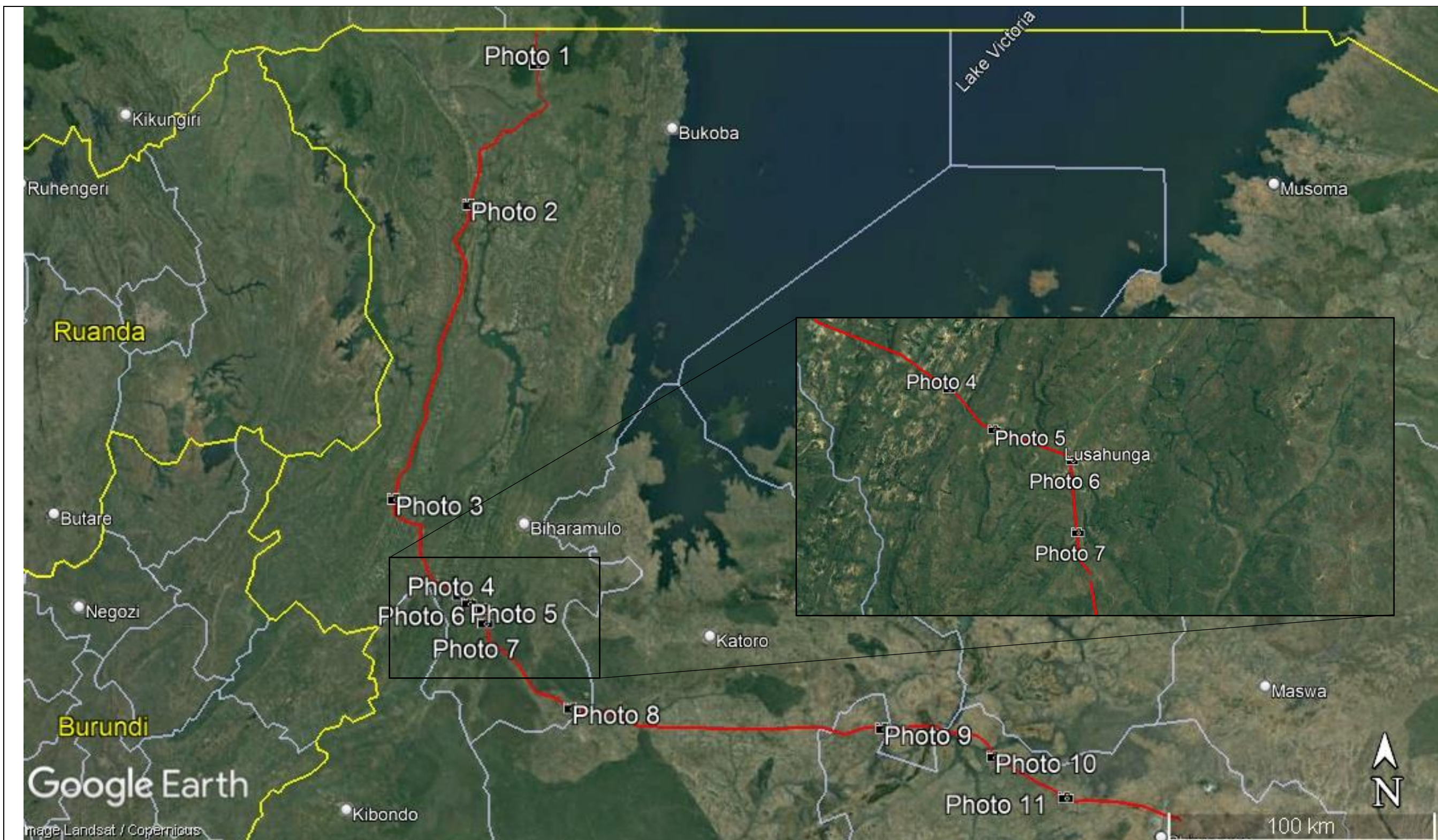


Figure 1: General location of the photos along the transmission line Route.



Photo 01: Byamutemba village in Nsunga Ward – District Missenyi/Kagera Region. Houses and plantations with in the easement of the future transmission line.
Photo Coordinates: 36M 319,558.56 m E / 9,876,560.81 m S.
Photo Direction: South – S (164.5°)



Photo 02: Kishao village in Bugene Ward / Karagwe District / Kagera Region. Houses and plantations with in the easement of the future transmission line.
Photo Coordinates: 36M 294.977,34 m E / 9.825.108,65 m S.
Photo Direction: North-northwest - NNW (-16.6°)



Photo 03: Nyabugombe village in Nyakahura Ward / Biharamulo District / Kagera Region. Houses and plantations in the easement of the future transmission line.
Photo Coordinates: 36M 267.351,27 m E / 9.717.638,10 m S.
Photo Direction: North-northeast - NNE (5.5°)



Photo 04: Kikoma village in Lusahunga Ward / Biharamulo District / Kagera Region. Houses and plantations in the easement of the future transmission line.

Photo Coordinates: 36M 291.424,20 m E / 9.682.495,87 m S.

Photo Direction: Northwest - NW (-58.3°)

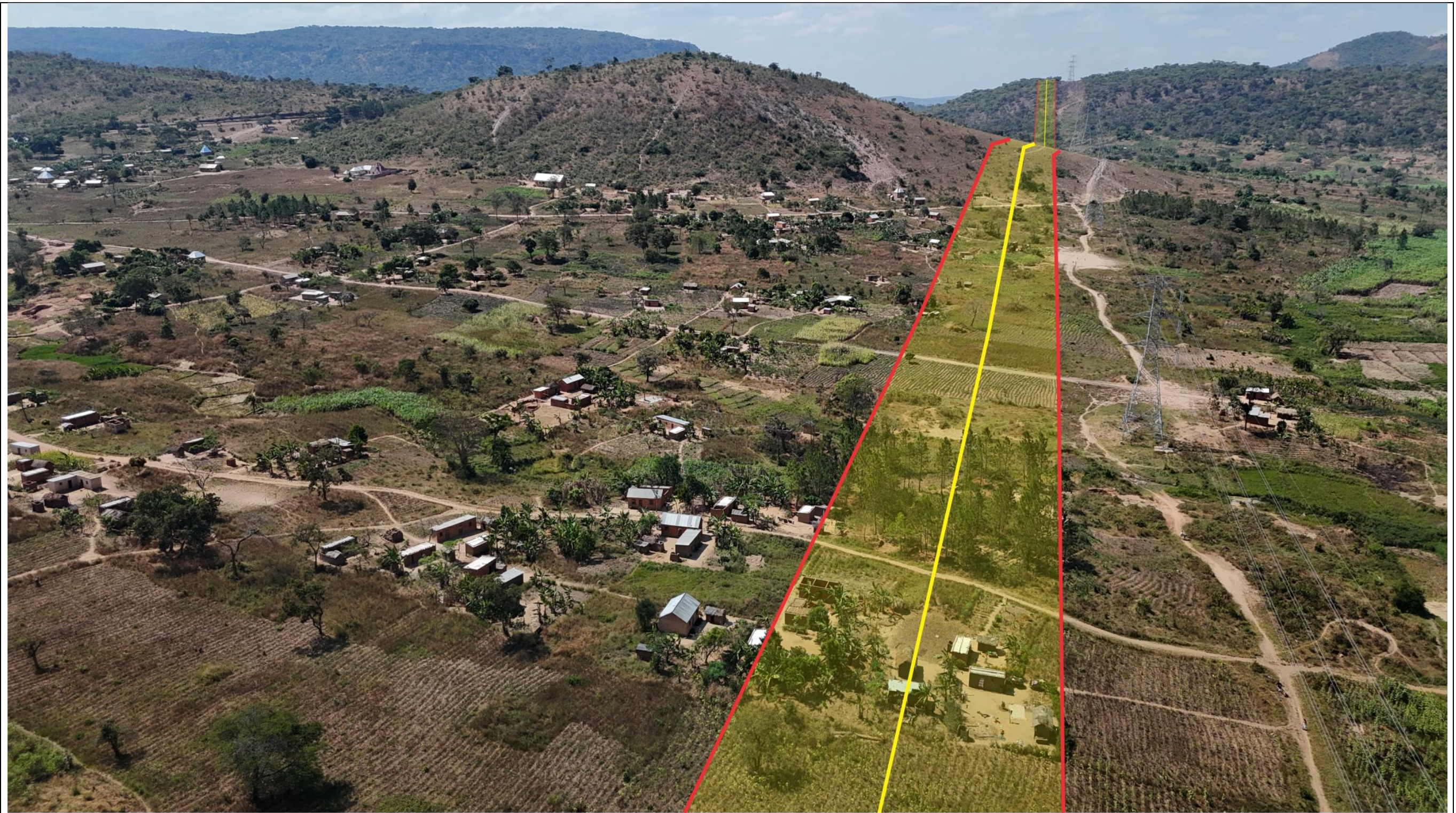


Photo 05: Kikoma village in Lusahunga Ward / Biharamulo District / Kagera Region. Houses and plantations in the easement of the future transmission line.
Photo Coordinates: 36M 294.643,12 m E / 9.679.622,19 m S.
Photo Direction: East - E (99.3°)



Photo 06: Lusahunga village in Lusahunga Ward / Biharamulo District / Kagera Region. Houses and plantations in the easement of the future transmission line.
Photo Coordinates: 36M 300.165,84 m E / 9.677.458,45 m S.
Photo Direction: Northwest - E (-34.3°)



Photo 07: Kabale village in Lusahunga Ward / Biharamulo District / Kagera Region. Houses and plantations in the easement of the future transmission line.

Photo Coordinates: 36M 300.560,00 m E / 9.672.380,00 m S.

Photo Direction: South - S (-179.8°)



Photo 08: Mavota village in Kaniha Ward / Biharamulo District / Kagera Region. Plantations in the easement of the future transmission line. Houses can be seen close to the easement
Photo Coordinates: 36M 332.257,14 m E / 9.641.276,02 m S.
Photo Direction: North-northwest - NNW (-26.6°)



Photo 09: Kalole village in Lunguya Ward / Kahama District / Shinyanga Region. Houses in the easement of the future transmission line. The easement is very close to other houses.
Photo Coordinates: 36M 446.792,24 m E / 9.633.723,39 m S.
Photo Direction: Northeast - NE (57.0°)



Photo 10: Solwa village in Solwa Ward / Shinyanga District / Shinyanga Region. Houses in the easement of the future transmission line. The easement is very close to other houses.
Photo Coordinates: 36M 487.711,24 m E / 9.623.234,28 m S.
Photo Direction: Northwest - NW (-40.5°)



Photo 11: Kalole village in Lunguya Ward / Kahama District / Shinyanga Region. Houses in the easement of the future transmission line. The easement is very close to other houses.
Photo Coordinates: 36M 514.204,87 m E / 9.608.017,20 m S.
Photo Direction: West-northwest - WNW (-71.5°)



Annex 13 – P.05 to P.10 - Biodiversity Management Plan (BMP)

PROPOSED 400kV UGANDA-TANZANIA INTERCONNECTOR PROJECT(UTIP) FROM IBADAKULI SUBSTATION IN SHINYANGA REGION VIA GEITA REGION, NYAKANAZI AND KYAKA SUBSTATIONS IN KAGERA REGION TO MASAKA WEST IN UGANDA (548.91 km)



BIODIVERSITY MANAGEMENT PLAN (BMP)

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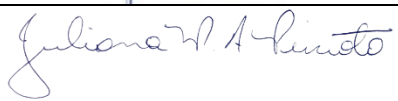

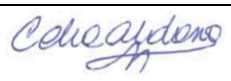

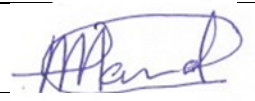
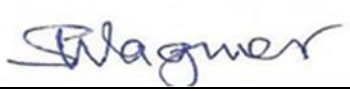

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LIST OF ACRONYMS AND ABBREVIATIONS

AVS	Active Visual Search
BAP	Biodiversity Action Plan
BBOP	Business and Biodiversity Offsets Programme
BCNP	Burigi Chato National Park
BMP	Biodiversity Management Plan
BS	Biodiversity Sampling
CBD	Convention on Biological Diversity
CEP	Construction Environmental Plan
CH	Critical Habitat
CITES	Convention on International Trade in Endangered Species
CO ₂	Carbon Dioxide
CR	Critically Endangered
CSBI	Cross-Sector Biodiversity Initiative
DAA	Direct Affected Area
DAI	Direct Area of Influence
dB	Decibel
DEFRA	Department for Environment, Food and Rural Affairs
EAC	East African Countries
EAPP	Eastern Africa Power Pool
EMA	Environmental Management Act
EN	Endangered
EOO	Extent of Occurrence
ESA	European Space Agency
ESIA	Environmental and Social Impact Assessment
ESMS	Environmental and Social Management System
ESS	Environmental and Social Standard
FBF	Firefly Bird Flapper
GBIF	Global Biodiversity Information Facility
GMP	General Management Plan
GN	Government Notification
GPS	Global Positioning System
IBA	Important Bird Area
ICMM	International Council on Mining & Metals
IFC	International Finance Corporation
IUCN	International Union for Conservation of Nature
kV	kilovolt
LC	Least Concern
LR	Lower Risk
MNRT	Ministry of Natural Resources and Tourism
MoU	Memorandum of Understanding
NELSAP	Nile Equatorial Lakes Subsidiary Action Program
NNL	No Net Loss
NP	National Park
NPI	Net Positive Impact
NT	Near Threatened

PAC	Prior Active Capture
PBV	Priority Biodiversity Values
PS	Performance Standard
PVC	Polyvinyl Chloride
QH	Quality Hectares
RACI	Responsible, Approver, Consulted, Informed
RGB	Red, Green, Blue
RPF	Resettlement Policy Framework
SCBD	Secretariat of the Convention on Biological Diversity
SER	Society for Ecological Restoration
SS	Substation
TANAPA	Tanzania National Parks
TANESCO	Tanzania Electric Supply Company Limited
TANRIC	Tanzania Natural Resources Information Centre
TANROADS	Tanzania National Roads Agency
TBC	The Biodiversity Consultancy
TFS	Tanzania Forest Service
TL	Transmission Line
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization

1.0

Introduction

This document presents the management plan for biodiversity and ecosystem services within the Project area. It includes a comprehensive assessment of the project's impacts on priority biodiversity values and proposes mitigation and compensation measures to achieve no net loss (NNL) for impacts on natural habitats and net positive impact (NPI) for impacts on critical habitat trigger species. This refers to the goal of ensuring that the biodiversity gains from a project outweigh the losses. For critical habitats, this means implementing measures that result in a net gain in biodiversity values. This will be achieved through an implementation of a set of six management programs. These programs are:

- P.05 - Biodiversity Offset Plan
- P.06 - Ecosystem Services Impact Mitigation Plan
- P.07 - Fauna and Flora Rescue and Relocation Plan
- P.08 - Invasive Species Control Program
- P.09 - Landscape Protection Program
- P.10 - Operation Biodiversity Management
- P.11 – Flora Active Search Program

The main objectives of this Biodiversity Management Plan are:

- Minimize and mitigate impacts on ecosystems, habitats, and species along the transmission line corridor and its areas of influence.
- Restore disturbed areas, and promote reforestation or rehabilitation efforts.
- Ensure adherence to environmental laws, international conventions, and lender requirements.
- Design and implement measures to reduce habitat fragmentation and maintain wildlife connectivity.
- Verify the occurrence, in the area directly affected by the project, of critical habitat trigger flora species known to occur only in the Indirect Area of Influence of the project.
- Implement measures to reduce electrocution, collisions, and other risks to birds.
- Establish a system for continuous biodiversity monitoring and adapt management strategies based on findings.
- Develop biodiversity offsets where residual impacts cannot be fully mitigated, including goals for biodiversity gains .

1.1

Project Background

Over the last decade, considerable efforts have been undertaken to allocate a stronger importance to power trade among East African countries. The EAC Master Plan (2003, ACRES), EAPP Masterplan of 2011 (SNC Lavalin) (update concluded in 2014), NELSAP power trade studies considered power trade among member countries. The

overall objective of the studies was to determine whether further interconnection of the power systems of Uganda, Kenya, Tanzania and the Great Lake Countries is technically feasible and economically viable as growth in demand has occurred since the early 2000 which is expected to last over the next 20 years.

Several technical feasibility studies, environmental and social studies were undertaken on the national, regional and sub-regional level and the voltage levels considered and recommended included 220 kV, 330 kV and 400 kV transmission lines. Therefore, the Governments of the East Africa Community Member States agreed to interconnect their power systems by constructing a high voltage TL system, aiming to: link generation in the area to load centres; enhance cross border regional electricity trade; improve security and reliability of electricity supply; and foster economic development and regional integration. Previously,

One of the priority projects has been the transmission interconnection between Uganda and Tanzania along the Lake Victoria. Hydropower potential in that area as well as low access to power services by the population have underscored the interest for such power transmission facilities which would also cover power distribution services. Uganda and Tanzania are currently implementing various programmes to increase their generation resources and transmission networks. Therefore, interconnection between countries will provide the opportunity to balance electricity demand and supply on a larger scale. By sharing electricity resources, countries can optimize their power generation to match demand patterns more effectively, reducing the reliance on fossil fuel power plants, resulting in lower CO₂ emissions.

1.2

Project Overview and Description

The 400 kV Tanzania (Kyaka-Nyakanazi-Ibadakuli) – Uganda (Masaka-Mutukula) Transmission Line (TL) has 548.91 kilometres in total, divided into 3 segments

- Mutukula-Kyaka, with 31.01 km length
- Kyaka-Nyakanazi, with 235.65 km length
- Nyakanazi-Ibadakuli, with 282.25 km length

The total project footprint is 2,851.52 hectares, including the towers and wayleave of 52 metres. Nevertheless, not the entire wayleave will be cleared to implement the project. Clearing will be carried out in the service strip, which is 14 metres-wide with a total area of 767.67 hectares (300.37 ha of natural habitats and 466.08 ha of modified habitats). Access will mainly be via the service strip, and new access will only be built where the topography does not allow transport via this strip. Construction sites will mainly be located in degraded areas. Additionally, expansion works will be needed for the existing substations (SS), the SS Nyakanazi, the SS Kyaka and the SS Ibadakuli, providing space for the TL and transformer bays and for future expansion.

For the construction, is estimated for the construction of the TL, it is estimated that 9 (nine) construction sites will be set up for the project, 3 (three) of them on the sites of the

SSs to be expanded, in the villages of Kyaka, Nyakanazi and Ibadakuli, 1 (one) in the village of Mutukula, on the border between Tanzania and Uganda, and another 5 (five) distributed along the route, at average distances of 70 to 80 km from each other. The exact location of these camps is not yet available.

It will also be necessary to open new accesses to the tower locations at specific points around the route where the topography does not allow access through the easement, and their interconnection to existing roads. For the TLs that are part of this project, should be few stretches of access outside the easement, as the topography is quite favourable. Improvements of existing accesses, involving small-scale earthworks, widening of roads without intervention in native vegetation and improvement of pavements, are also predicted.

2.0

National and International Framework

National framework

- Protected Places and Areas Act (1969): Part of the proposed transmission line traverses some village and district forest areas in various parts of the alignment. The transmission line design should include appropriate mitigation measures to minimize any possible impacts to the wildlife and in particular before approaching the key sensitive habitats.
- The National Policies for National Parks in Tanzania (1994): The policy aim to preserve national parks and to ensure that national parks retain a high degree of integrity in wildlife conservation. Part of the TL will pass through Burigi-Chato National Park. The act requires that an Environmental Impact Assessment be carried out prior to any actions, developments and activities within and adjacent to parks' boundaries. The act also establishes the legal basis for the ESIA process and its main requirements. Requires the NEMC to determine whether a developer is required to prepare an ESIA before a proposed project, establish whether a project is likely to have a significant impact on the environment, and recommend projects to the Minister for approval and issuance of an ESIA certificate.
- Plant Protection Act (1997): The Act prevent the introduction and spread of harmful organisms (invasive species), ensures sustainable plant and environment protection, controls the importation and use of plant protection substances, regulates the export and imports of plants and plant products and ensures the fulfilment of international commitments, to entrusts all plant protection regulatory functions to the Government, and for matters incidental thereto and connected therewith.
- National Forestry Policy (1998): Part of the project will pass through Forest Reserves, and the implementation of the TL will lead to a reduction in natural habitats. One of the main goals of the National Forest Policy is to ensure sustainable management and use of natural resources for the benefit of present

and future generations. To achieve this goal, the states that: ecosystem preservation will be ensured through conservation of forest biodiversity, water catchments and soil fertility; new forest reserves will be established in biodiversity-rich areas for biodiversity conservation and then will be upgraded to nature reserves for more effective protection; in-situ and ex-situ conservation programs including gene banks for endangered species will be established; sustainable supply of forest products and services will be ensured through effective management of forest reserves under local and central government, critical watersheds, forest areas with high biodiversity, forest on public lands, and traditional forests..

- The Forest Act No. 14 (2002): Part of the project will pass through the Biharamulo Forest Reserve. Section 18 of the Act states that any proposed development in a forest reserve, private forest or sensitive forest area including watersheds, whether that development is proposed by, or is to be implemented by a person or organization in the public or private sector, the developer of the development shall prepare and submit to the Director an Environmental Impact Assessment of the proposed development.
- The National Parks Act (2002) Chapter 282, revised as of July 31, 2002, provides the legal framework for the establishment, control, and management of national parks in Tanzania. The legislation outlines the process for establishing national parks, including the powers of the President to declare areas as national parks and the creation of a Board of Trustees responsible for managing these parks. The Trustees are tasked with maintaining and conserving the wildlife and vegetation within national parks, as well as overseeing visitor facilities and pursuing investments related to park functions. The Act also imposes strict controls on national parks, including prohibitions on unauthorized entry, hunting, mining, and other activities without appropriate permits. Financial provisions are detailed, including funding, budgeting, and auditing processes for the Trustees. It also highlights penalties for violations, the responsibilities of the Trustees in managing the parks, and the Minister's authority to issue directions to ensure compliance with the Act.
- The Environment Management Act (2004): Section 63, 66, 67 and 68 promotes the protection of ecosystems, forest resources, and natural habitats and the maintenance of viable populations of species in natural surroundings. The Act promote environmentally sound and sustainable development in an area adjacent to protected areas intending to further protection and conservation of these areas. This act is relevant to the project, considering the impacts on natural habitats and the loss of flora individuals due to vegetation clearing.
- The Wildlife Policy of Tanzania (2007): The Wildlife Policy of Tanzania guides the protection and conservation of wildlife and wetlands, sustainable utilization of wildlife and wetlands, management and development of wildlife and wetlands resources, strengthening resource monitoring and research and enhancing communication, education and public awareness. This act is relevant to the

project, considering that part of the route passes through the Burigi-Chato National Park, the Biharamulo Forest Reserve, and natural habitats.

- Wildlife Conservation Act, No. 5 (2009): This Act makes provision for the protection, conservation, development, regulations and control of fauna products and matters incidental thereto. It stipulates the conditions upon which areas could be declared protected zones and restrictions on entry, use and residence within such areas. It also gives restrictions on grazing livestock within game reserves and regulates hunting within the controlled game reserves. Part IV of the Act states that every significant physical development in a protected wildlife area, whether such development is prepared or implemented by a person or organisation in the public or private sector, the potential developer must prepare and submit to the Minister responsible for the environment a report on the Environmental Impact Assessment of the proposed development, and no development shall commence unless and until an Environmental Impact Assessment certificate has been issued by the Minister responsible for the environment. This is relevant to the project considering that part of the TL will pass through the Buriti-Chato National Park, a wildlife protected area.
- National Environmental Policy (2021): The policy promotes the environmental management of water sources; strengthens the conservation of wildlife habitats and biodiversity; and enhances conservation of forest ecosystems for sustainable provision of environmental goods and services. This policy is relevant to the project, considering that there will be direct impact on natural habitats.

International policies

- World Bank Environmental and Social Standards (ESS): set out the requirements for Borrowers relating to the identification and assessment of environmental and social risks and impacts associated with projects supported by the Bank through Investment Project Financing. Among the World Bank's standards, the ESS 6 establishes requirements related to Biodiversity Conservation and Sustainable Management of Living Natural Resources. The ESS6 recognises that protecting and conserving biodiversity and sustainably managing living natural resources are fundamental to sustainable development, the importance of maintaining core ecological functions of habitats, including forests, and the biodiversity they support, addresses sustainable management of primary production² and harvesting³ of living natural resources, and recognizes the need to consider the livelihood of project-affected parties
- IFC International Performance Standards (PS): IFC Performance Standards (PS) defines responsibilities for managing environmental and social risks, *which* consists of 8 principles. *Similar to ESS6, IFC PS6* recognizes that protecting and conserving biodiversity, maintaining ecosystem services, and sustainably managing living natural resources are fundamental to sustainable development. The requirements set out in *IFC PS6* have been guided by the Convention on Biological Diversity, which defines biodiversity as “the variability among living

organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species, and of ecosystems.

- The Convention on Biological Diversity (CBD): is the international legal instrument for the conservation of biological diversity. It provides for sustainable use of its components as well as fair and equitable sharing of the benefits arising out of the utilization of genetic resources. The CBD covers biodiversity at all levels: ecosystems, species and genetic resources. It also covers all possible domains that are directly or indirectly related to biodiversity and its role in development, ranging from science, politics and education to agriculture, business, culture and much more. The CBD is relevant to the project and RAP processes to ensure the ecosystem services are preserved and any damage that occurred is restored.
- UNESCO - World Heritage Convention: Tanzania is a signatory to several UNESCO conventions that appeal to the safeguarding of cultural heritage. Among these is the 1972 UNESCO Convention concerning the Preservation and Protection of World Cultural and Natural Heritage ratified in 1977, the 2003 UNESCO Convention on the Safeguarding of Intangible cultural heritage ratified in 2011 and the 2005 UNESCO Convention on the Protection and Promotion of the Diversity of cultural expressions that was ratified in 2011. The process of land acquisition for the establishment of the proposed project shall observe the provision of the World Heritage Convention.

3.0

Biodiversity Baseline

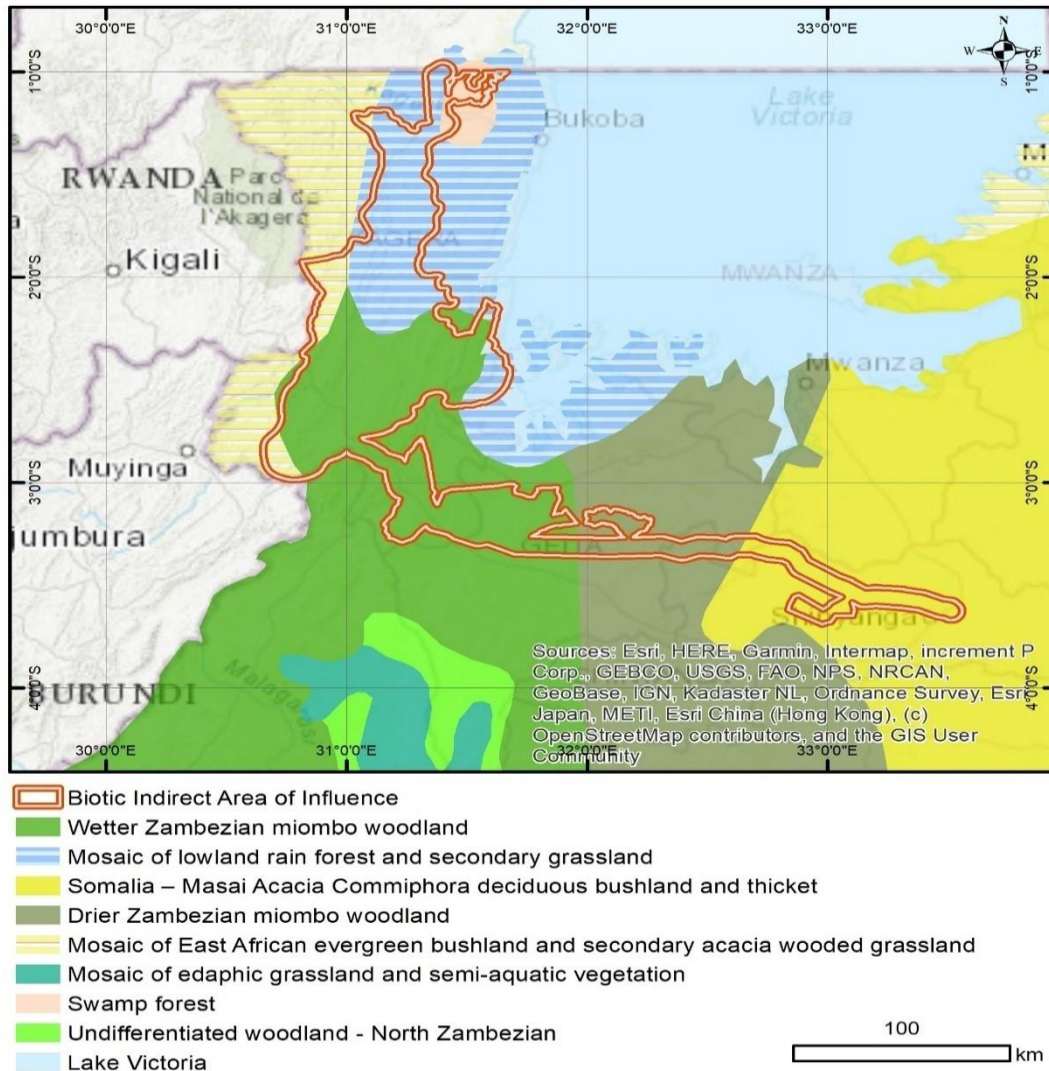
3.1

General Characterization

Ecosystems and habitats

According to White's vegetation map of Africa (White, 1983) the project is located in three main phytogeographical types, most part are concentrated in the Guinea-Congolia/Zambezia regional transition zone and in the Lake Victoria regional mosaic. A minor part overlaps with the SomaliaMasai regional centre of endemism. According to the Tanzania Vegetation Map, based on the map elaborated by White (1983), the ecosystems associated with this phytogeographical types, that occur in the study area, are: Mosaic of lowland rain forest and secondary grassland, Wetter and Drier Zambezian miombo woodland, Somalia – Masai *Acacia Commiphora* deciduous bushland and thicket, Mosaic of East African evergreen bushland and secondary *Acacia* wooded grassland and Swamp Forest (Figure 3.1.a).

Figure 3.1.a
Tanzania vegetation map by F. White (1983)



Source: Adapted from Tanzania Natural Resources Information Centre (TANRIC), University of Dar Es Salaam. Data Source: The Vegetation of Africa by F. White published by UNESCO 1983

None of these phytophysiognomies are threatened with extinction (IUCN¹) and occurs in other parts of the continent. However, although these ecosystems are not classified as threatened, many are under threat from the conversion of natural habitats, mainly for the establishment of agricultural crops, the use of savannas as grazing land for cattle and the (sometimes indiscriminate) use of fire to renew pastures, and the extraction of timber and other plant products.

According to official land use and land cover maps (ESA, 2021), the anthropized areas are mostly located in the Shinyanga and Geita regions, along the east-west alignment of the TL. This region is more intensely anthropized, with the remaining natural habitats

¹ IUCN Ecosystems (iucnrl.org)

basically inside the protected areas and in specific places where the terrain is steeper. Areas with more open vegetation (such as savannah, grasslands, shrublands), located on flat terrain and outside protected areas, are predominantly occupied by anthropogenic land uses, especially the areas close to water bodies, which are intensively used for agricultural activities, mainly rice cultivation

Along the Kyaka- Nyakanazi segment, there is a more significant presence of preserved natural habitats, mainly within the Burigi-Chato National Park. However, in the region closest to Lake Victoria there are several urban centres and a large population agglomeration, with modified habitats predominating.

Protected Areas and Internationally recognized areas

There are 8 Protected Areas in the Project's region: 3 of which are intercepted by the Project, the Burigi-Chato National Park, intercepted by the and the 400 kV Kyaka – Nyakanazi TL; the Biharamulo Forest Reserve and the Uyovu Forest Reserve, both intercepted by the 400 kV Nyakanazi - Ibadakuli TL. The other 5 Protected Areas are Forest Reserves located within the Project's Indirect Area of Influence (Lubaga, Minziro, Nindo, Ruamagazi, Ruiga River and Uyovu).

As for the internationally recognized area, there are 3 Important Bird Areas (IBA) in the project region. Two of these areas also coincide with Protected Areas, the Burigi - Biharamulo Game Reserves, which has a similar boundary to the Burigi-Chato National Park, and the IBA Minziro Forest Reserve, whose area coincides with that of the Minziro Nature Forest Reserve.

Flora and fauna biodiversity

Regarding flora, the database consulted indicates a total of 807 species with the potential to occur in the project region, belonging to 410 genera and 122 families. Among the records collected through primary data, a total of 173 plant morphospecies were recorded, of which 01 were pteridophytes and 172 angiosperms. Among all the species recorded by secondary and primary data, 25 species are classified as EN and 3 as CR. Of the 28 species, 20 have a restricted range, i.e., with an EOO of less than 50,000 km².

Regarding fauna, the assessment of the terrestrial mammals detected 55 species from 10 orders and 23 families. The orders Artiodactyla (even-toed ungulates) and Carnivora (carnivores) presented the highest richness of species, while the orders Eulipotyphla (insectivores and true shrews), Macroscelidea (elephant-shrews), Perissodactyla (horses and rhinoceroses), Proboscidea (elephants) presented only one species each. The family Bovidae (antelopes, cattle, gazelles, goats, sheep, and relatives) presented 13 species, followed by Cercopithecidae (Old World monkeys), with six species, while 13 families presented one species each. Regarding threatened species, 6 species are classified as Vulnerable, like the Lion (*Panthera leo*), the Leopard (*Panthera pardus*) and the Masai Giraffe (*Giraffa tippelskirchi*), Another three species area classified as Endangered, as the African Savanna Elephant (*L. africana*) and the Ashy Red Colobus (*Piliocolobus tephrosceles*). Concerning the endemism, most of the species detected in field and

through interviews present large distribution ranges and are not habitat specialists.

There are two important wildlife corridors, classified as important for African Elephants herds (*L. africana*), the Burigi-Chato - Akagera (Rwanda) and Kigosi Moyowosi - Burigi Chato (MNRT, 2022).

The primary bird survey resulted in a total of 3,756 records, covering 219 species distributed in 20 orders and 55 families. Four species are threatened with extinction, with the Hooded Vulture (*Necrosyrtes monachus*) listed as 'Critically Endangered'. None of the species are on Appendix I of CITES, although 24 are on Appendix II, suggesting the need to control international trade to avoid their possible future threat. As for endemism, although species such as the Swahili Sparrow (*Passer suahelicus*) and the Ashy Starling (*Lamprotornis unicolor*) are considered endemic to East Africa, they are widely distributed within their areas and are not threatened. The analysis of migratory routes revealed the presence of 11 migratory species and 23 partially migratory species, highlighting the relevance of the East Atlantic, Mediterranean/Black Sea, and East Asia/East Africa Flyways for the region's avifauna. In addition, the project will intercept two Important Bird Areas (IBAs) - Minziro Forest Reserve and Burigi-Biharamulo Game Reserves.

For the herpetofauna, the primary data resulted in a total of 23 taxa. The amphibian group was the most abundant and diverse, accounting for around 52 per cent of the total number of taxa. None of the species recorded are classified as endangered, with only the Central African Rock Python (*Python sebae*) standing out as 'Near Threatened'. Three other species, the Nile Monitor (*Varanus niloticus*), the Central African Rock Python (*Python sebae*) and the Leopard Tortoise (*Stigmochelys pardalis*) are listed in CITES Appendix II (2024). No species endemic to Tanzania or invasive species were recorded either.

3.2

Priority Biodiversity Values

Priority biodiversity values are those that, due to their degree of threat, distribution and/or ecological significance for natural populations, fall within the definitions of items (a) to (e) of paragraph 23 of ESS6. Because of these characteristics, these values need special attention when designing the project's mitigation hierarchy.

Based on the project's biodiversity baseline, taking into account the data obtained from primary sources, and the species with potential occurrence in the region (secondary sources) **130 priority biodiversity values (PBV)** have been identified in the entire area of indirect influence of the project, including the following (detailed in Table 7.2.4.3.c of Section 7.2.4.3. of the ESIA):

- 21 Threatened species (EN or CR)
- 21 Threatened (EN or CR) and restricted-range species
- 4 Threatened (EN or CR) and migratory species
- 6 Vulnerable migratory species
- 75 Migratory species

- Ecological functions needed to maintain the viability of the biodiversity values (1)
- Important habitat for species congregation (1)
- Natural habitats (1)
- 5 priority ecosystem services: 3 provisioning services and 2 regulation, all of them type 1

Of these 130 priority values, 12 PBVs triggered the thresholds for activating CH:

- Criteria (a) and (b): 7 flora species triggered criteria a and b: *Albertisia exelliana*, *Blotiella trichosora*, *Emilia cryptantha*, *Oxyanthus ugandenses*, *Thunbergia laborans*, *Tinnea physalis* and *Vernonia tinctoriosae*. All are classified as EN or CR and have an EOO of less than 50,000 km². None of the 7 species were found in the Project's DAI, they were only recorded through secondary data. Of these, 5 species (*E. cryptantha*, *V. tinctoriosae*, *B. trichosora*, *A. exelliana* and *O. ugandensis*) have a very similar distribution, occurring in the Minziro FR region and the Sago Bay IBA, on the border between Tanzania and Uganda, near the shores of Lake Victoria. The species *T. laborans* has only 4 records, 3 of them around Lake Victoria (to the east, south and west of the lake, the latter within Burigi-Chato NP), and the fourth record in Rwanda. The records of *T. physalis* are concentrated in the Shinyanga region. As demonstrated in **Section 7.2.4 (Figures 7.2.4.3.a to 7.2.4.3.c) and 8.2.3.2 (Item 7)** of the ESIA, the project will not directly intercept the critical habitat delimited for these species, there are no existing records in the area of direct influence of the project (considering online databases), and these species were not evidenced during the primary data survey. Therefore, it is unlikely that significant populations will occur in the affected area. However, as the project intersects phytophysionomies where some of these species may occur (mainly *A. exelliana*, *T. physalis* and *T. laborans*), there is a potential risk.
- Criterion (a): 3 species of fauna triggered the classification under criterion (a), the mammals Common African Pangolin *Phataginus tricuspis*, Ashy Red Colobus *Piliocolobus tephrosceles* and the African Savanna Elephant *Loxodonta africana*. Only the elephant *L. africana*, were recorded in the project's DAI, in the Burigi-Chato NP region. The primate *P. tephrosceles* was only registered in the studied alternative near Lake Victoria, as described in the species' geographical distribution available on IUCN website. The pangolin *P. tricuspis* was recorded through interviews, and it occurs mainly in the Minziro FR region. As demonstrated in **Figures 7.2.4.3.g to 7.2.4.3.n**, the project will only intercept the critical habitat of the elephant *L. africana*.
- Criterion (c): conservatively and considering the potential of lakes and other wetlands to congregate animals, especially in dry vegetation environments, Lake Burigi was considered a CH under criterion (c). The project will not intercept this critical habitat (see **Figure 7.2.4.3.m, Section 7.2.4.3**).

- Criterion (e): the region between Akagera National Park (in Rwanda), through Burigi-Chato NP to Moyowosi - Kigosi Game Reserve is an important ecological corridor in the region, used as a migratory route mainly by elephants, but also by other species of fauna. It has been classified as one of the 10 most important ecological corridors in the country and is important for maintaining the ecological balance of the region, favouring the exchange of gene flow between different populations. The project will directly intercept this critical habitat (see **Figure 7.2.4.3.n, Section 7.2.4.3**).

4.0

Engagement with Stakeholders

Biodiversity and ecosystem service stakeholders can be persons or groups both internal and external to the Project, and exist at a global, national and local level. They can range from company staff and local communities to scientists and non-governmental organisations national and internationally. Stakeholders of particular relevance to this project are persons or groups who are directly or indirectly involved with, who may have interests in and/or the ability to influence: (i) the rehabilitation outcomes of the Project, and (ii) achieving NNL scale of compensation/offsets.

A stakeholder mapping and consultation exercise, which included biodiversity-related stakeholders, was carried out as part of the ESIA. The details of the stakeholder identification and consultation is presented in **Section 7.5**. The list of the Project's priority biodiversity and ecosystem services stakeholders and any engagement undertaken during the development of the BAP is presented in **Table 4.a**. Documents received are presented in **Annex 13.1**.

An additional consultation was held with TANAPA and TFS representatives on 13 November 2024. The focus was to present the Project and verify their impressions about the impacts on biodiversity and possible mitigation measures. TANAPA, TFS and TANESCO will develop a Memorandum of understanding between them on operational modalities (will be subject of further discussions), in response to the recommendations made by TANAPA, TFS and the MNRT for the mitigation measures of the project. This will include, for example, the installation of support structures for the Park Rangers and camera traps, to help monitor the wildlife within the park and, also any illegal activities. TANAPA and TFS will share an official document with the agreement made between them and TANESCO.

Another consultation was held with flora and fauna experts to verify the possible occurrence of trigger species in the area directly affected by the project, as well as more up-to-date and accurate information on abundance, population and distribution. The consultations included experts in African biodiversity and experts in assessing threatened species according to IUCN criteria, both from Tanzania and from international research institutes with extensive experience in Africa. The consultations were carried out remotely between the end of January and the beginning of February of 2025 (**Table 4.0.b**).

Table 4.0.a

Project's priority biodiversity and ecosystem services stakeholders and engagement undertaken during the development of the BAP

Name of stakeholder	Date of consultation	Level of interest in the Project (high/medium/low)	Level of influence in Project (high/medium/low)	Description of engagement during BAP development	
				Concerns	Recommendations
Government agencies					
Burigi Chato National Park TANAPA Offices in Biharamulo	Consultation held in January 2024, during the field survey	High	High	<ul style="list-style-type: none">- They appreciate the Project, as it will connect Kagera to the national grid, solving power outages in the region.- They provided security guards to accompany the JGP/Bene Consult team during the surveys inside the park, for safety reasons, as Bushmen hunt in the area.- As a national park, they are concerned about infrastructure development, such as powerlines and roads, which could negatively impact the park's ecology.	<ul style="list-style-type: none">- The park is a major tourism attraction in the country, so mitigation measures must be carefully planned to reduce any adverse impacts.- Consult TANROADS in Kagera as they are also working on a project in Benaco.- Powerline towers could disturb animal habitats and increase mortality rates. What mitigation measures will be implemented to prevent these risks?- Secondary data on the park’s biodiversity is available at the Ecology Office for your reference.
Ministry of Natural Resources and Tourism Dra Siima Bakengesa	Consultation held in August 2024	High	High	<ul style="list-style-type: none">- The Protected area (Burigi Chato NP) currently faces impacts such as uncontrolled extraction of forest products (timber, medicinal plants and mushrooms), and wild fires.- The implementation of the Project may cause habitat loss and fragmentation, and loss of flora species	<ul style="list-style-type: none">- Involvement of the Ministry of Natural Resources and Tourism in all steps of project implementation from the initial plan to implementation.- Support in surveillance programmes to curb illegal extraction of forest products, wildfires and invasive species.- The main currently needs of the BCNP are: restoration of degraded areas; control of human activities; lack of trained personal and equipment (such as drones).- Support to surrounding communities on alternative sources of income.
Tanzania Forest Services Agency (TFS)	Consultation held in November 2024	High	High	<ul style="list-style-type: none">- The main conservation objectives of the protected areas from Makotopora to Tabora are: (a) Biodiversity conservation in general as well as promotion of sustainable use of the area’s natural resources. In the mentioned area there is an endemic species of Itigi thickets which requires a special protection model for its existence and sustainability; and (b) Curbing anthropogenic activities to the lowest level in the protected areas.- The main environmental impacts faced by the protected areas are: a) Illegal extraction of forest products especially timber species and charcoal; and b) Encroachment of forest reserves for cultivation, mining and grazing in protected areas.- The implementation of the project will cause loss of flora and fauna species and biodiversity in general where the clearance of vegetation will be done to give way to the construction of transmission lines.	<ul style="list-style-type: none">- It is proposed that where there is too much vegetation/high concentration of biodiversity the way of the line could be shifted a bit so as to reduce too much removal/clearance of the vegetation hence reduce loss of biodiversity.- Compensation for negative impacts caused by the construction of transmission lines within protected areas, as required by the Forestry Act No. 14 of 2002 and Government Notification (GN) No. 59/28/2022, which establishes the fees to be paid for such destruction of forest resources caused by the project within a forest reserve. This will be determined through a resource assessment in collaboration with TFS officials, and the compensation fee will be determined and paid in accordance with the Act and the GN.- The main needs of the protected areas today are but not limited to: Creation of awareness of the importance of protected areas to the surrounding communities and the general public; Restoration of degraded areas by planting trees; Law enforcement hence control and minimizing illegal activities (fires, charcoal burning, timber harvesting, agricultural encroachment, pastoral activities and human settlement ect); Inadequate trained personnel and working facilities like vehicles, motorcycles and modern photographic equipments (drones) for protection; Ranger posts within protected areas; Political will.- Regarding restoration of degraded areas and Land tenure regularization the priority areas for carrying out the restoration activities will be in those areas whereby the transmission lines are passing through and neighbouring areas.
TANAPA and TFS	Consultation held in November 2024	High	High	<ul style="list-style-type: none">- As a government institution they have no objection to the implementation of the Project, as it is of great national interest.	<ul style="list-style-type: none">- Support has been requested for the establishment of ranger posts in the Burigi-Chato National Park.

Table 4.0.a
Project's priority biodiversity and ecosystem services stakeholders and engagement undertaken during the development of the BAP

Name of stakeholder	Date of consultation	Level of interest in the Project (high/medium/low)	Level of influence in Project (high/medium/low)	Description of engagement during BAP development	
				Concerns	Recommendations
				- The identified wildlife corridor is active and plays an important role for biodiversity.	- Transmission towers need to be higher than 40m, to allow giraffe and elephant migration.
Community associations and cooperatives					
Representatives of the wards intercepted by the project	During the field surveys	High	Low	Interviews conducted on the main biodiversity and ecosystem services attributes, and their importance to the population. Details are presented in the Social Baseline	
Representatives of the villages intercepted by the project	During the field surveys	High	Low	Interviews conducted on the main biodiversity and ecosystem services attributes, and their importance to the population. Details are presented in the Social Baseline	

Table 4.0.b
Flora and fauna experts consulted on critical habitat trigger species

Name	Location	Position	Feedback
Ian Darbyshire	Kew Botanical Garden	Research Leader	Provide feedback on <i>Thumbergia laborans</i> : Darbyshire reported that it is possible that this species is poorly recorded, as most botanists have historically carried out their research in this area (NE Tanzania) during or at the end of the rainy season. However, the expert believes that it is a really scarce species, considering the small number of existing collections.
Quentin Luke	National Museums of Kenya, East African Herbarium	Senior Research Associate / Chair of the East African Plant Red List Authority	Provided general feedback on restricted range and threatened species in Tanzania. In general, the expert stated that: The Red Listing of plants in the East African region is still very incomplete. The only reliable source (for Kenya, Uganda & Tanzania) is to look at the Flora of Tropical East Africa (FTEA), which gives many more endemic and restricted range species for these countries. The questions on the trigger species can be answered by looking at the Red List page for each. Because the assessments were quite recent, and all these species have very few locations you can assume they have not been located anywhere other than the points shown on the RL assessment.
Neduvoto P Mollel	National Herbarium of Tanzania	Curator	Provide feedback on general distribution of the 7 flora trigger species. Provided a table which is presented in Annex 13.1.
Pierre Meerts	Meise Botanic Garden	Contributing to the writing of the Flore d'Afrique Centrale at Meise Botanic Garden	Provide feedback on <i>Tinnea physalis</i> : ' <i>Tinnea physalis</i> is indeed a narrow endemic of NE Tanzania, the existing records corresponds to very few different localities and the most recent gathering on GBIF dates back to 1958, Flora of Tropical East Africa (FTEA) states that several specimen labels describe this as rare or local'.
Frank Mbago	National Herbarium of Tanzania/ member of East African Red Listing Of Threatened Plant Species Committee	Retired Curator / Project consultant for Bene Consult	Provide feedback on general distribution of the 7 flora trigger species. Provided a table which is presented in Annex 13.1. Stated that obtaining accurate information related to population, distribution or even whether or not they are present in the project area would require more intensive field studies.
Emmanuel Mbige	College of Forestry, Wildlife and Tourism Sokoine University of Agriculture	Researcher / Project consultant for Bene Consult	It provided general feedback on fauna species that triggered the critical habitat trigger, and information on the elephant population and the wildlife corridor. He reported that the elephant population in Burigi-Chato Park is approximately 89 individuals (but this number is not confirmed by the TWR, the official agency responsible for census). Stated that elephants move randomly in the north within

Table 4.0.b**Flora and fauna experts consulted on critical habitat trigger species**

Name	Location	Position	Feedback
			Kyaka areas and the other populations are within the southern Burigi-Chato National Park. And construction of various components of the project will not interfere nor possibly block wildlife movement across the project area.
Fandey Mashima	Tanzania Forest Services Agency	Flora specialist	Provide feedback on general distribution of the 7 flora trigger species. Provided a table which is presented in Annex 13.1.

5.0

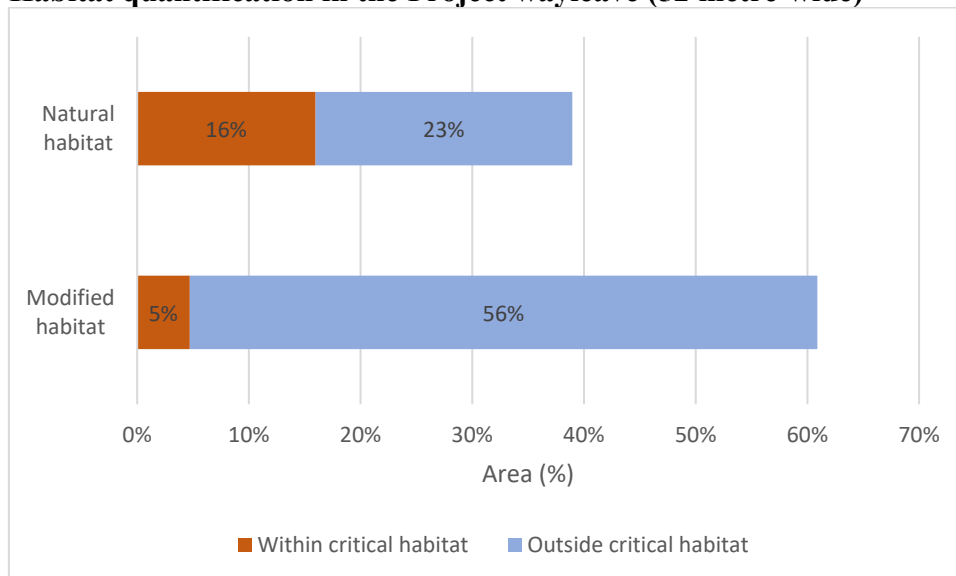
Key Risks and Impacts

Table 5.0.a presents the main risks and impacts associated with the implementation and operation of the project, and which priority biodiversity values may be affected.

According to the land use and cover map elaborated for this study (**Map 7.2.2.1.1.a, Annex 4** of the ESIA), the area directly affected by the project, which corresponds to the 52-metre-wide of the wayleave (totaling 2,851.52 hectares), has 1,110,97 hectares of natural habitats, 39% of the total area. Of this total, 21% (589.84 ha) is in critical habitat, with 16% (455.54 ha) being natural critical habitat and 5% (134.30 ha) being modified critical habitat (**Figure 5.0.a**). It is important to emphasise that not the entire wayleave will be cleared.

Figure 5.0.a

Habitat quantification in the Project wayleave (52 metre-wide)



The area delimited as CH also corresponds to the region in the best state of preservation of native vegetation, and the lowest intensity of landscape fragmentation, on the stretch of the TL Kyaka-Nyanakanazi (**Figure 5.0.b**).

Table 5.0.a

Main risks and impacts of the project on priority biodiversity values and ecosystem services

Main risk/impact	Description	Biodiversity values potentially affected	Project phase
Reduction of natural habitats	The vegetation clearing for project implementation will lead to a reduction on the availability of natural habitats, including critical natural habitats.	Threatened and restricted range flora and fauna species Ecological corridor Important habitat for species congregation Natural habitat	construction and operation
Loss of vegetation cover and reduction of individual plants	The implementation of the project will require the suppression of areas of native vegetation to install the towers, service strip and some new accesses, causing the loss of flora, potentially including threatened and endemic species.	Threatened and restricted range flora and fauna species Ecological corridor Natural habitat	construction
Increased landscape fragmentation and edge effect incidence	The suppression of native vegetation for the implementation of the project will lead to the creation of new edges and, consequently, habitat fragmentation or the intensification of the edge effect in already anthropised areas.	Threatened and restricted range flora and fauna species Ecological corridor Natural habitat	construction and operation
Disturbance of fauna during construction	Disturbance to fauna during construction is related to the increase in noise caused by construction activities, especially the vegetation clearing, as well as the increased movement of workers and machinery. This impact tends to cease as soon as the noise stops.	Threatened fauna species	construction
Increased risk of fire in adjacent vegetation	As well as there being a risk of fire due to the construction activities themselves, the use of fire is common practice in the region, and opening up access to new areas can increase the risk of fires in new areas.	Threatened and restricted range flora and fauna species Ecological corridor Important habitat for species congregation Natural habitat	Construction and operation
Risk of expansion of invasive flora species	In some places in the project region, exotic species have been recorded in abundance, especially Lantana camara. The mobilisation of machinery and people during the works, and the opening up of new accesses, could facilitate the dispersal of these species.	Threatened and restricted range flora and fauna species Natural habitat	Construction and operation

Table 5.0.a

Main risks and impacts of the project on priority biodiversity values and ecosystem services

Main risk/impact	Description	Biodiversity values potentially affected	Project phase
Risk of increased illegal exploitation of natural resources	Agricultural and extractive activities are common in the region, and opening up access to new areas of native vegetation could drive these activities into areas currently occupied by natural habitats	Threatened and restricted range flora and fauna species Ecological corridor Natural habitat	Operation
Risk of an increase in hunting	Just as there is an increase in the risk of exploitation of areas, the opening of new accesses can lead to an increase in animal hunting. Although this practice does not seem to be common (in the interviews conducted with the population, only 1 interviewee mentioned hunting activities), it is possible that it is a common activity, but due to the legal restrictions involved, the population does not mention that they practice it.	Threatened fauna species	construction and operation
Risk of birds' collision	Collision risks between avifauna and transmission lines are well known. A risk assessment carried out for the ESIA (Section 8.4.2) categorised the fauna sampling units based on the risk of bird collisions. Based on these results, sample area BS1 is the most important in terms of bird collision risk. However, areas BS2, BS5, BS8 and BS9 also revealed a significant wealth of species with a high risk of collision (Figure 5.0.c).	Threatened and migratory bird species	Operation

Figure 5.0.b
Total critical habitat in the project region

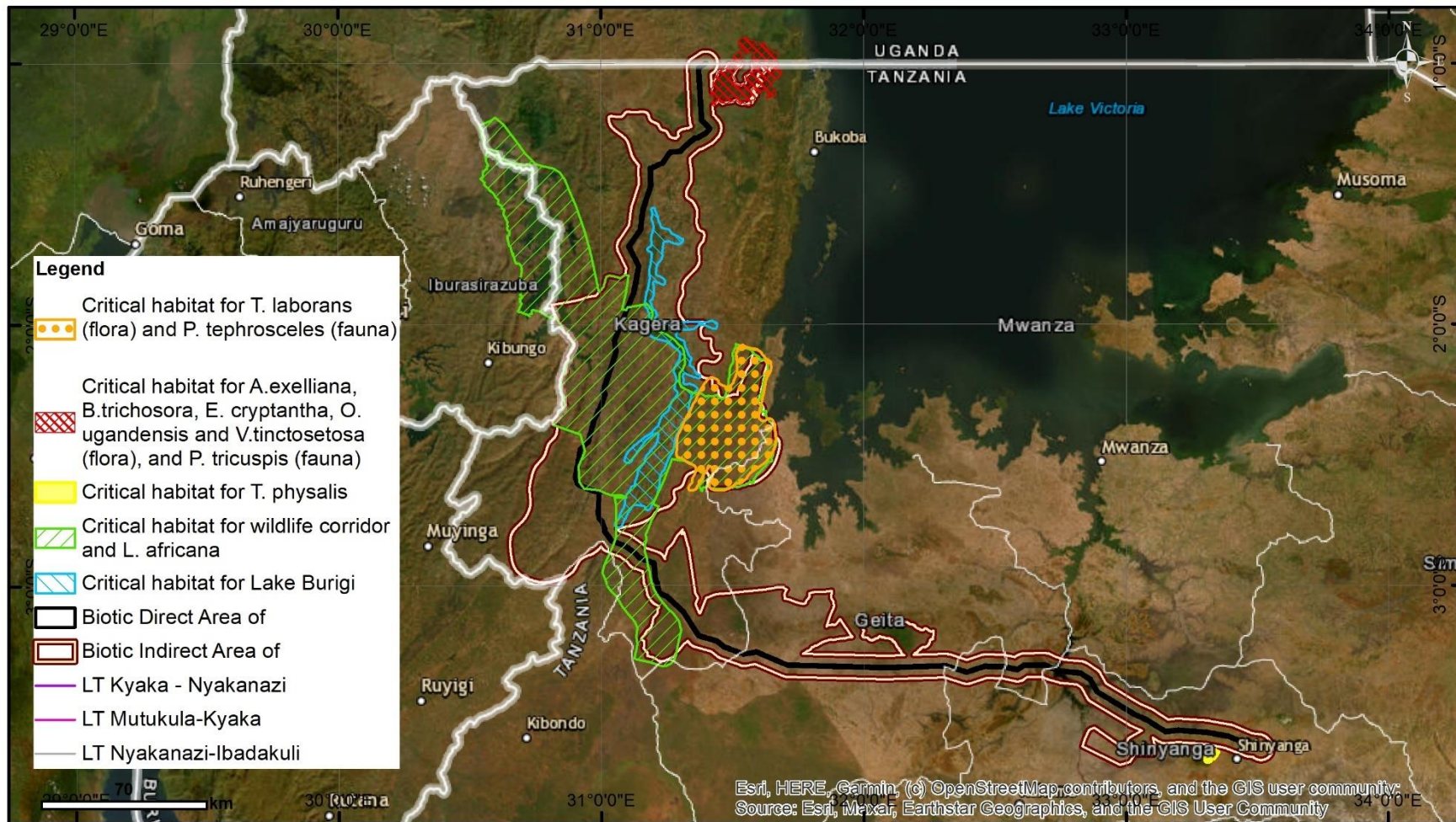


Figure 5.0.c
Location of the Biodiversity Sampling points



6.0

Mitigation Strategy of the Project

When there is critical natural habitat, paragraph 24 of ESS6 states that no project activity that has potential adverse impacts can be implemented unless certain conditions are met:

Requirement paragraph 24 of ESS6	Project compliance
(a) No other viable alternatives within the region exist for the development of the project in habitats of less biodiversity value	<p>The east-west stretch of the project will not directly interfere with CH. On the north-south stretch, the critical habitat region is broad, stretching from the shore of Lake Victoria to the Akagera region in Rwanda, and it is not possible to avoid CH in any of the alternatives evaluated (see Chapter 5 of the ESIA).</p> <p>In addition, as shown in the figures presented in Section 7.2.4.2 (Chapter 7 of the ESIA), although 12 biodiversity values triggered the CH trigger, the project route directly interferes with the EAAA of only 2 triggers, the elephant <i>L. africana</i> and the ecological wildlife corridor of which the BCNP is an integral part.</p> <p>Additionally, as part of the analysis of alternative routes for this project, and to achieve the lowest socio-environmental impact, the Kyaka-Nyakanazi segment was adjusted to follow the parallelism and sharing of the right-of-way of the existent TL Nyakanazi-Benako and its future extension to Kyaka, reducing the cumulativeness of some impacts.</p> <p>Although sharing with this TL under construction does not make it possible to avoid the vegetation clearing (due to the need for safety distance), parallelism makes it possible to avoid and minimise the fragmentation of new areas of native vegetation by concentrating infrastructure works in the same corridor.</p> <p>Parallelism with this TL will run along the entire length of the project within the BCNP and the CH boundary. Proximity to a project under construction will make it possible to use structures such as camp sites, support areas and accesses, minimising the need to open new ancillary facilities. Both projects were also designed parallel to the B182 road, with an average distance of ~ 400 metres between the TL and the road, minimising the length of new access that need to be built in areas with a steeper slope.</p>
(b) All due process required under international obligations or national law that is a prerequisite to a country granting approval for project activities in or adjacent to a critical habitat has been complied with	<p>This environmental impact study is being prepared following the work plan approved by the NEMC and local legislation. The study will go through the approval process as required by national legislation and is also being carried out following the requirements of the World Bank's socio-environmental standards.</p> <p>After obtaining non-objection for NEMC and projects sponsors, Tanesco, through the Ministry of Energy to the Ministry of Tourism and Natural Resources, will seek a formal</p>

Requirement paragraph 24 of ESS6	Project compliance
<p>(c) The potential adverse impacts, or likelihood of such, on the habitat will not lead to measurable net reduction or negative change in those biodiversity values for which the critical habitat was designated;</p> <p>(d) The project is not anticipated to lead to a net reduction in the population of any Critically Endangered, Endangered, or restricted-range species, over a reasonable time period:</p>	<p>agreement from TANAPA/TFS to allow the commencement of construction activities within protected areas.</p> <p>As demonstrated in the impact assessment (Chapter 8 of the ESIA), the conversion of natural habitats for the implementation of the project, although it implies direct and disturbing impacts on the local fauna and flora, will not lead to the local extinction of species or a significant reduction in the population. Considering the correct implementation of the mitigation measures adopted, such as a reduction in the service strip for the implementation of the TL (reducing the need for vegetation clearing), measures to control the suppression of vegetation, actions to rescue and relocate fauna and flora, as well as actions to restore areas degraded by the project and compensatory planting for suppression, the impacts on the CH trigger biodiversity values can be mitigated.</p> <p>Additionally, the known records in the literature for 6 trigger species of flora, in addition to the primate <i>P. tephrosceles</i>, are close to the shore of Lake Victoria. During primary data collection, the primate <i>P. tephrosceles</i> was also recorded in the sampling plots close to Lake Victoria (biodiversity sampling points BS4 and BS5). The common african pangolin <i>P. tricuspis</i> were registered in the project area only through interviews and, according to available information, an important habitat for this species would be the Minziro Forest Reserve, which will not be impacted by the project. As for the elephant <i>L. africana</i>, according to existing records, the most significant populations (in terms of number of individuals) are located in the boarder between Tanzania and Nairobi (Figure 7.2.4.3.d). In other words, most of the known records for the CH triggering species are outside the area directly affected by the project, indicating that there are no significant populations of these species in the Project's DAA.</p> <p>The trigger for criterion (c) is also outside the Project's DAA. As for the trigger for criterion (e), the ecological corridor passes through areas of natural and modified habitats, including a landscape that has already been partially altered in the current scenario. The mitigation measures planned for the project, including those in the Construction Environmental Plan (CEP), Operation Management Programme (OMP) and Biodiversity Management Plan (BMP) make it possible to minimize impacts on the ecological corridor.</p> <p>Regarding criterion (e) the distance between the towers (~400 metres), as well as their height (between 49 and 52 metres), will not impede the passage of elephant herds, the main species that use the wildlife corridor.</p>
<p>(e) The project will not involve significant conversion or significant degradation of critical habitats;</p>	<p>The service strip for the implementation of the TL was reduced to a total width of 14 metres, instead of the 52 metres of the wayleave. This measure makes it possible to decrease the vegetation clearance from 1,110.97 ha to 300.37 ha, a reduction of 810.6 ha (73%). Considering the footprint of the Project that overlaps the critical habitat, the conversion of natural critical</p>

Requirement paragraph 24 of ESS6	Project compliance
	<p>habitat decreases from 455.55 to 109.69 hectares, a reduction of 345.86 (~76%) hectares. Therefore, the vegetation clearance for the project implementation will be 300.37 ha (being 109.69 ha in natural critical habitat), in addition to 16.61 ha in modified critical habitat. However, this value may be slightly higher, as the final location of the accesses and construction sites has not yet been determined. Nevertheless, these structures will be implemented mainly in degraded areas.</p> <p>Considering the total extent of the CH (Section 7.2.4.3 of the ESIA, Table 7.2.4.3.b and Figure 7.2.4.3.o), the habitat conversion caused by the implementation of the project represents 0,01% of the total critical habitat, and 1.36% of the total critical habitat within the Project's DAI. The entire stretch within the CH will be in parallel with an TL under construction, making it possible to reuse infrastructure (such as accesses and camp sites) and concentrate the impacts of the edge effect in a single corridor.</p>
(f) The project's mitigation strategy will be designed to achieve net gains of those biodiversity values for which the critical habitat was designated;	The mitigation strategy to achieve gains for the values that triggered the CH trigger is presented in the Biodiversity Offset (P0.5).
(g) A robust and appropriately designed, long-term biodiversity monitoring and evaluation programme aimed at assessing the status of the critical habitat is integrated into the Borrower's management programme:	This Biodiversity Management Plan includes monitoring of fauna, flora and landscape, which should be carried out during the operation of the project, in order to ensure that the mitigation measures adopted are being effective in achieving net gains for the project. See Programmes P0.8, P0.9 and P10.

Additionally, the project mitigation strategy should demonstrate that its implementation and operation will not cause measurable adverse impacts on the biodiversity values that identify or designate that habitat and on the ecological processes that support those values, following the steps of the mitigation hierarchy.

The mitigation hierarchy is a hierarchy in terms of priorities, which involves a precautionary approach to anticipating and avoiding adverse impacts on the environment, and, where avoidance is not possible, minimising. Residual impacts must then be remedied or mitigated to an acceptable level, and what cannot be remedied/mitigated must be compensated for (**Figure 6.0.a**).

As a general rule, this means that the previous components need special emphasis. While all the components of the mitigation hierarchy are important and rigorous efforts to minimise impacts as far as possible, they may also fail to achieve significant reductions in the project's potential impacts (CSBI & TBC, 2015).

Figure 6.0.a
Mitigation hierarchy



Source: TBC (Mitigation hierarchy - The Biodiversity Consultancy)

Thus, the application of the mitigation hierarchy is an iterative and continuous process, applying the necessary measures in the recommended sequence, until the residual impacts are reduced to the minimum possible, following the following four stages:

- i. Avoidance - measures taken to modify the spatial or temporal design of a project to protect biodiversity features from impacts.
- ii. Minimise - measures taken to reduce the duration, intensity or scale of impacts that cannot be completely avoided.
- iii. Restore - measures taken to restore or reverse the degradation of ecosystems impacted by the project, including measures designed to remediate, restore, reestablish, recover, revegetate or otherwise enhance project impacts that cannot be avoided or further minimised.
- iv. Offset - a set of actions that produce measurable conservation outcomes, designed to compensate for residual impacts on biodiversity resulting from the activities of an existing or new project and that continue after the implementation of appropriate avoidance, minimisation and restoration measures.

Avoidance

The Project is committed to implementing avoidance measures, i.e., measures to 'design out' an impact or risk to prevent their expected impacts on biodiversity. It has also used optimisation criteria to assess all infrastructure development options and analyse alternatives to avoid significant impacts on biodiversity, including:

- The design of the route was assessed in detail and optimisation proposals were made in order to avoid impacts on large remnants of native vegetation, riparian vegetation and important cultural areas.
- New accesses will only be opened when the slope of the terrain does not allow

access to be made through the TL's own service strip.

- The construction sites will be located primarily in already degraded areas.
- Before carrying out any vegetation clearance activities, TanESCO must carry out an active search programme for flora species that are CH triggers in the project's area of indirect influence. The aim of the programme is to actively search for flora trigger species in certain stretches of the area directly affected by the project (details in Section 5.2 of Programme P11). If any individuals are found, measures to adapt the project should be implemented to avoid impacts on these species. This measure aims to avoid a potential impact of the project on CH trigger flora species. Although they have not been found in the project area, there is a risk that they could occur in some stretches where there are phytophysionomies characteristic of these species (more details in P.11).

Minimisation

The Project is committed to implementing minimisation measures to reduce the severity of impacts on biodiversity by controlling or limiting the source of impact. Minimisation measures planned for the Project include:

- The service strip for the implementation of the TL has been reduced to a total width of 14 metres, instead of the 52 metres of the wayleave. This measure makes it possible to decrease the vegetation clearance from 1,110.97 ha to 300.37 ha, a reduction of 810.6 ha (73%). Considering the footprint of the Project that overlaps the critical habitat, the conversion of natural critical habitat decreases from 455.55 to 109.69 hectares, a reduction of 345.86 hectares (~76%). Therefore, the vegetation clearance for the project implementation will be 300.37 ha (being 109.69 ha in natural critical habitat), in addition to 16.61 ha in modified critical habitat.
- The Construction Environmental Plan (CEP) provides for a series of measures to prevent and control impacts related to contamination of soil, water and air.
- The CEP also provides for a series of guidelines for vegetation clearance, to minimize impacts in the remaining vegetation around the project.
- The Fauna and Flora Rescue and Relocation plan provides for measures for scaring away fauna before the vegetation clearance, in addition to rescue and relocation of low mobility animals, and rescue and relocation of germplasm, mainly of threatened and endemic flora species.

Restoration/rehabilitation

Rehabilitation measures will include the restoration/rehabilitation of all temporary construction support infrastructure, to restore the area to similar conditions to the original. The restoration of vegetation will be carried out with native species from the region, avoiding the use of exotic species.

Table 6.0.a summarizes the mitigation strategy of the project for the priority biodiversity values

Table 6.0.a
Mitigation strategy for the priority biodiversity values

Main risk/impact	Biodiversity values potentially affected	Mitigation strategy
Reduction of natural habitats Loss of vegetation cover and reduction of individual plants Increased landscape fragmentation and edge effect incidence	Threatened and restricted range flora and fauna species Ecological corridor Important habitat for species congregation Natural habitat	<u>Avoid</u> <ul style="list-style-type: none"> • Optimising the project route • Use of the service strip for access to the towers during construction and operation • Prioritising degraded areas for support structures • Flora Active Search Program (P.11) <u>Minimize</u> <ul style="list-style-type: none"> • Reduction of the vegetation clearing area • Construction Environmental Plan (CEP) • Fauna and Flora Rescue and Relocation Plan • Landscape Protection Program <u>Restore</u> <ul style="list-style-type: none"> • Rehabilitation of areas degraded by the Project (Construction Environmental Plan) • Operation Biodiversity Management
Disturbance of fauna during construction	Threatened fauna species	<u>Avoid and minimize</u> <ul style="list-style-type: none"> • Construction Environmental Plan (CEP) • Fauna and Flora Rescue and Relocation Plan
Increased risk of fire in adjacent vegetation	Threatened and restricted range flora and fauna species Ecological corridor Important habitat for species congregation Natural habitat	<u>Avoid and minimize</u> <ul style="list-style-type: none"> • Construction Environmental Plan (CEP) – several measures to avoid and minimize risk of fires • Construction Emergency Preparedness and Response Plan • Operation Management Plan
Risk of expansion of invasive flora species	Threatened and restricted range flora and fauna species Natural habitat	<u>Avoid, minimize and restore</u> <ul style="list-style-type: none"> • Invasive Species Control Program
Risk of increased illegal exploitation of natural resources	Threatened and restricted range flora and fauna species Ecological corridor Natural habitat	<u>Avoid and minimize</u> <ul style="list-style-type: none"> • Operation Management Programme: Access Control Plan • Landscape Protection Program
Risk of an increase in hunting	Threatened fauna species	<u>Avoid and minimize</u> <ul style="list-style-type: none"> • Operation Management Programme: Access Control Plan
Risk of birds collision	Threatened and migratory bird species	<u>Avoid and minimize</u> <ul style="list-style-type: none"> • Operation Biodiversity Management - Monitoring of accidents with avifauna during operation

6.1

Residual Impacts Assessment

As explained above, despite all the measures to avoid and minimise the project's impacts, there will still be a conversion of natural habitats. Thus, a semi-quantified residual impact assessment was undertaken to help understand the scale and magnitude of residual impacts. Residual impacts are those that remain after the implementation of the project's mitigation hierarchy, i.e. after the implementation of measures to avoid and minimise the project's impacts and, after that, measures to restore the impacted biodiversity or part of it (TEN KATE & CROWE, 2014). Impacts that are not mitigated must be compensated for by implementing biodiversity offsetting measures. Due to difficulties intrinsic to the process of quantifying the losses of all biodiversity components (BBOP, 2009), the quantification of the net balance of biodiversity is usually done by means of metrics that use factors that represent different aspects of biodiversity and that can be effectively measured (*surrogates*).

There is no one best way to quantify biodiversity losses and gains and, in recent decades, a variety of metrics have been developed to meet the requirement of preventing the net loss of biodiversity, including measures of area, ecosystem functions or population structure and status (BBOP, 2009). Most use some measure of area (surface) as the basic unit for calculating the final balance, but vary in terms of how the extent of the area is adjusted to take account of differences in the composition, structure and function of biodiversity, i.e. its condition.

An appropriate metric is needed to measure project impacts (or losses) and be able to weigh these up against gains that can be realized through on-site rehabilitation and offsite offsets. Generally, biodiversity values are expressed in terms of their quantity and quality. A suitable metric should account for the type, amount, and condition of the biodiversity that is being lost and gained (ICMM & IUCN, 2013).

As previously mentioned, the project directly intersects the critical habitat triggered by the elephant *L. africana* and the wildlife corridor. The other biodiversity values that triggered the CH are in the project's indirect area of influence, and it is understood that there will be no significant impacts on these values. The other two fauna trigger species (the pangolin *P. tricuspis* and the primate *P. tephrosceles*), do not occur in the Directly Affected Area, according to the IUCN geographical range (for *P. tephrosceles*) and the primary data collected (for *P. tricuspis* and *P. tephrosceles*).

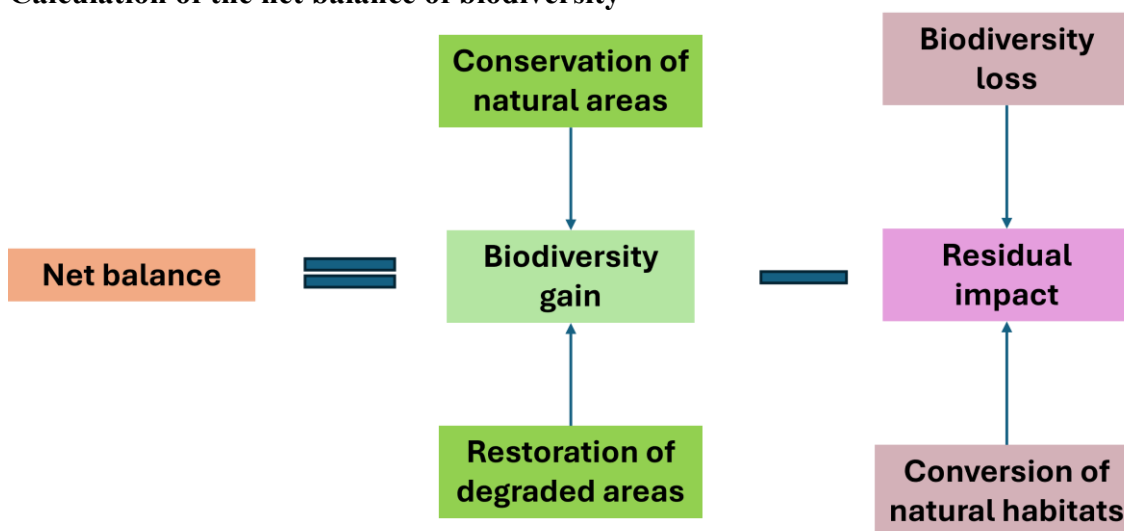
For the CH trigger flora species, it is understood that there is no direct impact on their population, since there are no evidence of their presence in the directly affected area, but a potential risk, due to uncertainties regarding their population and distribution and the existence of phytophysiognomies that could harbour these species.

Thus, the residual impacts were calculated using two different metrics: Quality Hectares, for the critical habitat directly intercepted; and Units of Global Distribution, for the risks to critical habitats in the Indirect Area of Influence.

Residual analysis for direct impact on critical habitats (Quality Hectares)

For the impacts on the CH triggers intercepted by the project, the elephant and the wildlife corridor, the metric of quality hectares, related to the loss of habitats that support these biodiversity values, was used. This was also applied to the elephant, given that it is an animal that occurs in a wide variety of natural and modified habitats. Through this metric, the net balance of the project was estimated based on the usual approach to biodiversity calculations, considering the gains and losses in both the impacted areas and the areas proposed for restoration and compensation (BBOP, 2012), based on the "quality hectares" methodology (or "area x quality" habitat) (Parkes et al. 2012; Temple et al., 2012) (**Figure 6.1.a**).

Figure 6.1.a
Calculation of the net balance of biodiversity



Source: Adapted from BBOP (2012)

Under this approach, biodiversity losses and gains must be quantified taking into account the qualitative aspect (condition) of the habitat or vegetation, which directly affects the CH trigger values species, as well as the other priority biodiversity and ecosystem services values. It is not possible to try and quantify impacts to all aspects of biodiversity individually. Instead, a habitat proxy will be used to estimate residual impacts to priority species. Such an approach is appropriate where a species is evenly distributed within the habitat, and where habitat loss can be used to assess population loss.

The advantage of the quality hectares methodology is that it is easy to measure and communicate, but there are no standardised metrics, which must be adapted for each project, depending on the characteristics of the site (BBOP, 2012b). Some aspects can be incorporated into the qualification of areas in the form of multiplication factors, such as the difficulty and degree of uncertainty of restoration, which end up reducing the value of the areas (DEFRA, 2012; MOILANEN *et al.*, 2009; LAITILA *et al.*, 2014).

For this residual impact calculation, the factors relating to the condition of the vegetation and the criticality of the habitat were taken into account and applied to the extent (in hectares) of the intervention areas, thus generating values in quality hectares (QH). To calculate the project's impact, the following quantities were taken into account (**Table 6.1.a**), based on the habitat mapping carried out for this EIA, and considering the 14-metre-width strip of vegetation clearing:

Table 6.1.a

Types of habitats and their characteristics considered in the residual impact assessment



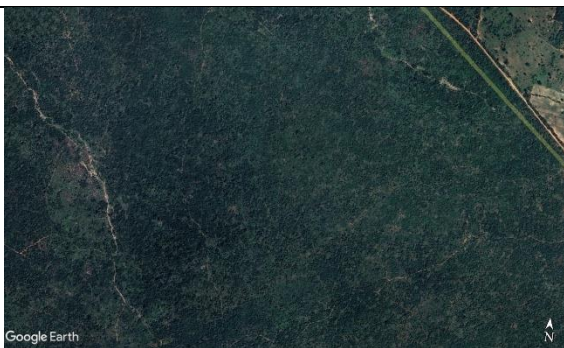

Habitat type	Description	Example	Area (ha)
Modified habitat within CH	Predominant degraded areas, characterized by areas with soil devoid of vegetation or with very incipient vegetation, without specific use or that can be identified by means of images. These areas are located within the polygon delimited as critical habitat.	 <p>Example of modified habitat in CH, located in the wildlife corridor in Kagera (reference coordinate 288500.40 E, 9683473.8S)</p>	16.61
Degraded natural habitat outside CH	Areas of natural habitat with signs of anthropisation, such as fire and selective deforestation for the extraction of natural resources. These areas are located outside the polygon delimited as critical habitat.	 <p>Example of degraded natural habitat outside CH, located near Biharamulo Forest Reserve in Nyantakara (reference coordinate 315755.35 E, 9648263.46S)</p>	37.59

Table 6.1.a

Types of habitats and their characteristics considered in the residual impact assessment

Habitat type	Description	Example	Area (ha)
Preserved natural habitat outside CH	Areas of natural habitat (including areas mapped as water) in a good state of conservation, located outside the polygon delimited as critical habitat. There may be some small signs of anthropisation.	 <p>Example of preserved natural habitat outside CH, located near Uyovu Forest Reserve in Bulega (reference coordinate 359086.43E, 9632453.10S)</p>	154.31
Natural habitat within CH	Areas of natural habitat, preserved and degraded (including areas mapped as water), located within the polygon delimited as critical habitat.	 <p>Example of preserved natural habitat within CH, located near Nyantakara Forest Reserve in Lusahunga (reference coordinate 311606.23E, 9641565.54S)</p>	109.69

PS: Areas mapped as water were included in this calculation as preserved natural habitats.

It is important to note that vegetation clearing due to the opening of new access and construction sites has not been included in this calculation, as the location of these structures has not yet been defined. As a result, actions to restore these degraded areas were also not taken into account in this calculation. Therefore, this assessment should be revised when there is better clarity on these issues.

Regarding the multiplication factor, the following were considered (**Table 6.1.b**):

The residual impact is then calculated by applying the multiplication factors shown in **Table 6.1.b** to the impacted areas (**Table 6.1.a**). The result of this calculation is shown in the table below (**Table 6.1.c**). As shown, the project results in a negative residual impact of **-327.92 QH**.

Table 6.1.b

Multiplier factors according to the type of habitat where the intervention will take place

Habitat type	Multiplier factor	Justification
Modified habitat within CH	0.5	Degraded areas that, in principle, would not need to be compensated (for impacts on biodiversity). However, as these areas are within CH, they were taken into account in the calculation, with a depreciation factor, because they are anthropogenic areas.
Degraded natural habitat outside CH	0.75	Areas of natural habitat that show intense signs of degradation and therefore may not support significant biodiversity. As they are outside the CH, a depreciation factor was considered, assuming that they are areas that lack significant richness and lower carrying support.
Preserved natural habitat outside CH	1	Areas of natural habitat that show few signs of degradation. As they are outside the CH, a 1:1 factor was applied.
Preserved natural habitat within CH	1.25	Include areas of both preserved and degraded natural habitat. As they are within the CH, a enhancement factor was applied.

Table 6.1.c

Calculation of the project's residual impact after avoidance and minimisation measures

Habitat type	Area (ha)	Multiplier factor	Quality hectares
Modified habitat within CH	16.61	0.5	8.31
Degraded natural habitat outside CH	37.59	0.75	28.19
Preserved natural habitat outside CH	154.31	1	154.31
Preserved natural habitat within CH	109.69	1.25	137.11
Total residual impact	318.2 ha	-	-327.92 QH

Assessment of the potential impacts of natural habitat reduction on trigger species identified in the project's IAI

Some species of flora and fauna that triggered the critical habitat were recorded only in the indirect area of influence, and no records of these species were found in the directly affected area, either through field data or data available in the literature. However, this lack of records may be due not only to the absence of individuals, but also to the lack of studies in the region. Considering that the area directly affected by the project includes ecosystems favourable to the occurrence of these species, the potential impact of the project on reducing the population of these species was assessed, should they occur in the area directly affected.

For trigger species included in the analysis, but that the CH is not directly intercepted by the project, losses and gains were calculated in Units of Global Distribution (UD). Units of Global Distribution is a metric conceptually related to Quality Hectares. A Unit of

Global Distribution is equivalent to 1% of a species' global population (or 1% of its global distribution, in the event that population data are unavailable). UGD are calculated as follows: if a species has a global population of 1,000 individuals, and 10 of those are lost, that would be a loss of 1% of the global population or 1 'Unit of Global Distribution' (UGD). Similarly, if a species has a global distribution of 100 ha, and 1 ha of its distribution is lost as a result of habitat loss, that is a loss of 1% of its global distribution or 1 'Unit of Global Distribution' (UGD) (TEMPLE et al., 2012). To convert losses and gains in hectares to Units of Global Distribution, the total global Area of Occupancy (AOO) was used.

For this analysis, the species' naturally occurring phytophysiognomies were assessed (see **Table 7.2.4.2.a** and **7.2.4.2.b**, **Section 7.2.4.2**), as well as whether there are any corresponding ones in the area directly affected by the project (see **Table 8.2.3.2.a**, **Section 8.2.3.2**, item 5).

It should be noted that this is an analysis of the potential impacts, since the project does not intersect the CH delimited for these species, and they have not been identified in the project's DAA or DAI. This analysis was used to assess the risk of a potential net reduction in the population of these species. According to footnote 13 of ESS6, "*Net reduction is a singular or cumulative loss of individuals that affects the species' ability to persist at the global and/or regional/national scales for many generations or over a long period of time. The scale (i.e., global and/or regional/ national) of the potential net reduction is determined based on the species' listing on either the (global) IUCN Red List and/or on regional/national lists. For species listed on both the (global) IUCN Red List and the national/regional lists, the net reduction will be based on the national/regional population.*". This definition was used as a basis for assessing the risk of population decline.

As can be seen in the table, the reduction in UGD for almost all species is less than 1%. The species with the greatest reduction are *T. laborans* and *T. physalis* (**Table 6.1.d**). This is considering the scenario that these species occur in great abundance throughout the phytophysiognomies identified as potentially occurring, which is highly unlikely. According to the IUCN Red List Categories and Criteria (IUCN, 2000), for a species to move from EN to CR it needs a reduction of more than 50% in its population, or a reduction of around 98% in its area of distribution. Therefore, the risk of a significant net reduction in the population of these species is considered to be low.

Table 6.1.d
Assessing residual impacts for risks related to trigger species evidenced in the project's IAI

Family	Species	Distribution	Habitat of occurrence (according to IUCN)	Population trend	IUCN Category	IUCN Criteria	EOO (km ²)	AOO (km ²)	Restricted range	Similar habitat in the project's ADA	Habitat area in the project's DAA (km ²)	UGD
Acanthaceae	<i>Thunbergia laborans</i>	This species is native to Rwanda and Tanzania where it is found between 1,150–1,550 m asl.	Woodland, bushland and roadsides.	Decreasing	EN	B2ab (i,ii,iii,iv,v)	11.636,68	20,00	Yes	Miombo woodland, Mixed woodland, Grass wooded savanna, Thicket bushland/shrubland	1,27	6,4%
Asteraceae	<i>Emilia cryptantha</i>	Emilia cryptantha is endemic to S Uganda and NW Tanzania.	Swamp grassland	Decreasing	EN	B2ab (i,ii,iii,iv,v)	6.394,34	45,00	Yes	Riverine grassland vegetation	0,02	0,04%
Asteraceae	<i>Vernonia tinctoriosa</i>	Endemic to northwest Tanzania and southwest Uganda.	Wetland areas on sandy lake	Unknown	EN	B2ab (iii)	11.093,95	45,00	Yes	Riverine grassland vegetation	0,02	0,04%
Dennstaedtiaceae	<i>Blotiella trichosora</i>	The species occurs in Burundi, Tanzania and Uganda.	Semideciduous moist forest, swamps	Decreasing	EN	B2ab (i,ii,iii,iv,v)	28.723,52	63,00	Yes	Evergreen dry forest, Riverine forest, Riverine grassland vegetation,	0,04	0,06%
Lamiaceae	<i>Tinnea physalis</i>	This species is endemic to Tanzania where it is found between 1,160–1,350 m asl.	Commiphora scrub, rocky outcrops and inselbergs.	Unknown	EN	B2ab (i,ii,iii,iv,v)	21.112,13	24,00	Yes	Miombo woodland, Mixed woodland, Grass wooded savanna, Thicket bushland/shrubland	1,27	5,3%
Menispermaceae	<i>Albertisia exelliana</i>	This species is native to Burundi, Rwanda, Tanzania, Uganda between 600–1,250 m asl.	Riverine forest	Unknown	EN	B2ab (i,ii,iii,iv)	1.023.615,15	40,00	No	Riverine forest	0,02	0,04%
Rubiaceae	<i>Oxyanthus ugandensis</i>	The native range of this species is E. Central DR Congo to SW. Uganda and North Tanzania.	Semideciduous moist forest	Unknown	EN	B2ab (iii)	159.777,00	1.597,77	No	Evergreen dry forest, Riverine forest	2,03	0,13%
Mammalia/ Pholidota	<i>Common African Pangolin Phataginus tricuspis</i>	In Tanzania, the species is known from the Minziro Forest Reserve on the northwest border with Uganda, and close to Bukoba (Foley et al. 2014).	Moist tropical lowland forests and secondary growth, dense woodlands, along water courses		EN	A2c+4cd	6.415.869	512	No	Evergreen dry forest, Riverine forest, Riverine grassland vegetation,	0,04	0,01%
Mammalia/ Primates	<i>Ashy Red Colobus Piliocolobus tephrosceles</i>	In western Tanzania in Biharamulo on the southwestern shores of Lake Victoria	Riverine and gallery forest, forest-miombo savanna mosaic, degraded secondary forests, evergreen forests		EN	A4bc	21.100	3.847	Yes	Evergreen dry forest, Grass wooded savanna, Miombo woodland, Mixed woodland, Riverine forest, Riverine grassland vegetation, Thicket bushland/shrubland	1,31	0,03%

6.2

Mitigation Approach for Residual Impacts

As shown above, after the measures to avoid and minimise the project's impacts, there are still residual impacts. Biodiversity offsetting measures will therefore be necessary to achieve the conservation goals. Biodiversity offsets are a set of actions that make it possible to produce measurable conservation results, designed to compensate for residual impacts on biodiversity resulting from project activities. Biodiversity offsets must adhere to the principle of 'equal for equal or better'.

As already mentioned, critical habitat values are centred on the availability of native habitats in a good state of conservation, which support the region's other biodiversity values. Thus, as detailed in the **P.05. Biodiversity Offset Plan**, the project's biodiversity offset proposal includes the restoration of degraded habitats, in proportions equivalent to the significance of the impacted habitat, as detailed in **Table 6.2.a**, including natural habitats, natural critical habitats and modified critical habitats.

Table 6.2.a

Restoration proposal based on the currently area planned for intervention

Habitat type	Area planned for intervention (ha)	Restoration proportion	Area to be restored (ha)
Modified habitat within CH	16.61	1:1	16.61
Degraded natural habitat outside CH	37.59	1:1	37.59
Preserved natural habitat outside CH	154.31	2:1	308.62
Preserved natural habitat within CH	109.69	3:1	329.07
Total			691.89 ha

In the case of *offsets* involving habitat restoration, the biodiversity gain must be assessed and quantified taking into account the initial condition of the habitat (baseline), before the impacts resulting from the implementation and operation of the project and the improvement actions to be carried out (BBOP, 2012a, 2012b). Thus, the biodiversity gain corresponds to the difference between the expected final condition generated by the *offset* actions and the initial condition of the habitat. In these cases, other aspects can also be incorporated into the qualification of the areas in the form of multiplier factors, such as the difficulty and time of restoration and the degree of uncertainty, which end up reducing the value of the areas (DEFRA, 2012; MOILANEN *et al.*, 2009; LAITILA *et al.*, 2014). The restoration difficulty factor is applied to the balance resulting from the difference between the initial and final condition values (in QH).

The following multiplication factors can be considered in these cases:

Table 6.2.b
Restoration difficulty scale and its multiplication factors

Level	Restoration difficulty	Multiplier factor
1	Low: restoration can only be carried out by promoting natural regeneration and removing degradation factors for example by building fences to prevent access by grazing animals, firebreaks to control fire and control of exotic species.	1
2	Moderate: restoration requires planting seedlings at low to medium density (densification, enrichment or cores) and moderate management and monitoring activities, such as watering, fertilising and management of competing species.	0.75
3	High: restoration requires planting seedlings at a medium to high density (full planting) and very frequent management and monitoring activities, such as watering, fertilising, managing competing species and combating pests.	0.5

In addition, another depreciation factor may be applied to the qualification of areas, with regard to uncertainties in conservation guarantees. If all the offset were carried out within existing protected areas (such as national parks and forests), the level of risk to conservation guarantee would be low, since these areas are already protected by national legislation and subject to a certain degree of control and fiscalization. However, precisely because these are already protected areas, one of the offset principles would not be fully met, the principle of additionality of the offset.

Although it is possible to consider that the project may bring some additionality by restoring degraded areas within protected areas, as reported during interviews with TANAPA and TFS, one of the current difficulties for managers of these areas is to control illegal degradation of native habitats within protected areas. Therefore, habitat restoration, together with contributions to improving monitoring mechanisms (to be agreed between Tanapa and Tanesco), could be considered a benefit of the implementation of the offset.

On the other hand, offsetting outside protected areas can increase the additionality of the project by restoring areas that are not planned for restoration, but it increases the level of risk in relation to maintaining the preservation of the natural habitat during and after restoration.

The following multiplication factors can be considered in these cases:

Table 6.2.c
Risk level scale for ensuring the preservation of the restored natural habitats

Level	Restoration difficulty	Multiplier factor
1	High risk: areas located outside protected areas and close to urban settlements, where the risks of invasion and destruction of areas under restoration are greater.	0.5
2	Moderate risk: areas located outside protected areas and far from urban settlements, where the risks of invasion and destruction of areas under restoration are moderate.	0.8

Table 6.2.c**Risk level scale for ensuring the preservation of the restored natural habitats**

Level	Restoration difficulty	Multiplier factor
3	Low risk: areas located within protected areas, where the risks of invasion and destruction of areas under restoration are lower.	1

Similarly, a valuation multiplier can be applied with regard to the restoration of natural habitats in a critical region, which will bring greater benefits to biodiversity and trigger values.

Considering the current intervention scenario, a calculation exercise was carried out to assess whether it is feasible to achieve net gains from the proposed offset. The following assumptions were adopted:

- 100% of habitat restoration will be carried out in totally degraded areas, devoid of native vegetation (level 3 of restoration difficulty, **Table 6.2.b**).
- 100% of the restoration areas will be within the critical habitat polygon (the same multiplier factor presented in Table 6.1.c was applied).
- 25% of the areas will be located within a protected area (level 3 of risk, **Table 6.2.c**).
- 75% of the areas will be located outside a protected area, far from urban settlements (level 2 of risk, **Table 6.2.c**).
- 25% of the areas will be located outside a protected area, close to urban settlements (level 1 of risk, **Table 6.2.c**).

The calculation was made considering the initial scenario, in which the target areas will be completely degraded, and the expected final scenario, which considers that the habitat will be restored, i.e., in conditions to continue the ecological succession process on its own, without human interference, and to provide support for native flora and fauna species. Therefore, considering the scenario presented in the **Table 6.2.d** below, it is possible to achieve net biodiversity gains for the project through this restoration proposal:

- Residual impact (Table 6.1.c) = **-327.92 QH**
- Gain balance (Table 6.2.d) = **+335.13 QH**
- Net balance = $335.13 - 327.92 = +7.21 \text{ QH}$

However, it is important to mention that these calculations were made based on the information available about the project at this time, and considering some assumptions for realising the offset. These calculations should be reviewed periodically, using the methodology and multiplication factors presented here, each time there is more detail on the uncertainties that exist at the moment, especially in relation to the final amount of intervention in natural and critical habitats. It is also important to consider that the success of the project's net gain depends on the correct implementation and monitoring of the measures planned to avoid and minimise impacts.

Table 6.2.d
Scenario of net gains in biodiversity, based on the proposed offset for restoring degraded areas

Restoration areas	Extension (ha)	Condition of the vegetation (Table 6.1.c)		Within critical habitat		Risk level (Table 6.2.c)		Partial (QH)	Partial balance (QH)	Rehabilitation difficulty (Table 6.2.b)		Final balance (QH)
		Level	Multiplier factor	Level	Multiplier factor	Level	Multiplier factor			Level	Multiplier factor	
Restoration of degraded areas - 25% within protected areas. <u>Initial condition</u>	172.97	1	-	3	1.25	3	1.00	-	216.22	3	0.50	108.11
Restoration of degraded areas - 25% within protected areas. <u>Expected final condition</u>	172.97	4	1.00	3	1.25	3	1.00	216.22				
Restoration of degraded areas - 50% outside protected areas and far from urban settlements. <u>Initial condition</u>	345.95	1	-	3	1.25	2	0.80	-	345.95	3	0.50	172.97
Restoration of degraded areas - 50% outside protected areas and far from urban settlements. <u>Expected final condition</u>	345.95	4	1.00	3	1.25	2	0.80	345.95				
Restoration of degraded areas - 25% outside protected areas and close to urban settlements. <u>Initial condition</u>	172.97	1	-	3	1.25	1	0.50	-	108.11	3	0.50	54.05
Restoration of degraded areas - 50% outside protected areas and close to urban settlements. <u>Expected final condition</u>	172.97	4	1.00	3	1.25	1	0.50	108.11				
Total	691.89 ha											335.13 QH

6.3

Revision Mechanisms

The present BMP and the residual impact and net balance must be revised in the following triggers:

Table 6.3.a

Triggers for the mitigation strategy review mechanism

Revision trigger		Aspect to be reviewed	Stage
1	Record of some of the CH trigger species in the project's DAA during the implementation of the Flora Active Search Program	Project design	Before the executive project is defined
2	Definition of the impacted area: final version of the executive engineering project, with the definition of the quantity and localization of new access and supporting areas.	Project's residual impact	Before the beginning of the construction
3	Definition of the final impacted area	Project's residual impact Project's gain balance	After construction is finished
4	Definition of the location of the areas to be restored	Project's gain balance	Continuous action as long as there are areas to be chosen, up to the limit defined in the calculation of trigger 2
5	Restoration activities execution	Project net balance	Annually, from the start of restoration activities, as long as the gain is not reached
6	Stakeholder engagement: mainly considering the further consultations with TANAPA and TFS to align the common understanding for operational stage. If the stakeholders consulted suggest another offset measure and if the proposal is viable and accepted by the project managers, with the support of biodiversity offset specialists.	Offset Project's gain balance Project net balance	After the decision, to be taken by the project managers, to change the offset proposal

6.4

Biodiversity Monitoring

The project's biodiversity monitoring will be carried out through the programmes listed below. Details of the objectives, monitoring indicators and methodology are presented in each programme.

P.05 - Biodiversity Offset Plan: the project's compensation proposal, with a focus on achieving net gains for critical habitat trigger values.

P.06 - Ecosystem Services Impact Mitigation Plan: includes mitigation measures for impacts on priority ecosystem services.

P.07 - Fauna and Flora Rescue and Relocation Plan: details the fauna and flora rescue and relocation measures to be carried out prior to suppression activities.

P.08 - Invasive Species Control Programme: includes preventive and corrective measures to be implemented continuously both during the construction and operation of the project.

P.09 - Landscape Protection Program: includes landscape monitoring measures, with a focus on minimising the induction of conversion of new areas of natural habitat.

P.10 - Operation Biodiversity Management: includes measures to monitor accidents with avifauna during operation, and measures to implement and monitor compensatory planting.

6.5

Institutional Arrangement

TANESCO is primarily responsible for managing the implementation of the mitigation measures, as well as coordinating the institutional arrangements necessary for the proper execution, monitoring and any necessary review of activities and targets. TANESCO is also responsible for publicising the BMP and its actions to interested parties.

TANESCO will liaise with TANAPA on areas to conduct habitat restoration to compensate vegetation loss within and outside the National Park particularly for the section of Burigi - Chato National Park. Moreover, Tanzania Forest Services Agency (TFS) will also provide guidance on tree species that will be selected according to the nature and geographical location of the areas designated for vegetation offset. This will be done after Forest Resource Assessment and to be done by TFS to determine amount and species of trees which are within the right of way and will be affected by proposed TL project.

Therefore, the development of the executive restoration projects will be carried out after a joint discussion between TANESCO, TANAPA and TFS.

Furthermore, as per experience from other TANESCO projects, TANESCO, TANAPA, TFS and District Authorities will agree on modality of habitat restoration for areas outside protected areas. This will be done within nearest villages and schools surrounding the protected areas. Habitat restoration projects to be conducted outside protected areas, which will be agreed by both parties, will have no impact on land, i.e., no land acquisition will take place.

To enable this coordination and management, one of the first activities to be developed by TANESCO is the creating of a working group to be formed by representatives from TANESCO, TANAPA and TFS to discuss the details and implementation of the offset. This working group should hold regular meetings every two weeks during the first year of project implementation, with the frequency reduced to one monthly follow-up meeting as activities progress.

During the initial meetings, responsibilities should be divided and a memorandum of understanding and commitment should be formalised between the participants. TANESCO will always be responsible for the overall management of the programme's implementation, with TANAPA and TFS assisting with technical issues and the selection and feasibility of target areas.

Hence for institutional arrangement TANESCO will:

- Establish close coordination with leading Authorities (TANAPA & TFS) by having formal agreement or memorandum of understanding (MoU).
- Establish multi-stakeholder coordination committee within the: Ministry of Natural Resource and Tourism, Leading Authority, Local Government Authority, NGOs and Community Level.
- Adhering to Legal and Policy Framework (EMA 2004, National Environmental Policy 2021, Wildlife Conservation Act 2009, General Management Plan (GMP) for Burigi-Chato National Park as well as Forest Act 2002 and relevant regulations and Policy) to align with the requirements of ESS6.
- To seek all the environmental authorizations necessary for the implementation and monitoring of the activities described in the Biodiversity Monitoring Programs mentioned in **Section 9.2.5**.

During Operation, TANESCO will coordinate process and nominate team leader to ensure:

- Timely implementation of Agreed Offset Plan within the selected sites.
- Making internal follow up and reporting progress monthly.

6.6

Capacity Building

The activities provided for in the monitoring programmes should be carried out by specialised consultants, assisted by TANAPA and TFS, with training in areas related to the topic, such as biologists, forestry engineers and veterinarians.

Supervision of the correct implementation of the activities must be carried out by TANESCO's contract managers, who must have training in the environmental field. For this, it is recommended that TANESCO have a permanent coordinating team, consisting of: 1 environmental specialist, 1 biodiversity specialist and 1 social expert (to support with stakeholder engagement actions).

6.7

Performance Indicators

Table 6.7.a

Biodiversity Management Plan performance indicators

Measure	Target	Indicators
Optimising the project route	<ul style="list-style-type: none"> Minimise the conversion of natural habitats to the minimum necessary 	<ul style="list-style-type: none"> Total native vegetation suppressed compared to initial forecasts
Use of the service strip for access to the towers during construction and operation	<ul style="list-style-type: none"> Use the service strip for access on all stretches where topography permits 	<ul style="list-style-type: none"> Utilisation rate of the wayleave Number of new accesses opened in areas with favourable topography
Prioritising degraded areas for support structures	<ul style="list-style-type: none"> All the support areas will be located in already degraded areas 	<ul style="list-style-type: none"> Number of support areas set up in degraded areas
Biodiversity Offset Plans	<ul style="list-style-type: none"> Correct implementation of the programme, according to the deadlines and targets set 	<ul style="list-style-type: none"> Indicators detailed in the plan
Ecosystem Services Impact Mitigation Plan	<ul style="list-style-type: none"> Correct implementation of the programme, according to the deadlines and targets set 	<ul style="list-style-type: none"> Indicators detailed in the plan
Fauna and Flora Rescue and Relocation Plan	<ul style="list-style-type: none"> Correct implementation of the programme, according to the deadlines and targets set 	<ul style="list-style-type: none"> Indicators detailed in the plan
Invasive Species Control Programme	<ul style="list-style-type: none"> Correct implementation of the programme, according to the deadlines and targets set 	<ul style="list-style-type: none"> Indicators detailed in the programme
Landscape Protection Program	<ul style="list-style-type: none"> Correct implementation of the programme, according to the deadlines and targets set 	<ul style="list-style-type: none"> Indicators detailed in the programme
Operation Biodiversity Management	<ul style="list-style-type: none"> Correct implementation of the programme, according to the deadlines and targets set 	<ul style="list-style-type: none"> Indicators detailed in the programme
Flora Active Search Programme	<ul style="list-style-type: none"> Active search carried out on 100% of the determined stretches 	<ul style="list-style-type: none"> Indicators detailed in the programme

6.8

Implementation Schedule

Implementation of the BMP should begin during project construction and remain active throughout operation.

6.9

Reporting

The actions carried out within the scope of the BMP should be publicised annually by drawing up a consolidated report that should be disseminated among the identified

stakeholders.

The report should include the main activities carried out, a summary of the results observed, a partial assessment of the effectiveness of the measures in relation to the targets of zero loss and gain of biodiversity, future actions. In addition, TANESCO shall also prepare monthly internal reports summarising the activities carried out, which shall be shared with TANAPA and TFS to assess the need for any adjustments.

7.0

References

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P.05 - Biodiversity Offset Plan

1. Justification

As detailed in **Section 7.2.4** of the ESIA, the project will have an impact on critical natural and modified habitats. The assessment of residual impacts presented in the BMP (**Section 5.2**) shows that even after the implementation of measures to avoid and minimise the project's impacts, residual impacts on biodiversity remain, which need to be compensated for in order to achieve the net biodiversity gain targets, as determined by paragraph 16 of ESS6.

Biodiversity offsets are a set of actions that make it possible to produce measurable conservation results, designed to compensate for residual impacts on biodiversity resulting from project activities (BBOP, 2018). Biodiversity offsets must adhere to the principle of 'equal for equal or better'.

The Project will seek to offset its residual impacts in alignment with good industry practice principles for offsets, including those developed by the multi-stakeholder Business and Biodiversity Offsets Programme (BBOP, 2018).

2. Main Objectives

Offset main objectives and principles are:

- **Adherence to the Mitigation Hierarchy:** Offsetting is a last resort and should only be undertaken after appropriate application of the Mitigation Hierarchy (avoidance, minimisation, rehabilitation and offsetting).
- **Equivalence:** Offsets should be designed to address impacts to biodiversity that is ecologically similar or of a higher conservation value.
- **Landscape context:** Offsets will be designed accounting for connectivity across the landscape, avoiding fragmentation, and maintaining flows of ecosystem services.
- **Additionality:** Offset gains should be clearly attributed to the Project's action and can demonstrate going above and beyond what would have occurred if the offset had not taken place.
- **Stakeholder participation:** Offsets should be developed based on appropriate, extensive, and transparent stakeholder consultation.
- **Equity:** A biodiversity offset should be designed and implemented in an equitable manner, which means the sharing among stakeholders of the rights and responsibilities, risks and rewards associated with a project and offset in a fair and balanced way, respecting legal and customary arrangements. Special consideration should be given to respecting both internationally and nationally recognized rights of indigenous peoples and local communities;
- **Long-term outcomes:** Biodiversity offsets will use an adaptive management approach, incorporating monitoring and evaluation, to secure outcomes that last at least as long as project impacts last, and ideally be secured in perpetuity.

- **Transparency:** The design, implementation and monitoring outcomes of a biodiversity offset will be transparent, and communicated to the public in a timely manner.
- **Net positive impact for critical habitats:** when a critical habitat is activated, offset must provide measurable gains for the biodiversity values that triggered the critical habitat.

3. Applicable Legislation

- Protected Places and Areas Act (1969)
- The National Policies for National Parks in Tanzania (1994)
- Plant Protection Act (1997)
- National Forestry Policy (1998)
- The Forest Act No. 14 (2002)
- The Environment Management Act (2004)
- The Wildlife Policy of Tanzania (2007)
- Wildlife Conservation Act, No. 5 (2009)
- National Environmental Policy (2021)

International

- World Bank Environmental and Social Standards (ESS) 6
- IFC Performance Standard 6

4. Responsibilities

Supervision of the correct implementation of the activities must be carried out by TANESCO's contract managers, who must have training in the environmental field. For this, it is recommended that TANESCO have a permanent coordinating team, consisting of: 1 environmental specialist, 1 biodiversity specialist and 1 social expert (to support with stakeholder engagement actions).

The TANESCO team can count on the help of consultants specialising in biodiversity to help implement the actions and revise the measures and calculations as necessary. In addition, as detailed in **Section 6.5** of the BMP, TANESCO must organise a institutional partnership with TANAPA and TFS, which should provide the technical assistant and facilitate the identification and feasibility of target areas for habitat restoration. Also, TANESCO must also consult with other public entities and civil society organization, in the selection of the target areas, in order to viabilize arrangements aiming to maintaining the preservation of the restored habitat, and avoid impacts on currently and planned land use, mainly the Ministry of Natural Resource and Tourism, Leading Authority, Local Government Authority, Community Level and NGOs.

5. Methodology

Offsets can be categorised based into two groups (BBOP, 2012²):

- **Avoided loss (protection):** prevents future damage to biodiversity in an unprotected area under threat of loss and/or degradation due to factors unrelated to the project, or in consequence of indirect and cumulative impacts. The protection of this area must be guaranteed through some legal instrument that prevents future land use conversions and must prevent the (very likely) degradation and downward baseline trend of biodiversity.
- **Restoration (rehabilitation) offsets:** repair damage to biodiversity that was not originally caused by the project. Note the distinction between the restoration stage and the mitigation hierarchy, which deals with the direct and indirect impacts of the project.

Among the groups presented above, the project region already has a diversity of protected areas, both national, such as Burigi-Chato National Park and several other Forests Reserves, and regional, such as local authority forest reserves, village land forest reserves, and community forest reserves. Therefore, the absence of legally protected areas does not seem to be a worrying factor for the project region. The conversion of natural habitats to anthropogenic land uses, on the other hand, is a point of concern for the region, as discussed in **Section 7.2.1**.

Restoring natural habitats recreates favourable environments for biodiversity, allowing the most sensitive species, such as endangered species and those with restricted distribution, to recover their populations, guaranteeing the preservation of the genetic variability that is essential for ecosystem resilience. In addition, reconnecting ecological corridors and fragmented landscapes facilitates the movement and dispersal of organisms, plant pollination and seed dispersal (KEENLEYSIDE *et al.*, 2012; ERBAUGH *et al.*, 2020; COLE *et al.*, 2021).

In addition, the restoration of degraded areas through the recovery of native vegetation cover contributes to the capture of carbon dioxide from the atmosphere, helping to combat climate change (COOK-PATTON & LISTER, 2020).

Ecological restoration is ‘the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed’ (SER, 2004). It is an intentional intervention that initiates or accelerates recovery of an ecosystem with respect to its structure (e.g., species composition, soil and water properties) and functional properties (e.g., productivity, energy flow, nutrient cycling), including exchanges with surrounding landscapes and seascapes (SER, 2004; SCBD, 2011). The term ‘ecological restoration’ can generally be taken as synonymous with ‘ecosystem restoration’ (SER, 2010). Ecological restoration can be confined to reducing pressures and allowing natural recovery, or involve significant interventions, such as planting vegetation, re-establishment of locally extinct

² Business and Biodiversity Offsets Programme (BBOP). 2012. Guidance Notes to the Standard on Biodiversity Offsets. Available at: [BBOP_Standard_Guidance_Notes_20_Mar_2012_Final\(2\).pdf](#)

species or the deliberate removal of invasive alien species (KEENLEYSIDE *et al.*, 2012).

The restoration of degraded areas is also in line with global and regional interests related to the conservation of biodiversity and living natural resources. The UN Decade of Restoration (2021 to 2030³) and the UN Millennium Development Goals (Target 7.A⁴) emphasise the need for integrated and collaborative actions to address environmental issues. They recognise that ecological restoration is key to achieving environmental sustainability, one of the essential pillars for sustainable development and poverty eradication.

Tanzania is also part of the AFR100 initiative, which aims to restore 100 million hectares of forests and landscapes in Africa by 2030. Tanzania has committed to restoring 5.2 million hectares of degraded land as part of this effort⁵.

Thus, considering the intense degree of degradation in the project region, and the importance of restoring natural habitats not only to achieve gains in the region's biodiversity values, but also to maintain priority ecosystem services, the offset proposal for the project is based on restoring degraded areas.

The total area to be restored will depend on the calculation of the project's net balance, presented in the BMP (**Section 6.2**), which should be revised following the triggers established in **Section 6.3**. The implementation of the offset will follow the following activities:

1. Definition of the total area to be restored, to be carried out based on the guidelines in **Sections 6.2** and **6.3** of the BMP.
2. Selecting the target-areas for restoration, in partnership with TANAPA and TFS, prioritising modified habitats within the critical habitat polygon.
3. Drawing up specific restoration projects for each group of areas.
4. Define strategies and partnerships with local entities, mainly Ministry of Natural Resource and Tourism, Leading Authority, Local Government Authority and Community Organisations, in order to guarantee the conservation maintenance of the restored habitat.
5. Implementation and monitoring of the restoration areas.

In order to enable net gains for critical habitat trigger values, the following prioritisation is recommended for the selection of restoration focus areas, in the following order of importance:

1. restoration of modified critical habitat located outside protected areas and far from urban settlements that could jeopardize the maintenance of the restored habitat.
2. restoration of degraded areas to allow connectivity between remnants of native vegetation, especially in the area of the Burigi-Chato - Akagera and Kigosi Moyowosi - Burigi Chato ecological corridors.

³ UN Decade on Restoration

⁴ United Nations Millennium Development Goals

⁵ Tanzania | AFR100

3. restoration of degraded areas located within the region's protected areas, especially forest reserves, which show intense signs of anthropisation and play an important role in terms of the availability of priority ecosystem services.

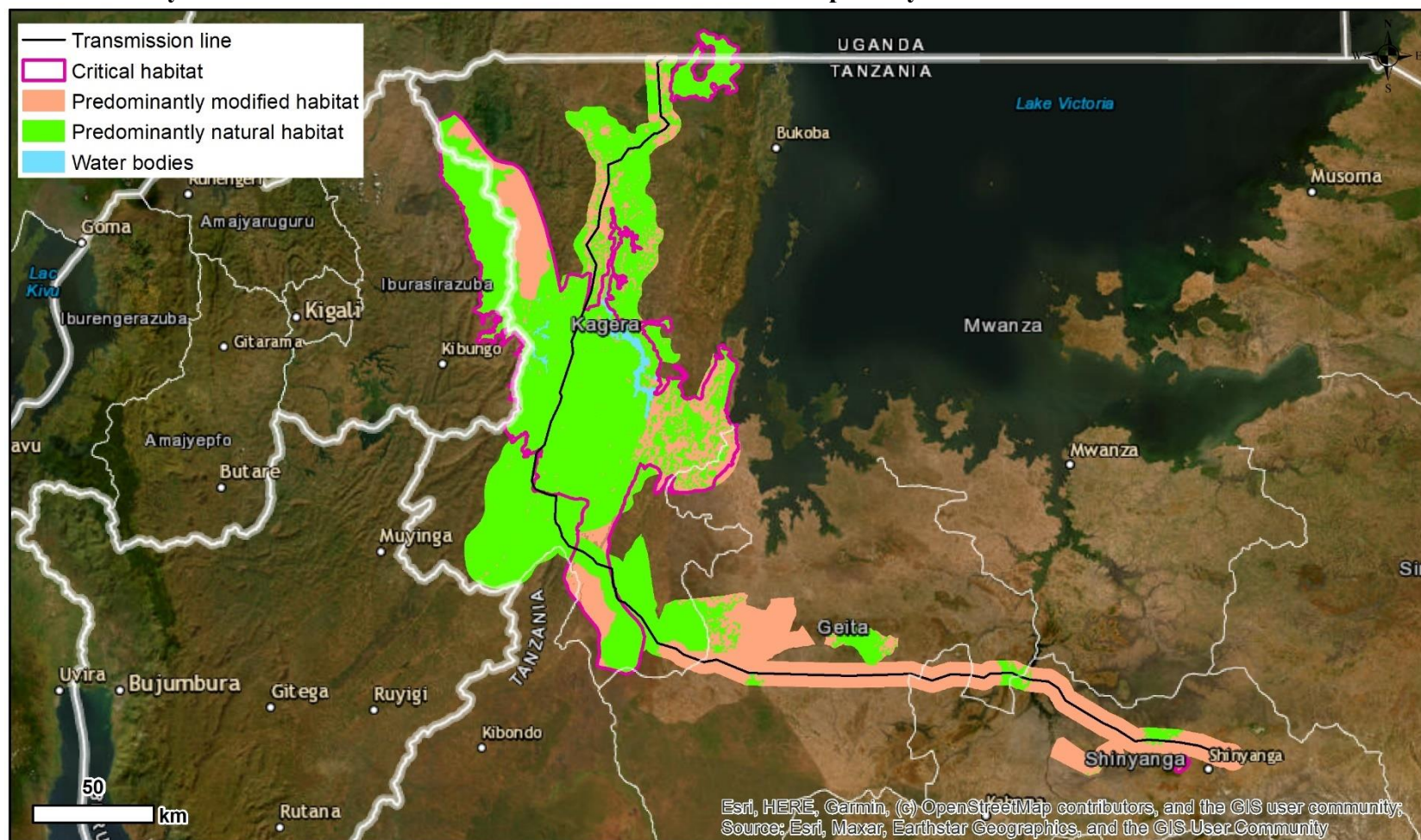
The **Figure 5.a** shows the modified habitat within the critical habitat that should be prioritised. However, during the implementation phase, this should be detailed, together with TANAPA and TFS, to define the priority areas to be restored.

It is also essential to involve the local community in defining these areas. Forest restoration occupies centre stage in global conversations about carbon removal and biodiversity conservation, but recent research rarely acknowledges social dimensions or environmental justice implications related to its implementation. Forest landscape restoration that prioritizes local communities by affording them rights to manage and restore forests provides a promising option to align global agendas for climate mitigation, conservation, environmental justice and sustainable development (ERBAUGH *et al.*, 2020).

Along these lines, it is recommended that restoration projects be drawn up in line with the actions already carried out under the AFR100 project. Detailed indications regarding elaboration of specie restoration plans are provided in the **P.10 - Operation Biodiversity Management**.

Figure 5.a of P.05

Predominantly modified habitats within the critical habitat that are a priority for restoration activities



6. Performance Indicator

The following indicators are proposed to monitor the implementation of this Plan:

Offset activity	Targets	Indicators	Deadline
1) Definition of the total area to be restored	➤ Review of net balance calculations following the triggers defined in Section 6.3 of the BMP.	• Reviews made	First scenario finalised at the end of the deployment stage
2) Carrying out specific consultations with project stakeholders, mainly TANAPA and TFS, for priority definition	➤ Consult protected area managers, TANAPA and TFS, and village and wards representatives on the definition of priority areas to be restored.	• Number of consultations held	Consultations completed by the end of the first year of the implementation stage
3) Fine-tuning of the executive project, if any flora trigger species are found in the DAA	➤ Evaluate the refinement (fine-tuning) of the project, with the aim of avoiding impacts, in 100% of the stretches where the species are found, with the help of expert botanists.	• Number of changes made to avoid impacts	Executive project revised after completion of the Flora Active Search Programme, prior to any vegetation clearing activity.
4) Selecting the focus areas for restoration.	➤ 100% of the areas to be restored defined.	• Number of defined areas x total number of areas to be recovered	The selection of areas should begin shortly after the end of consultations, during the second year of implementation.
5) Drawing up specific restoration projects for each group of areas.	➤ 100% of specific restoration projects elaborated.	• Number of restoration projects carried out.	Specific projects must be drawn up at the same time as the focus areas for restoration are selected.
6) Implementation and monitoring of the restoration areas.	➤ 100% of the total area to be restored with ongoing restoration and monitoring activities.	• Number of projects started.	Restoration activities must begin before the end of project implementation.

7. Reports and Documentation

Progress reports on the activities carried out as part of implementing the offset should be produced every six months. The reports should minimally contain: introduction, period to which it refers, activities carried out during the period, evaluation of performance indicators, critical analysis of points of concern and/or difficulties encountered, adjustments made (if any), planning of next steps.

8. Schedule

The implementation of the offset must begin with the start of the project's implementation, and must remain active throughout the project's lifetime.

P.06 - Ecosystem Services Impact Mitigation Plan

Ecosystem Services Impact Mitigation Plan, which will propose strategies to minimize impacts on priority ecosystem services, including TYPE 1 services that have been identified as priorities during the ESIA process.

1. Justification

As demonstrated in **Section 8.2.3.2** of the ESIA, five priority ecosystem services have been identified: 3 provisioning services and 2 regulation, all of them type 1. The ecosystem service ‘feeding’ is directly linked to the availability of arable land in the project area, and the impact on this service can be assessed based on the areas of farmland directly impacted by the implementation of the project. The other priority ecosystem services, natural medicines, biomass, pollination and life cycle maintenance, are linked to the availability and quality of native vegetation in the region. As these ecosystem services are a priority, measures are needed to mitigate the impacts of the project on these services.

However, since the priority ecosystem services are related to the availability of arable land (food service) and preserved natural habitats in order to guarantee the maintenance of the ecological cycle (natural medicines, biomass, pollination and life cycle maintenance services), mitigation measures for impacts on these components are already provided for in other programmes. This plan therefore only consolidates the specific mitigation measures to mitigate impacts on each of the priority ecosystem services.

2. Main Objectives

The objectives of this plan include:

- Reducing Negative Impacts: minimising the negative impacts of the project's construction on priority ecosystem services.
- Maintaining Socio-Economic Activities: Ensuring that the population directly affected by the project is compensated for the impact on the priority ecosystem service of food.
- Preservation and Restoration: Protect and restore degraded ecosystems to ensure the continuity of priority ecosystem services.
- Monitoring and Evaluation: Implement monitoring and evaluation systems to track the effectiveness of mitigation measures and make adjustments as necessary.

3. Applicable Legislation

National

- Protected Places and Areas Act (1969)

- The National Policies for National Parks in Tanzania (1994)
- Plant Protection Act (1997)
- National Forestry Policy (1998)
- The Forest Act No. 14 (2002)
- The Environment Management Act (2004)
- The Wildlife Policy of Tanzania (2007)
- Wildlife Conservation Act, No. 5 (2009)
- National Environmental Policy (2021)
- Legislation regarding compensation for land use

International

- World Bank Environmental and Social Standards (ESS) 1, 5 and 6

4. Responsibilities

Responsibility for the correct implementation of the measures set out in this plan lies with TANESCO's Management Team, which will supervise the implementation of the ESMS programmes.

5. Methodology

The table below consolidates the mitigation and compensation measures for impacts on priority ecosystem services:

Priority ecosystem service	Related component	Plan/Program	Mitigation measures
Livelihood	Availability of arable areas	Resettlement Policy Framework (RPF)	The plan provides for financial compensation for the loss of land and monitoring of ways of restoring life, following the Good Practice Handbook on Land Acquisition and Involuntary Resettlement
Natural medicine Biomass Pollination Lifecycle maintenance	Availability of natural habitats in good conditions of preservation	Biodiversity Management Plan	Establishes the biodiversity mitigation strategy of the project
		Biodiversity Offset Plan	The plan provides for offsetting for biodiversity residual impact.
		Fauna and Flora Rescue and Relocation Plan	The plan provides for measures to minimize impacts on flora and fauna during construction activities
		Invasive Species Control Program	The program provides for measures to monitor and eradicate exotic invasive species for the project area, preserving the natural habitats
		Landscape Protection Program	The programme determines measures to monitor natural habitats around the project, identifying vectors of

Priority ecosystem service	Related component	Plan/Program	Mitigation measures
			deforestation in natural habitats at an early stage
		Construction Environmental Plan (CEP)	Establishes procedures for vegetation clearing, and other measures to avoid and minimize pollution and contamination during construction
		Operation Management Programme	Establishes procedures for pollution and erosion control during operation. Provides for the Emergency Response Plan (ERP) Framework for the Operation Phase.
Feeding Natural medicine Biomass Pollination Lifecycle maintenance	Availability of arable areas Availability of natural habitats in good conditions of preservation	Stakeholder Engagement Plan	It provides for the implementation of mechanisms for public consultation with interested parties, continuous social communication and complaints and grievance mechanisms. Through these instruments, the affected population will be able to share their perceptions of the project's impacts on ES, as well as the effectiveness of mitigation measures on the availability of these services.

6. Performance Indicator

The monitoring indicators are those for the programmes mentioned in the previous section. The correct implementation and monitoring of the aforementioned programmes also guarantees the mitigation of impacts on ecosystem services

7. Reports and Documentation

The report and documentation implementation schedule follows the timetable for the programmes mentioned in **Section 5.8**. Reporting and documentation of the measures will be the same as for the programmes mentioned in **item 5.9**. In addition, a consolidated document should be produced annually, focusing specifically on actions to mitigate impacts on ecosystem services. This consolidated report will be based on the reports produced for the other programmes and will present the progress made in implementing the actions, any adjustments made and the timetable for future actions.

8. Schedule

The implementation schedule follows the timetable mentioned in **Section 5.8**.

P.07 - Fauna and Flora Rescue and Relocation Plan

1. Justification

Suppression activities could have an impact on fauna and flora species, including the loss of flora and the possible loss of low-locomotion fauna.

The suppression of native vegetation for the implementation of the TL could imply not only a reduction in vegetation cover in the region of the development, but also the loss of local floristic diversity and indirect impacts on the adjacent vegetation intercepted by it. In order to mitigate and compensate for this impact, this programme is proposed.

With regard to fauna, the scaring and rescue of wild fauna during vegetation suppression is essential to minimise the risk of deaths and accidents to animals in the directly affected area. Throughout the project's implementation period, it is necessary to maintain veterinary supervision for the rescue of wild animals that may be found on the work fronts and construction sites.

2. Main Objectives

The programme's objectives include:

- To guide the monitoring of vegetation clearing fronts during the implementation of the project.
- Passively promoting the translocation of larger and/or more mobile fauna from the area of vegetation clearing, directing them to vegetated/preserved areas in the region surrounding the intervention.
- Capturing animals that are injured or otherwise unable to move.
- Protect nesting species located in the vegetation clearing strips.
- Provide appropriate veterinary care and, if necessary, send them to a partner veterinary clinic.
- Identify, record and photograph the specimens, creating a database of the animals chased away/translocated throughout the activity.
- Making scientific use of the species of interest to science that die as a result of the intervention carried out in the area, through the formation of reference collections.
- Implement measures to protect the fauna and workers involved in the vegetation suppression activity, including actions to reduce people being run over on access roads, minimising potential accidents.
- Reduce the loss of floristic diversity in areas where vegetation removal is necessary for the implementation of the Transmission Line (TL), by rescuing germplasm, especially of species defined as priorities (endangered or protected, rare and endemic).
- Contribute to the conservation of local flora species by relocating the material rescued to adjacent fragments or donating it to institutions that are interested.
- Visit the areas where the vegetation will be cleared collecting botanical material (seeds, epiphytes and hemiepiphytes) with an emphasis on the species defined as

- priorities (endangered or protected, rare, endemic and of traditional use).
- Dispose of the rescued material, either by relocating it to adjacent remnants that will not undergo intervention, using it in the Terrestrial Habitat Restoration Programme or donating it to research and/or teaching institutions, nurseries, botanical gardens, parks or others that show an interest.
- Draw up a spreadsheet with the main data on the rescued material (scientific name, type, rescue coordinates and final destination), as well as selective photographic records of the most relevant species rescued.

3. Applicable Legislation

- Protected Places and Areas Act (1969)
- The National Policies for National Parks in Tanzania (1994)
- Plant Protection Act (1997)
- National Forestry Policy (1998)
- The Forest Act No. 14 (2002)
- The Environment Management Act (2004)
- The Wildlife Policy of Tanzania (2007)
- Wildlife Conservation Act, No. 5 (2009)
- National Environmental Policy (2021)

International

- World Bank Environmental and Social Standards (ESS) 6
- IFC Performance Standard 6

4. Responsibilities

TANESCO is responsible for the Programme and will have to allocate the financial and human resources needed to carry it out. It will have to hire fauna teams specialising in the terrestrial vertebrate groups (avifauna, mastofauna and herpetofauna).

As far as flora is concerned, germplasm collection must be carried out by a team trained and coordinated by a biologist, agronomist, forestry engineer or similar. The team must be sized to meet the vegetation suppression schedule, ensuring that the suppression areas are previously inspected by the rescue team.

A land survey team is also needed to obtain the necessary authorisations from the owners of the land where the rescue work will be carried out.

5. Methodology

5.1. Fauna Rescue and Relocation

Scaring away and rescuing wild fauna during vegetation suppression is essential to minimise the risk of deaths and accidents involving animals in the directly affected area.

Throughout the project's implementation period, it is necessary to maintain veterinary supervision for the rescue of wild animals that may be found on the work fronts and construction sites.

Small, less mobile vertebrate species such as amphibians, reptiles, marsupials, rodents and arboreal primates are among the most vulnerable. Nests, eggs and young found in the area to be cleared should also be preserved or removed according to a specific assessment. For medium and large fauna, as well as winged species (birds and chiroptera), it is expected that they will be able to move to areas unaffected by the activities. However, preventative measures are necessary to avoid accidents that could cause injury or even death to animals during vegetation suppression.

These activities have a special focus on rescuing vertebrates that are more susceptible to accidents due to their low mobility, as well as preserving and rescuing nests with eggs and puppies.

5.1.1. Mobilization

Prior to the initial field activities, the contracted teams must carry out the following actions:

- Meeting of the technical team to detail and standardise the methodologies to be applied during the rescue and chasing away of fauna.
- Integration of the teams involved in the suppression (tractor drivers, assistants, chainsaw operators, fauna technical team, etc.).
- Setting up a temporary structure with suitable equipment and materials to carry out the activities.
- Definition of a standard protocol to be followed by the teams during the fauna scaring and rescue process.
- Recognising and zoning the vegetation removal areas, identifying the best access routes and the different environments present.

In addition, educational talks should be given to the employees involved in the work (office, technicians, workers and support staff) prior to the start of the activities and throughout the work, when necessary, taking into account the hiring of new contingents of workers.

The talks should emphasise issues such as: the importance of preserving wildlife, processes for rescuing, chasing away and saving wildlife, environmental legislation, and the ban on hunting, catching and chasing wild animals.

5.1.2. Installation of the Temporary Fauna Rescue Base

The fauna rescue team must have a mobile support base in the immediate vicinity of the construction site for emergency assistance, equipped with materials and equipment (vehicle), with a veterinary surgeon in charge. In addition, a Temporary Fauna Rescue Base must be set up, with facilities for the temporary keeping of animals, including care

supervised by a veterinarian. A container can be used to set up this base, which will be located at the construction site. This base will include equipment for animal containment, materials for minor surgical procedures, a mini oven for sterilising materials, medicines, cupboards and a brooder. The base should also include a room with a fridge, freezer and microwave for any animal care needs, as well as another room for storing equipment and materials, and finally a room for conditioning animals suitable for release.

5.1.3. Fauna Rescue and Scaring Activities

The wildlife scaring and rescue activities should be carried out in two stages:

- **Stage I - Prior rescue:** This consisted of removing as many animals as possible from the DAA prior to the start of the vegetation suppression process, using scaring and active capture methods (Active Visual Search - AVP).
- **Stage II – Vegetation clearing monitoring:** During manual, semi-mechanised and/or mechanised vegetation suppression activities, the fauna rescue team carried out all the procedures to scare away and rescue any fauna that might still be in the area, even after the previous rescue.

It should be noted that in order to minimise the impact of capture stress on the health of the animals present in the area, the premise adopted should be to avoid capturing and handling animals as much as possible. Thus, only when it is impossible for a particular animal to move around on its own will it be captured and released in an area designated for release, located at a safe distance from the suppression activities. Whenever an animal is rescued, a field form must be filled out, containing the rescue location (with planimetric coordinates), the species rescued, information on the animal's situation and destination. All the species recorded in the area will be classified according to their degree of threat in accordance with official national and international lists, level of endemism and other pertinent information.

Stage I - Prior rescue

Prior rescue must be carried out by means of Prior Scaring and Prior Active Capture, as described below:

- a) **Preliminary Scaring:** Prior to the vegetation suppression activities, the rescue teams will travel along the entire stretch to be suppressed in order to scare away the animals present in the intervention area to neighbouring natural areas. This methodology will promote the 'guided escape' of the animals in a non-invasive way, in order to maintain the physical integrity and reduce the stress of the individuals. It should be noted that the suppression procedures will be organised in such a way as to cause the fauna to move from the impacted areas to contiguous natural areas.

This scaring must be carried out indirectly, through the noise caused by machinery, equipment and the movement of the suppression team, or directly by

the rescue team, using noise and the movement of the team. Therefore, the suppression stages must be directed in order to direct the fauna with the greatest dispersal capacity to adjacent areas.

- b) **Prior Active Capture:** In this method, an Active Visual Search (AVS) will be carried out throughout the area to be cleared, scouring micro-habitats such as boulders or loose rocks, tree hollows, burrows, termite mounds, nests, among other possible occupation sites. The aim of this practice will be to rescue as many animals as possible, with a focus on species with low agility, restricted use areas, fossorial and semi-fossorial habits, arboreal habits, young that are unable to move, sick or injured animals and other species that are likely to be involved in accidents and suffer damage during vegetation suppression.

The active visual search will be carried out in such a way that there is no specific time limit between the pre-determined points, with the team moving between daytime periods, if necessary, at night, always observing places that could be used as microhabitats by representatives of the macrofauna, such as: bromeliads, fallen trunks, burrows and treetops, leaf litter and other places that could be used by these individuals during their activities.

When abandoned nests and termite mounds are found, they will be destroyed, thus preventing possible recolonisation. In active environments, whether they are nests or burrows, they should be isolated with zebrafish tape for signalling and monitoring. Bees and maribondos will have to be relocated, as they can pose a risk to field workers, local inhabitants and their surroundings, as well as being an important group in the dynamics of the ecosystem. It is important to note that isolated trees located in anthropized areas (pastures) will also be inspected to identify and rescue these life forms.

The animals must be captured manually or with the aid of containment equipment, depending on the case. Once the animals have been contained, they should be placed in a transport box, a cloth bag or plastic containers with perforated lids and immediately sent to a veterinarian for an assessment of the animal's physical condition.

Animal species with a greater capacity for dispersal and escape behaviour will be guided to the fragments that remain unchanged. In this way, these specimens will continue to make up the faunal community of the local biota, avoiding overpopulation of the translocated areas.

Stage II: Monitoring Vegetation Clearing

The field team will be responsible for rescuing and chasing away vegetation during manual, semi-mechanised and mechanised clearing activities, as described below:

- a) **Monitoring manual and semi-mechanised vegetation suppression:** Manual vegetation suppression will consist of the selective cutting of plant species that

can be utilised, carried out using light cutting tools (machete, sickle and chainsaw), while at the same time scaring away and rescuing species of fauna through active capture during the PVA. Dead trees hollowed out trees and palm trees, when felled, should be inspected to check for hollows that could be used as nests or shelters by animals.

- b) **Monitoring mechanised vegetation clearing:** Prior to the start of the activity, the team will once again carry out the PVA and advise the machine operators on the procedures to be adopted to facilitate the scaring and rescue of fauna and ensure the safety of all those involved in the operation.

Throughout the intervention, the team must maintain a minimum distance of 10 metres from the clearing equipment, obeying the proposed safety margin, in order to save as many animals as possible. When animals are spotted, they must be signalled immediately in order to paralyse the machine/tractor and the biologist in charge must capture or chase the animal away.

As soon as the suppression front has passed, the fauna team should carry out a new sweep of the newly suppressed area to rescue any individuals that may not have been located previously or that may have sought shelter in the area after suppression.

5.1.4. Capture Methods

Capture will be aimed at animals with less capacity for movement, such as lizards, amphibians, snakes, rodents, invertebrates, etc., which will be rescued and kept on a temporary support base in ventilated transport boxes until they can be relocated to the pre-defined release points. It should be emphasised that physical restraint of the animals will only be carried out when it is confirmed that it is impossible to chase the animal away or move it.

The specific procedures that will be adopted for each taxonomic group are described below:

- **Arachnids:** The arachnids will be contained using plastic tweezers, plastic pots and, when harmless, bare hands or gloves to prevent injury to the animal. The specimens should be placed in plastic jars with perforated lids and moistened cotton wool. Special care should be taken with specimens of venomous arachnids.
- **Amphibians:** The methodology used will be visual recognition, followed by direct physical restraint with bare hands or gloves, avoiding injury to the animal due to the high sensitivity of its skin. For transport, specimens should be placed in plastic jars with perforated lids and cotton wool moistened with water to prevent dehydration.
- **Reptiles:** Reptiles considered aggressive will be restrained with the aid of leather gloves and a snake hook, and the rest should be captured with bare hands to avoid loss of sensation and injury to the animal. Special attention will be paid to ophidian species considered poisonous/poisonous. Wooden or plastic boxes with locks and

plastic jars with perforated lids will be used for transport.

- **Mammals:** Considering small to medium-sized mammals, capture procedures will be adopted by lurking and stalking, using some basic forms of physical restraint, according to the species, restricting defensive movements, using a Lutz lasso, lasso or crane. After capture, the small non-flying mammals will be transferred to containment boxes lined with leaf litter. Medium to large mammals should be transferred to wooden boxes of a size proportional to the size of the species, with small holes in the sides of the box, in order to minimise stress during transport.
- **Birds: In general, birds tend to flee at the movement and noise of suppression activities.** In the case of weakened individuals, they should be carefully captured by hand or with the aid of cloth pincers, due to their very fragile bodies. Cloth towels should be used for psittaciforms that use their beaks as their main defence. Leather gloves will be used mainly for birds that use their claws as a means of aggression, such as falconiformes. For transport, the birds will be placed in cloth bags to avoid stress during the journey.
- **Nests and eggs:** Nests containing eggs/puppies found during the activity should be isolated by marking them with a coloured tape, creating a protective radius of at least 5 metres from the nest, maintaining the surrounding vegetation until the puppies are fully developed, thus avoiding the handling of nests and their abandonment by the parents. These nests will be monitored daily and, when unoccupied and inactive, will be destroyed to prevent recolonisation by other animals during the suppression process. It is important to emphasise that if the parents abandon their eggs or nests, they must be rescued, packed in cloth bags and appropriate baskets and sent for veterinary monitoring.
- **Nests of native bees:** Removals of these nests will be carried out by the biologist in charge and a field assistant, duly equipped with appropriate clothing, a fumigator and transport box, with the aid of a chainsaw and machete. If a swarm of native bees is found on the ground in the suppression area, it must be removed and transferred to preserved areas that will not be interfered with by the work. Translocations should be made to an area with similar vegetation, as close as possible to the rescue site.
- **Live Containment and Interception and Drop Traps:** *Sherman, Tomahawk and Pitfalls* type traps should be used to capture herpetofauna and small mammals prior to vegetation clearing. Transects will be set up in the field to capture small terrestrial vertebrates. The *Sherman* and *Tomahawk* traps will have to be baited. The baits used will consist of a mixture of banana, peanuts, fishes and cornmeal.

5.1.5. Screening and Veterinary Care Procedures

Screening of rescued animals should be carried out *on site* to avoid transporting, handling and storing the animals for an unnecessary period, which could increase their stress levels and cause undesirable pathophysiological changes. During screening, the veterinarian will assess the animals' physical condition, and in cases where no alterations are

diagnosed, the specimens should be photographed, taxonomically identified, submitted to biometrics, sexed, weighed and then sent to the release areas.

Any animal specimens that have suffered any kind of physical injury, are in poor health or are unable to return to the wild (e.g. nestlings, puppies, etc.) must be taken to the Temporary Base in the project area, where they will be assessed, subjected to emergency procedures and sent for release.

For each individual of the fauna being cared for, a specific medical file has been drawn up to monitor its state of health, reporting the situation at the time of capture, the evolution of the clinical condition, the care required, the medication used (when necessary) and the specific management to which it was subjected.

In the case of more serious injuries, the animals can be euthanised in order to preserve animal welfare. To apply the technique, strict procedures will be adopted to minimise the risk of anxiety for the animal, so that it does not feel physical or mental suffering. Thus, the euthanasia method will aim for immediate loss of consciousness, followed by respiratory and cardiac arrest and loss of brain function.

Finally, in the event of animals being run over on the access roads used mainly by the project, they will have to be rescued as part of this plan, since it was expected that vegetation suppression activities would cause greater movement of fauna, and consequently lead to accidents with animals, including being run over, during their journey.

5.1.6. Release

During chasing away, the fauna will be directed to adjacent environments that have the same physiognomic characteristics as the affected areas, while each rescued animal must have its capture location georeferenced so that it can be released in the shortest time and in a safe, nearby location. This procedure will allow new individuals to enter the receiving areas as naturally as possible.

5.1.7. Fixing and Listing Dead Animals

Specimens of wildlife of scientific interest that die during vegetation suppression activities and are in a good state of conservation will be sent to a partner scientific collection. To this end, the animals will have undergone fixation procedures (preparation of the specimen for conservation) prior to being sent. The animals must be placed in containers and fixed with 70% alcohol or 10% formaldehyde.

5.2. Flora Rescue and Relocation

For the implementation of the TL, there is the potential for interventions on 131.01 hectares with native cover (natural habitats). In order to reduce the impact of the loss of floristic diversity due to the implementation of the Project, plant germplasm will be rescued in the intervention areas in native grassland and forest formations.

Priority species will be defined for rescue, such as those threatened with extinction, protected by law, rare or of scientific, environmental or economic interest. In addition to these, other native species present in the areas of suppression that are fertile and have suitable material for collection will also be targeted for salvage, with the aim of increasing the number of material and species collected. Thus, considering the results of the floristic survey presented in EISA, the species classified as priorities for salvage are shown in Table below, in which the species of greatest conservation interest are highlighted in bold. All employees involved in the germplasm rescue activities must undergo prior training, aimed at presenting safety procedures, detailing the areas destined for rescue, the target species and the procedures for collecting and finally disposing of this material.

The flora salvage team will visit the sites, equipped with digital GPS files of the suppression polygons, before the vegetation removal activities begin. To do this, they must maintain frequent contact with the suppression teams in order to organise field logistics.

Table 5.2.a of P.07

List of priority species for germplasm rescue

Family	Specie name	Author	Life form	Status IUCN	Status Cites	Usage	Occurrence
Anacardiaceae	<i>Lannea schimperi</i>	Engl.	Tree	'-	-	food and masticants (fruit, bark)	Native
Anacardiaceae	<i>Ozoroa insignis</i>	Delile	Tree	LC OR LR/LC	-	Sacred/medicinal	Native
Araliaceae	<i>Cussonia arborea</i>	Hochst. ex A.Rich.	Tree	LC OR LR/LC	-	Snakebite, malaria, constipation	Native
Asparagaceae	<i>Asparagus setaceus</i>	(Kunth) Jessop	Shrub	'-	-	Sacred/medicinal	Native
Asteraceae	<i>Vernonia galamensis subsp. galamensis</i>	-	herb	'-	-	oilseed	Native - Endemic
Burseraceae	<i>Commiphora africana</i> var. <i>africana</i>	(A.Rich.) Engl.	Tree	'-	-	food and masticants (gums and resins)	Native
Burseraceae	<i>Commiphora schimperi</i>	(O.Berg) Engl.	Tree	LC OR LR/LC	-	food and masticants (gums and resins)	Native
Celastraceae	<i>Mystroxydon aethiopicum</i>	(Thunb.) Loes.	Tree	'-	-	Economic or medicinal usage	Native
Ebenaceae	<i>Euclea divinorum</i>	Hiern	Tree	LC OR LR/LC	-	Tooth ache, stomach ulcers	Native
Euphorbiaceae	<i>Euphorbia hubertii</i>	Pax	Tree	EN	II	-	Native
Fabaceae	<i>Dalbergia melanoxydon</i>	Guill. & Perr.	Tree	NT	II	Economical or medicinal usage	Native
Fabaceae	<i>Erythrina abyssinica</i>	DC.	Tree	'-	-	Malaria, convulsions in children, anthrax, snakebite, sacred	Native
Fabaceae	<i>Pterocarpus angolensis</i>	DC.	Tree	'-	II	-	Native
Malvaceae	<i>Dombeya rotundifolia</i>	(Hochst.) Planch.	Tree	'-	-	Economical or medicinal usage	Native
Malvaceae	<i>Grewia forbesii</i>	Harv. ex Mast.	Shrub	'-	-	Food (seeds), sacred	Native
Menispermaceae	<i>Cissampelos pareira</i>	L.	Liana	'-	-	cultural forests	Native
Myrtaceae	<i>Syzygium cordatum</i>	Hochst. ex Krauss	Tree	'-	-	Sacred/medicinal	Native
Olacaceae	<i>Ximenia caffra</i>	Sond.	Shrub	LC OR LR/LC	-	food (fruit)	Native
Phyllanthaceae	<i>Bridelia micrantha</i>	(Hochst.) Baill.	Tree	'-	-	Worms, diarrhoea, headache, sacred	Native
Phyllanthaceae	<i>Flueggea virosa</i>	(Roxb. ex Willd.) Royle	Tree	LC OR LR/LC	-	Bilharzia, malaria, stomach ache, itching	Native
Primulaceae	<i>Maesa lanceolata</i>	Forssk.	Tree	LC OR LR/LC	-	Diarrhoea, tooth ache, rashes	Native
Rubiaceae	<i>Coffea eugenioides</i>	S.Moore	Tree	'-	-	food (seeds and fruits)	Native
Rutaceae	<i>Clausena anisata</i>	(Willd.) Hook.f.	Tree	'-	-	Stomach pains, worms, diarrhoea, headache, malaria, influenza, food (seed)	Native
Rutaceae	<i>Harrisonia abyssinica</i>	Oliv.	Shrub	LC OR LR/LC	-	Fever, nausea, vomiting, snakebite, tuberculosis, stomach ache, malaria	Native

Collection should be carried out using the technique best suited to the maturity of the fruit/seeds, the life habits of the species, field conditions and the type of seed dispersal. Fruits and seeds of tree and shrub species will be collected directly from accessible fertile branches or with the aid of pruning shears or loppers; directly from the substrate (soil) when the fruit does not have wind-dispersed seeds (anemochoric) and dispersal occurred close to the mother tree; and by manually shaking the tree so that they fall onto a plastic tarpaulin placed on the ground, maximising collection.

Storage of the propagating material may vary depending on its viability, logistical conditions and distance from the target germplasm rescue areas. With regard to the seeds collected, their storage will vary based on their classification as orthodox or recalcitrant. Orthodox seeds tolerate drying at low humidity levels (5 to 7% humidity) and low storage temperatures, and can be packed in airtight containers and subjected to temperatures of up to -18°C (MEDEIROS, 2003). Recalcitrant seeds, on the other hand, cannot be dehydrated below a certain degree of humidity (25 to 50%, depending on the species) without physiological damage occurring. The right environment for conservation can be achieved by burying them in moist charcoal, moist sawdust or moist sand (FLORIANO, 2014). However, there are species that need good aeration and cannot be buried. They should be packed in paper bags or open boxes to allow good oxygen diffusion, and placed in an environment with high relative humidity so they don't dehydrate (FLORIANO, 2014).

The biologist coordinating the germplasm rescue will indicate whether there is a need to return to the areas to rescue material from the tops of fallen trees. In this case, the teams will be guided in advance by the germplasm rescue coordinator and will carry out the rescue.

Information about the collections will be recorded on specific forms containing: scientific name (or morphotype), type, rescue coordinates and final destination, and the rescued materials will be selectively photographed.

The final destination is one of the most important points in a rescue programme and will be defined in advance so that the material does not deteriorate due to storage time or the lack of a place with a clear purpose for its use. The material can be used for the rehabilitation of degraded areas by the construction, or, under the Biodiversity Offset Plan, donated to partner institutions such as universities, research centres, community associations and other entities or sent to partner nurseries for the production of forest seedlings.

The rescued cacti, epiphytes and hemiepiphytes will be relocated to plant formations in the vicinity of the development that will not undergo intervention. The type of substrate in which each plant was found should be recorded, in order to relocate them in the same type of environment (substrate, humidity, luminosity).

Rescued specimens should be wrapped in damp newspaper and sent for relocation to remnants of native vegetation adjacent to the suppression areas.

The epiphytes and hemiepiphytes found will be removed from the tree trunks by hand or using a machete or spatula, removing the outer bark of the trunk, or the section of the branch where the individuals are attached will be cut off and they will be relocated to trees in the surrounding remnants of vegetation. Transplanting will preferably be carried out in forks, scars from fallen trunks and depressions, as well as tree trunks whose rhytidomes are thicker and rougher, characteristics that allow them to retain more moisture and contribute to the attachment of the roots of the transplanted plants. Whenever possible, trees located in shady and humid areas and/or with similar characteristics to the site where the material was collected will be prioritised.

The epiphytes and hemiepiphytes will preferably be attached to the trunks of the selected trees using a biodegradable rope or string. The number of epiphytes to be transplanted into each forophyte may vary considerably, taking into account the size of the trees, the size of the epiphytes, the condition of the trunk, among other characteristics.

Terrestrial species, on the other hand, can be planted directly in the ground, using the most suitable substrate for the type of species. The cacti will be relocated in a similar way to the situation in which they were rescued, but favouring more protected locations, such as in crevices of the outcrops, or the relocated individuals can be propped up with loose pieces of rock found at the relocation sites.

Similarly, the seeds will be used to enrich adjacent plant formations by scattering them on the ground in places similar to their original habitats.

Preferably, these activities should be carried out with greater attention and intensity in the surroundings and interior of Burigi-Chato National Park, and should always comply with the Park's regulations.

If interested, all types of rescued materials can be donated to research and/or teaching institutions, nurseries, botanical gardens, parks, among others.

6. Performance Indicator

The performance indicators are the following:

Fauna rescue and relocation

- Number and variety of individuals chased away.
- Number and variety of individuals rescued.
- Number and variety of individuals seen by the Veterinarian.
- Number and variety of individuals referred to the Veterinary Clinic.
- Number and variety of specimens sent to scientific collections.
- Number of deaths.
- Number of releases points.
- Number and variety of animals released.
- Number of isolated nests.
- Number of hives isolated or relocated.

Flora rescue and relocation

- Extents/areas travelled to rescue germplasm in relation to total areas of native vegetation suppression.
- Quantity of material destined (relocated or donated) in relation to the total rescued.

7. Reports and Documentation

At the end of each month of monitoring vegetation suppression activities, a monthly report should be drawn up containing information on the stretches monitored, methodological procedures with sampling efforts, results containing information on the richness, abundance, quantity and type of material rescued (for flora), location of the record, coordinates of the release areas, translocation; destination of the animals, coordinates of the species of flora rescued and location of relocation, as well as photographic records. At the end of each quarter, a consolidation report and an annual report should be drawn up on the activities that took place during the period.

8. Schedule

The activities must take place while the vegetation is being cleared. The flora and fauna teams should scour the area prior to vegetation clearing, so the planning of activities should be done in conjunction with the team responsible for suppression.

9. References

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P.08 - Invasive Species Control Programme

1. Justification

As assessed in the environmental diagnosis of the project, 5 exotic species were recorded in the area, two species have high potential to invade native habitats. *Mimosa pigra* var. *pigra* and *Lantana camara* are American tropical plants reported as invasive in a long list of countries worldwide, the main focus of this programme must initially be on these two species. *Grewia rothii* and *Catunaregam spinosa* are species native from India Continent and southeast Asia having some reports in East Africa. The *Tamarindus indica* is a specie highly cultivated in the tropics due to its usage in culinary, and others (POWO-Kew; GBIF).

Exotic species with invasive potential are a threat to biodiversity and the ecological balance of the region's grassland environments. Transformation activities such as the installation of the towers and the opening of new accesses, as well as maintenance activities in the wayleave, could facilitate the dispersal of invasive exotic species throughout the area, especially with the increase in the flow of vehicles, people and machinery.

2. Main Objectives

The main objectives area:

- During the construction phase, draw up a map of the areas infested by invasive exotic species around the project's intervention areas, especially if they are located inside protected areas.
- Evaluate the need for and effectiveness of control measures for each case of detection of dispersal and/or proliferation of these species in the monitored areas.
- Carry out control measures for each case that has been assessed as necessary.

3. Applicable Legislation

National

- Protected Places and Areas Act (1969)
- The National Policies for National Parks in Tanzania (1994)
- Plant Protection Act (1997)
- National Forestry Policy (1998)
- The Forest Act No. 14 (2002)
- The Environment Management Act (2004)
- The Wildlife Policy of Tanzania (2007)
- Wildlife Conservation Act, No. 5 (2009)
- National Environmental Policy (2021)

International

- World Bank Environmental and Social Standards (ESS) 6
- IFC Performance Standard 6

4. Responsibilities

TANESCO is responsible for the Programme and will have to allocate the financial and human resources needed to carry it out. Construction teams can help identify sites of exotic species infestation, as well as the teams that will be carrying out the fauna and flora rescue and relocation activities

5. Methodology

5.1. Control Activities During the Implementation and Operation of the Project

For the teams working in the field, training in the identification and management of invasive species should be given to all employees on these work fronts, covering information on invasive species, such as techniques for identifying the species, the type of dispersal, the appropriate final destination of seeds that are in the machinery or stuck to clothing and tools.

During the implementation of the TL, employees must report to the environmental supervision team whenever they observe areas infested by these species. The removal of these species in the areas where the project is being implemented must be carried out quickly. If there is reproductive material, the removal can only be carried out by trained staff to prevent the seeds of these species from being dispersed during their removal.

Periodically, and more intensively during the fruit dispersal period, the project's machinery and vehicles should be inspected to check for the presence of seeds and fruit of these species. If the presence of seeds and fruits of invasive species is found in the machinery, periodic cleaning of this equipment should be carried out to prevent it from acting as a source of dispersal of invasive species.

If sources of invasive species dispersal are found frequently on the machinery, construction and non-emergency maintenance activities in the areas with the highest infestation of these species should be interrupted until the reproductive period of these species is over.

5.2. Monitoring the Dispersal of Invasive Species

The TL intersects several native areas, in particular the Burugi-Chato National Park region. The vegetation around this stretch is predominantly grassland and Savannah formations. The monitoring of the dispersal of invasive alien species will be carried out within the wayleave and in a 20 m buffer on either side of the accesses within or in the Burugi-Chato National Park Buffer Zone, and with the same buffer for open accesses in native vegetation throughout the implementation of the TL.

During the construction phase, an initial mapping of the locations where invasive alien species are present in the study area will be carried out, based on *on-site* visual assessments. The focus of this activity will be to distinguish different mapping categories that reflect the degree of infestation in areas with native vegetation.

The sample areas for locating plots to support the initial mapping will be defined by analysing satellite images and field inspections. Once the first version of the mapping has been finalised, other sample areas may be included for monitoring using the plots.

In each selected sample area, fixed plots measuring 20 m x 20 m will be installed, within which the clusters of these invasive shrubs and trees will be counted, their total height measured and the coverage within the plot estimated. There will also be a visual analysis of the degree of infestation in each sampling area, which will include a photographic record at georeferenced fixed points.

Monitoring of the sample areas (evaluation of the plots and visual analysis) will be carried out at the start of the operation phase, and its frequency will be defined after the initial inspection, to be carried out during the installation stage. In each campaign, the aforementioned parameters will be measured, as well as the visual analysis of the sample area to update the mapping of infested areas.

If it is found that there has been an increase in the density of invasive alien species and/or ground cover in any of the sample areas, the need for and effectiveness of control measures should be assessed, including the recovery of the area following the procedures described in the vegetation restoration measure provided for in the **P.10 - Operation Biodiversity Management**, with the main activity being the mechanical removal or targeted application of herbicides to these invasive species.

The assessment of the need to restore the area should take into account the degree of infestation, the size of the area where the infestation was found, the current use and vegetation cover of the area and its surroundings, among other aspects. It should also involve the owners of the land where the infestation was observed, as it will depend on their authorisation for any intervention.

6. Performance Indicators

The following indicators are proposed to monitor the implementation of this Programme:

- Carry out 100% of the planned monitoring campaigns.
- Carry out 100% of the planned updates to the mapping of areas infested by invasive exotic species around the project's intervention areas.
- Reduction or eradication of invasive species in the areas most at risk.
- Reduction in the number of outbreaks in areas infested by invasive species.
- Reduction in the number of sources of propagules of these species on machinery and employees' clothing.

7. Reports and Documentation

A permanent channel for recording invasive species should be set up where employees can record the existence and infestation of these species in the project areas. In addition, a six-monthly report should be drawn up covering all the control activities carried out during the period, as well as monitoring the indicators indicated.

The report should be sent to the project's environmental supervision team, funding organisations (if they are interested) and environmental protection bodies involved in the project.

8. Schedule

The programme should begin its activities with the start of construction. The monitoring of exotic species should be carried out during operation, and its duration should be assessed by the team responsible for its implementation, based on a critical analysis of the results observed.

Regardless, the team responsible for maintaining the line must constantly check for new infestations. If new outbreaks are identified, the monitoring and eradication measures must be activated again.

P.09 - Landscape Protection Programme

1. Justification

The line will be built primarily using the 14-metre service lane. However, in some places where the terrain is not favourable, it will be necessary to open new accesses. The location and length of these new accesses has not yet been defined, but areas with low access capillarity and unfavourable terrain occur mainly in the Burigi-Chato National Park region.

In this area, the vegetation is mainly preserved. Considering the strong vocation for agriculture and livestock farming in the region, the opening of new accesses could facilitate the expansion of these activities into areas where they do not currently occur. It is therefore necessary to monitor whether the implementation of the project will lead to the expansion of anthropogenic areas or induce new conversions of native habitats.

2. Main Objectives

The main objectives area:

- Reduce deforestation and forest degradation, protecting natural areas and ecosystems.
- Check whether the implementation of the project is causing the expansion of anthropized areas.
- Identify and prevent illegal activities, informing the competent authorities whenever new deforestation is detected.

3. Applicable Legislation

National

- Protected Places and Areas Act (1969)
- The National Policies for National Parks in Tanzania (1994)
- Plant Protection Act (1997)
- National Forestry Policy (1998)
- The Forest Act No. 14 (2002)
- The Environment Management Act (2004)
- The Wildlife Policy of Tanzania (2007)
- Wildlife Conservation Act, No. 5 (2009)
- National Environmental Policy (2021)

International

- World Bank Environmental and Social Standards (ESS) 6
- IFC Performance Standard 6

4. Responsibilities

TANESCO is responsible for the Programme and will have to allocate the financial and human resources needed to carry it out. Operation teams can help identify areas where there is evidence of new land conversion.

5. Methodology

5.1. Identification of Priority Areas for Monitoring

The first stage involves identifying priority stretches for monitoring. Stretches where anthropogenic occupation is already consolidated present a lower risk of new deforestation related to the implementation of the line, as land use is consolidated and the access network is already established. This situation occurs mainly along the 400 kV Nyakanazi – Ibadakuli TL.

The identification of priority stretches for monitoring should consider the following aspects:

- location of the new accesses
- land use and land cover around the new accesses. Areas with native vegetation cover within critical habitat should be prioritised for monitoring
- new accesses in or near protected areas should also be prioritised.

These sections should be identified as soon as the location of the new accesses is defined by the engineering team.

5.2. Monitoring of New Deforestation

Once the priority stretches have been defined, monitoring will be carried out through regular imaging using a drone. The drone to be used must be suitable for monitoring large areas, with ample flight autonomy, equipped with RGB sensors and high-resolution cameras.

In the first year after the line is built, overflights should be carried out every 3 months. In subsequent years, depending on the behaviour observed, the frequency of flights could be reduced to every six months. If any new deforestation is detected in the areas of the new accesses, the team should inform the competent authorities, stating the geographical coordinates and approximate size of the deforestation identified.

Additionally, as specified in the Operation Management Programme, for accesses in areas of greater risk to biodiversity, TANESCO should evaluate the possibility of not maintaining this access for maintenance of the TL, closing and recovering it, and checking another alternative form of access through areas of lower risk.

This monitoring should be included in the access control plan to be drawn up in the TANESCO environment.

6. Performance Indicators

The following indicators are proposed to monitor the implementation of this Programme:

- Number of priority areas identified
- Number of overflights carried out
- Number of new clearings identified
- Number of reports passed on to the responsible authorities

7. Reports and Documentation

Partial reports should be produced for each monitoring campaign, including at least the stretches monitored, whether new deforestation has been identified and the number of alerts made to the competent authorities.

8. Schedule

The programme should begin its activities at the end of the construction stage, as soon as the new open accesses are no longer used by the construction team. And continue during operation for at least one year. At the end of this period, the need for continued monitoring should be assessed on the basis of the frequency of new deforestation observed.

Regardless, the team responsible for maintaining the line must constantly check for new deforestations, and, if necessary, inform the competent authorities.

P.10 - Operation Biodiversity Management Programme

The operation of the line could cause biodiversity impacts, especially in relation to the risk of birds colliding with the line. The risk assessment presented identified the points and species most sensitive to this risk, which require monitoring to assess the significance of this risk and the need for mitigation measures.

The biodiversity management programme during the operation should also support the implementation of mitigation measures related to the recovery of degraded areas and areas where exotic species have been eradicated.

Therefore, the Operation Biodiversity Management is divided into three sub-programmes:

1. Subprogramme of bird collision monitoring
2. Subprogramme of fauna monitoring
3. Subprogramme of native vegetation restoration

P.10.1 – Subprogramme of Bird Collision Monitoring

1. Justification

The first studies to identify the interaction between birds and electrical structures as a problem for nature conservation emerged in the 1970s and 1980s, identifying collision and electrocution as the main problems. A third aspect of this interaction is the choice of these structures for nesting.

Most of the accidents and negative impacts of birds on TLs, as well as TLs on birds, are reported in continents such as Europe, North America and Africa, due to the large flow of migratory species such as geese, storks and cranes (SAVERENO *et al.*, 1996; JENKINS *et al.*, 2010).

As for the efficiency of using *bird signalling devices* on TLs, some studies have already presented some efficient mitigation alternatives, such as a prior study of the route, painted PVC spirals to avoid collisions, and different types of signalling devices, such as spirals, signs, flappers, swivels or spheres (JANNS & FERRER; 1998; BEAULAURIER; 1981; ALLONSO *et al.*, 1994; SAVERENO *et al.*, 1996; BERNARDINO *et al.*, 2018). Devices with reflective or glow-in-the-dark parts are becoming more prevalent (SPORER *et al.*, 2013; BARRIENTOS *et al.*, 2011). According to Martin (2011), current trends reflect the expectation that, based on what we know about bird vision, larger or closer markers, brighter and more contrasting-coloured markers, and those with movable components should be the most effective.

Despite the various types of signalling devices, there is little evidence for their comparative effectiveness. This is partly due to limited study designs, lack of publication of studies with negative conclusions and possible variations in the effectiveness of each type of signalling device depending on the species (BARRIENTOS *et al.*, 2011).

Most studies comparing different signalling devices have found inconclusive results. Some studies have managed to establish a correlation between TLs marked with flappers and large double spirals and the response of individuals of the *Canadian* crane species (*Antigone canadenses*), however other studies have shown contrary results in relation to the effectiveness of spiral devices, both in relation to their size and the colour of the spiral (CROWDER, 2000; VENTANA WILDELIFE SOCIETY, 2009; CALABUIG & FERRER, 2009).

In addition, aspects relating to the ideal spacing of signalling devices are even more imprecise than the efficiency of the devices types themselves, and there may be a tipping point below which the addition of more signalling devices improves mitigation and above which little additional benefit is obtained (SPORER *et al.*, 2013; BARRIENTOS *et al.*, 2011; ANDERSON, 2002).

In this way, it can be said that bird signalling devices on TLs cables result in a reduction in the number of collisions. Still, the effectiveness of the device can vary, which will depend on various factors, such as the type of device, the spacing used between them, the surrounding environment, the phytophysiognomic type and degree of conservation of this environment, the geographical location, the relief, the atmospheric conditions, the seasonality, the lighting conditions and the bird community itself in the region. As such, there is still considerable uncertainty when choosing the most effective design and arrangement for each specific circumstance, which will only be resolved when further studies are carried out. A recent study compared three different devices to reduce birds' risk of collision with the cables. FERRER *et al.* (2020) compared the yellow spiral, orange spiral, and flapper, where the flapper flight diverter showed the best result with the highest reduction in mortality.

As for bats, the three main direct impacts that an TL can have on this group are: collision with cables and towers, electrocution and interference from electric and magnetic fields (AGWANDA, 2013). However, unlike birds, bats almost never collide with TLs, poles, towers or other static structures, and mortality in energy systems, although not fully understood, is commonly related to wind energy projects (LEDEC, 2012; ARNETT *et al.*, 2008).

High-flying bats, especially aerial insectivores, would be the most susceptible to collisions with TLs cables. However, these animals have an echolocation system designed to capture prey and identify obstacles relatively early (FENTON, 1990), minimizing the risk of collision.

2. Main Objectives

The Subprogramme's objectives are:

- Identify along the route of the TL the areas of interest for winged fauna that harbour species with potential for collision;
- Qualitatively characterise the bird community of each monitored stretch;
- Classify the areas of interest to winged fauna in terms of their sensitivity to collision

events;

- Identify the species that interact with the TL and other structures;
- Identify the efficiency of the signalling devices on the monitoring stretches; and,
- Identify the impact of the TL and other structures on the bird and bat community.
- (FENTON, 1990), minimising the risk of collision.

3. Applicable Legislation

National

- Protected Places and Areas Act (1969)
- The National Policies for National Parks in Tanzania (1994)
- Plant Protection Act (1997)
- National Forestry Policy (1998)
- The Forest Act No. 14 (2002)
- The Environment Management Act (2004)
- The Wildlife Policy of Tanzania (2007)
- Wildlife Conservation Act, No. 5 (2009)
- National Environmental Policy (2021)

International

- World Bank Environmental and Social Standards (ESS) 6
- IFC Performance Standard 6

4. Responsibilities

TANESCO is responsible for the Subprogramme and must allocate the financial and human resources necessary for its implementation. It must therefore hire a team of ornithologists and mastozoologists to carry out the Subprogramme.

5. Methodology

Monitoring of winged fauna will be carried out using the following methodologies: observation census and collision estimation. To carry out this monitoring, the stretches with the greatest potential for collision indicated in the bird collision risk analysis **Section 8.2.4.2** were chosen.

According to the analysis indicated, the stretches located at the fauna sampling points during the baseline named BS1, BS8 and BS9 are the areas with the greatest potential risk for birds (see **Section 8.2.4.2** for details of the bird collision risk analysis). The following **Table 5.a** shows the locations and physiognomies of these winged fauna monitoring points.

Table 5.a of P.10.1**Winged fauna monitoring points during operation**

Area	Coordinates UTM	Phytophysiomies
BS1	36 M 334614 9876670	Wooded grassland
BS8	36 M 358814 9632825	Miombo Woodland
BS9	36 M 461492 9635551	Shrubland Thickets

Although the risk analysis points to these three priorities stretches, the entire route of the TL will have to be assessed before operations begin to determine whether there will be a need for stretches in other environments. The focus of this analysis will be environments with alluvial influence, areas of forest vegetation and places with conglomerations of semi-aquatic or larger birds, etc.

Bird signalling devices should be installed on the segments considered to be most at risk, as indicated in Table 5.a above, based on the collision risk analysis (**Section 8.2.4.2**, item 17.02 of the ESIA). For the stretches considered to be control stretches, stretches should be selected on the existing LTs around the project where there is no collision avoidance equipment installed. The monitoring methods are detailed below.

Observation Census

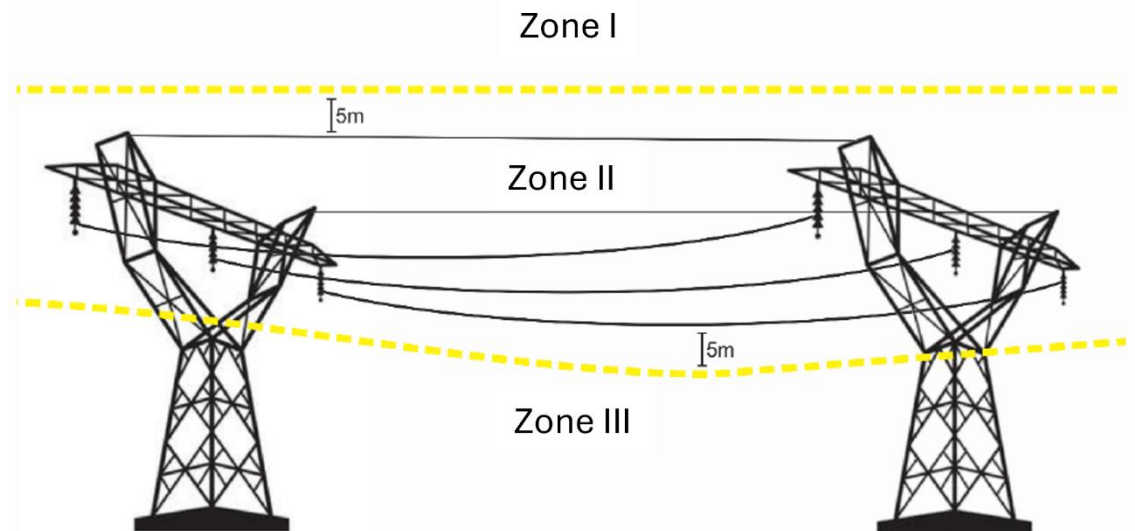
Bird flight observation should be carried out in two shifts, from sunrise to mid-morning and from mid-afternoon to sunset. In each of the chosen stretch (with and without signalling devices), the specialist will remain for 60 minutes near one of the towers, taking note of the species of birds and the types of interactions with the cables of the TL with the aid of a pair of 10x42 binoculars. In this way, it will be possible to observe up to 4 stretches per day, taking into account displacement and logistics.

For each flight interaction with the TL, the risk of collision will be assessed using two variables: a) distance of the flight in relation to the set of cables on the TL; and b) position of the flight transposing the TL (**Figure 5.a**). The distance variable will be classified according to whether the bird crosses the TL inside or outside an imaginary zone with a risk distance of five metres around the cables, both above and below them. This is an intermediate distance compared to that adopted in other studies (three metres in SAVERENO *et al.*, 1996 and ten metres in DE LA ZERDA *et al.*, 2003). Flights within the risk distance will be considered more dangerous for the birds, due to their proximity to the cables. The flight position variable will be categorised into three positions: I = above the cables; II = between the cables and III = below the cables. Of the three flight positions, position II represents the greatest risk of collision for birds (SAVERENO *et al.*, 1996) and bats.

It is worth emphasising that the methodologies described here will not involve any management of bird or bat species. The methodologies applied are aimed solely at non-invasive recording through visual censuses, without the need to capture, handle or transport wildlife specimens.

Figure 5.a of P.10.1

Schematic example of the delimitation of the imaginary line 5 metres down from the conductor cables and 5 metres up from the lightning cables and the zones that categorise the three flight variations



Source: Rialma (2021).

Therefore, in each monitoring area, i.e. the area chosen with a signalling device and without a signalling device, the census by observation methodology should be carried out. It should be noted that this methodology will only be used with birds, as it will be possible to visualise the interaction of birds between the cables and towers, and the greatest bat activity occurs at night.

As for the signalling devices (**Figures 5.b and 5.c**), the ones known as fireflies can be used, also installed on phase conductors and protection cables, which can be differentiated into two categories: rotating type (Firefly Bird Flapper - FBF) and ribbon/spiral type. FBFs have the particularity of lighting up and reflecting ultraviolet radiation and visible light during the day and night (up to 10 hours). The ribbon types have two photoluminescent and retroreflective plates. Ferrer *et al.* (2020) compared the spiral type (yellow and orange) and the flapper, where they observed that the flapper flight diverter was responsible for a 70.2% lower average bird mortality rate.

Studies on the mitigation of impacts of power lines on birds have been known for a long time. Janns & Ferrer (1998), mapping some power lines, concluded that a preliminary study of the route and the right choice of route can significantly reduce the potential for collision. Bevanger & Broseth (2001), studying the impact of birds on 300, 66 and 22 kV lines, concluded that removing lightning arresters would reduce bird deaths by more than 50% in relation to collisions. These authors believe that the development of technologies that allow the suppression of these cables is urgent. This result was also achieved by Raab *et al.* (2012) in Austria and Hungary. Beaulaurier (1981) summarised the results of 17 studies involving markers on wires or conductors and found an average reduction in bird mortality of 45% compared to unmarked lines. In addition, he recorded an average

reduction in collision rates of 48% when lightning conductors were removed. This study suggests that marking and removing lightning conductors appears to be equally effective in mitigating bird collisions. However, removing lightning conductors can cause electrical problems for line reliability and system operation, so marking is probably the best way to reduce bird mortality on power lines.

Alonso *et al.* (1994) clearly demonstrated the effectiveness of painted PVC spirals in preventing collisions. These authors carefully compared collisions and evasive behaviour of birds crossing 380 kV transmission lines in marked and unmarked segments. Their results pointed to a reduction of more than 60% in flight intensity and collision frequency after the installation of markers. This method was confirmed by Savereno *et al.* (1996) in South Carolina/USA with similar efficiency, confirming the effectiveness of the method. Janns & Ferrer (1998) used three models of markers on different types of power lines, in which the use of spiral warning devices reduced the number of collisions, black transverse stripes were effective for birds, with the exception of one species (*Otis tarda*), and the third type of warning device, which consisted of long, thin stripes, did not reduce bird mortality.

Bernardino *et al.* (2018) compiled and analysed several studies focusing on bird collisions with power transmission lines. This compilation resulted in a survey of 191 studies published between 1971 and 2016. They found that spiral, plate, flapper, spinning, or ball markers have been the most common mitigation measure used to reduce bird collisions with power transmission lines. Furthermore, devices with reflective or glow-in-the-dark parts are becoming more prevalent, while the aviation balls used in early signalling experiments are generally being phased out (MURPHY *et al.*, 2016; SPORER *et al.*, 2013; BARRIENTOS *et al.*, 2011). According to Martin (2011), current trends reflect the expectation that, based on what we know about bird vision, larger or closer markers, brighter and more contrasting colours, and those with moving components should be the most effective.

Figure 5.b of P.10.1

Example of a signalling device to reduce collisions with birds



Source: Avian Power Line Interaction Committee (APLIC, 2012)

Figure 5.c of P.10.1**Examples of pendant devices that can be used to divert birds**

Source: *Avian Power Line Interaction Committee (APLIC, 2012)*

Collision estimation

Whether through collisions or electrocution, this analysis aims to verify the direct impact of TLs on the behaviour of species. In this way, the area below the TL will be searched for the carcasses of collided birds and bats. This methodology will be carried out by two field researchers, each of whom will search for carcasses for 30 minutes on each side and then reverse the sides of the search, where they will again search for another 30 minutes (**Figure 5.d**).

All bird and bat remains (groups of feathers, bones or whole carcasses) found will be considered the result of collisions, as will dying individuals. Similar remains (feathers attributable to the same species) found under the same stretch will be attributed to the same individual, unless the total count indicates that more than one individual has been found.

When a trace is found, the necessary information should be noted on the forms, which will be compiled in a single electronic spreadsheet so that a standard database can be fed (geographical coordinates, taxonomic data, date, time, environment of the collision or electrocution site and annotation of the photographic record). All the remains found will then be removed from the site during the sampling period, avoiding overestimating the number of collisions by double counting the same remains in subsequent campaigns.

Figure 5.d of P.10.1**Schematic example of the search for carcasses in the TL**

Source: Rialma (2021).

Bird Collision Risk Analysis

The search for and discovery of carcasses or dying birds in the field will be subject to certain sources of error (DE LA ZERDA & ROSSELLI, 2003; JOHNSON *et al.*, 2002), which generate sampling errors. These errors can be classified into four types, according to the following provisions:

Search error (SE)

The structure of the habitat, among other factors, alters the observer's ability to find carcasses. Thus, it is likely that the number of winged specimen bodies found by a given technician will be lower than the actual number of bodies present in the area. Therefore, the objective of this search experiment is to evaluate the observer's efficiency in detecting carcasses on the ground under the transmission line.

This search error (SE) is calculated through an experiment in which a predetermined number of carcasses (N=10) are randomly scattered throughout the sample area and then located in a single review by a second technician (KERNS & KELINGER, 2004). If no carcasses from collisions are found in the field, domestic bird carcasses found at markets or aviaries should be used. The difference between the number of carcasses placed and the number of carcasses found provides the individual SE for each researcher, calculated using the following formula:

$$SE = (TN/PEC) - TN$$

SE = search error;

TN = is the total number of dead individuals found at the end of each seasonal sampling;

PEC = is the proportion of experimental carcasses found by the technician (expressed

from 0 to 1); and given this scope, it is important to use 10 samples of whole and partial carcasses (feathers, bones, carcasses, etc.) to test for search error.

Removal error (RE)

Moribund individuals and carcasses can be completely eliminated by various carnivorous animals (whether predators or scavengers), causing the actual number of animals impacted by TL to be underestimated (FERRER *et al.*, 1991). Therefore, to determine the degree of removal by carnivores, an experiment will be conducted with domestic bird carcasses; 20 carcasses will be used and reviewed after 24 hours, representing the cycle of activities and temporal replacement of different carnivores throughout the day (morning, daytime, dusk, night). Thus, the proportional value is calculated by dividing the original number of carcasses by the number remaining at the end of the experiment, corresponding to the removal error or RE, which will be used to estimate the absolute number of birds affected by TL, according to the formula:

$$RE = (TN + SE) / PNR - (TN + SE),$$

RE = corresponds to the removal error by carnivores;

PNR = proportion of carcasses not removed by carnivores (expressed from 0 to 1) at the end of the experiment (24 hours after the carcasses were placed).

SE = search error;

TN = total number of dead individuals

Physiognomy error (PE)

This correction method will be applied in locations with dense vegetation or bodies of water, corresponding to the proportion of the difference between the total sampled area and the area that can be sampled, excluding those where the terrain or vegetation makes inspection impossible. It is governed by the following formula:

$$PE = (TN + SE + RE) / PPS (TN + SE + RE)$$

PE = corresponds to the physiognomy error;

PPS = + corresponds to the proportion of physiognomy sampled (expressed from 0 to 1).

SE = search error;

RE = removal error;

TN = total number of dead individuals.

Escape error (EE)

Some individuals may collide with the TL structures and not fall immediately to the ground, moving to areas where they will not be sampled (DE LA ZERDA & ROSSELLI, 2003). Others may fall within the sampling area but move along the ground outside the sampling area. This error is called the escape error (EE) and is given by the percentage of individuals that collide with the lines but continue flying or walking outside the sampling area. Thus, EE is calculated by direct observation of birds that collide and the proportion

of those that did not fall within the carcass search area, using the following formula:

$$EE = (TN + SE + RE + PE) / PBHF - (TN + SE + RE + PE)$$

EE = corresponds to the escape error;

PBHF = is the proportion of birds hit that fell within the sampling area, expressed from 0 to 1.

SE = search error;

RE = removal error;

PE = physiognomy error

TN = total number of dead individuals.

Total collision estimate (TNC)

The total number of collisions (TNC) will be calculated by adding each of the error estimates mentioned above to the total number of birds collided with found by the search method, according to the formula:

$$TNC = TN + SE + RE + EE.$$

6. Performance Indicators

The following are indicators of the Subprogramme's effectiveness:

- Length of the TL displaced in search of areas of interest to birds and their determination;
- Number of ornithological communities characterised by the number of stretches monitored; and,
- Number of stretches of the TL with signalling devices by the number of stretches of the TL with significant potential for collision.

7. Reports and Documentation

For each campaign to monitor collisions with winged fauna, a report should be issued containing information on species (richness), abundance, determination of species considered sensitive, threatened and endemic. Field records, including the efficiency of the signalling devices and the collision rate of birds and bats. For bats, information should be provided on whether there was a collision with cables/towers or by barotrauma. All reports must contain photographic records of the fauna monitoring areas, methodologies, results, photographic records and the raw data spreadsheet (excel table). A consolidation report must be drawn up annually. The campaigns will take place every four months.

8. Schedule

The programme will begin during the LT operation phase. Monitoring will be carried out for at least 3 consecutive years. After this period, an assessment should be made of the effectiveness of continuing the monitoring. The analysis should be carried out by the team

of specialists responsible for the monitoring, and based on the results obtained to date.

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P.10.2 – Subprogramme of Bioindicator Fauna Monitoring During Operation

1. Justification

Fauna monitoring is of fundamental importance in natural areas that will suffer from the implementation of linear structures, and especially in regions where migrations of large mammals and birds are recorded. Therefore, monitoring these groups means keeping track of ecological fluctuations in local biodiversity, using key groups of bioindicator species and thus assessing the negative effects of the construction work on these animals in the medium to long term.

Medium-sized and large mammals are more affected by habitat loss and fragmentation, as they depend on large areas to maintain healthy populations. In a review of the susceptibility of Tanzania's large terrestrial mammals to changes in their environment, whether in relation to climate change or even the species most sensitive to environmental changes of other kinds, they listed a series of mammals that can be considered as bioindicators of changes in their habitats (Shilla, 2014). The main species considered as bioindicators are the hippopotamus (*Hippopotamus amphibius*), waterbuck (*Kobus ellipsiprymnus*), african elephant (*Loxodonta africana*) and wildebeest (*Connochaetes taurinus*), in addition to these main species, the rhinoceros (*Diceros bicornis*), wild dogs (*Lycaon pictus*), buffalo (*Syncerus caffer*), lion (*Panthera leo*), African leopard (*Panthera parduspardus*) e cheetah (*Acinonyx jubatus*) can also be considered as indicator species of environmental quality, as they are sensitive to changes in their habitats (ELTRINGHAM, 1979; SINCLAIR, 2003; VIE *et al.* 2009; HERLEY, 2011). In this sense, the monitoring of large mammal species is necessary in order to ensure that their populations are monitored in the face of the development.

Birds, on the other hand, have several representatives that are sensitive to environmental changes (Stotz *et al.*, 1996) and have known taxonomy, endangered species (IUCN, 2024 and CITES, 2024), rare and endemic species; informing monitoring of environmental changes for more critical species. (VERNER, 1981; COELHO *et al.*, 2016; TEIXEIRA & CARLOS, 2023; BALTZER *et al.*, 2010; WOTTON *et al.*, 2020). Por essas características, são amplamente utilizadas em levantamentos e monitoramentos ambientais, uma vez que impactos decorrentes de empreendimentos afetam diretamente suas comunidades, sobretudo as espécies mais especializadas e sensíveis (VIELLIARD *et al.*, 2010). Em áreas em processo de restauração, por exemplo, a presença de espécies florestais, frugívoras e insetívoras de sub-bosque é um indicativo de avanço sucessional e de recuperação ecológica (VOLPATO *et al.*, 2018; GIACOMINI, 2024). Já em paisagens fragmentadas, observa-se um comprometimento do equilíbrio ecológico, com a redução de populações de aves sensíveis às alterações no habitat, como as insetívoras de sub-bosque, notoriamente intolerantes a variações microclimáticas de temperatura e umidade que ocorrem fora de ambientes florestais bem conservados (STOUFFER & BIERREGAARD-JR, 2010). Em ambientes aquáticos, tanto continentais quanto marinhos, diversas espécies atuam como indicadoras da qualidade da água, especialmente em relação à contaminação por metais pesados. Aves marinhas, por sua vez, estão fortemente associadas à produtividade oceânica, podendo refletir a disponibilidade de recursos pesqueiros e a presença de poluentes orgânicos persistentes (FIGUEROLA &

GREEN, 2003; BARRETO, 2013; ESTRADA-GUERRERO & SOLER-TOVAR, 2014).

Therefore, monitoring the groups listed above will make it possible to characterise the local fauna as a whole, allowing us to infer the negative impacts of the implementation of the TL on the biota.

2. Main Objectives

This Subprogramme has the following objectives:

- Monitor the abundance and richness of species.
- Identify possible population fluctuations of bioindicator fauna groups (birds and medium and large mammals).
- To identify species that are sensitive to environmental changes and are considered environmental bioindicators.
- To identify the influence of human activity in the region on the faunal groups monitored.

3. Applicable Legislation

National

- Protected Places and Areas Act (1969)
- The National Policies for National Parks in Tanzania (1994)
- Plant Protection Act (1997)
- National Forestry Policy (1998)
- The Forest Act No. 14 (2002)
- The Environment Management Act (2004)
- The Wildlife Policy of Tanzania (2007)
- Wildlife Conservation Act, No. 5 (2009)
- National Environmental Policy (2021)

International

- World Bank Environmental and Social Standards (ESS) 6
- IFC Performance Standard 6

4. Responsibilities

TANESCO is responsible for the Subprogramme and will have to allocate the financial and human resources needed to carry it out. It must therefore hire a team of ornithologists, mastozoologists and herpetologists to carry out the programme.

5. Methodology

Fauna monitoring will include mastofauna (medium and large mammals) birds.

Monitoring will be carried out in four sampling areas: BS1, BS2, BS5 and BS6. These are shown in **Table 5.a** below:

Table 5.a of P.10.2

Biodiversity sampling points where fauna will be monitored during construction and operation

Biodiversity Sampling point	Coordinates (UTM, 36S, WGS84)	Phytophysiognomy
BS1	36 M 334614 9876670	Wooded grassland
BS2	36 M 309059 9851758	Evergreen dry forest
BS5	36 M 301705 9672599	Open Miombo Woodland
BS6	36 M 278828 9752758	Savana Woodland

In addition to the areas detailed above, sampling points will also be implemented in the target areas for habitat restoration (Programme P.05).

The sampling methodology for each group is presented below:

Mastofauna

Medium and Large Mammals

As the majority of medium and large mammal species can be identified in the field, invasive methods should not be used for monitoring. In this case, direct and indirect observation methods (Visual Census by Transect), camera traps and third-party information collection will be used.

- **Transect Census** - this methodology will take into account the existing trails in each sampling area. Censuses will be carried out from 7.30am until 11.30am and at the end of the day from 5.30pm until 6.30pm, totalling approximately 5 hours of searching per day. This methodology will take into account indirect records such as faeces, carcasses, signs of marking, fur and footprints, as well as visual records using binoculars and a telezoom camera. It should be noted that the records obtained from car journeys on the trails and main roads will also be taken into account in this methodology;
- **Camera traps** - 4 camera traps will be installed in each sampling area at a location chosen by the researcher. The locations for the camera traps will be selected taking into account the environments and the traces of medium and large mammals. To this end, priority will be given to natural trails and paths used by the target species, in order to maximize the result of photographic captures. In each area, the camera traps will have to remain active for 2 days and when considering the four monitoring areas, the sampling effort will be 32 camera traps/campaign (2 days x 4 cameras x 4 areas);
- **Third Party Collections** - This method will consist of records brought in by members of other teams and local residents. Although third-party data will not be used in statistical analyses, this method will allow species to be added to the list of local richness.

Birds

Two methods will be used to monitor terrestrial avifauna: transect census and mist nets.

- **Transect Census** - this consists of recording all the birds seen or heard as the observer walks along the transect of each sampling area. This method makes it possible to record birds in places where the visual and auditory field of the static observer would not reach. For this method, the observer will walk along the main trail of each sampling area and will identify the acoustic and visual recordings. In the event of doubtful identification, the play-back method will be used to attract territorial birds. The census per transect will be carried out at a speed of approximately 1 km/h in the early hours of the morning, from 07:00 until 11:00 and then at the end of the day, from 17:30 until 18:30, totalling 5 hours per day. Taking into account the four sampling areas, number of days and hours, the sampling effort will be 20 hours/campaign (4 areas x 5 hours);
- **Mist nets** - three (3) mist nets measuring 12 m x 2.5 m will be installed and kept open from 7am until 11am and at the end of the day from 5pm until 6pm, totalling around 5 hours of mist netting per day. The nets were inspected every 50 minutes. The mist nets must remain open for two days in each area.

6. Performance Indicators

The following are indicators of the Subprogramme's effectiveness:

- Number of records of endangered and endemic species;
- Number of environmental bioindicator species;
- Number of new records of extension of distributions in the monitoring zones; and,
- Increase in the accumulation curve in each campaign and their stabilisation.

7. Reports and Documentation

For each campaign, a report should be issued containing information on species (richness), abundance, determination of species considered sensitive, threatened and endemic. All reports must contain photographic records of the fauna monitoring areas, methodologies, results, photographic records and the raw data spreadsheet. A consolidation report should be drawn up annually.

8. Schedule

The campaigns will begin during the construction phase and continue during the operation phase for an initial period of 5 years. The campaigns will be carried out every four months. At the end of this period, a critical analysis of the data should be made and the continuity of monitoring should be assessed in conjunction with the team responsible for the BMP and the P.05 - Biodiversity Offset Plan.

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P.10.3 – Subprogramme of Native Vegetation Restoration

1. Justification

The suppression of native vegetation for the implementation of the TL may imply not only a reduction in vegetation cover in the region of the development, but also the loss of local floristic diversity and indirect impacts on the adjacent vegetation intercepted by it. In addition, vegetation clearing activities will cause habitat fragmentation, leading to the appearance of edge effects, which will need to be minimised to avoid further degradation of the remaining vegetation.

Thus, the implementation of the project will require the recovery of degraded areas and native habitats, both those degraded as a result of the implementation of the project and for the offsetting of the project's biodiversity.

2. Main Objectives

The Subprogramme's objectives include:

- Minimising the effects of degradation of the remaining vegetation.
- Promoting the recovery of areas degraded by the works, and other degraded areas, as a way of offsetting the impacts on biodiversity and ecosystem services.
- Present guidelines for the preparation of executive projects for the recovery of degraded areas.

3. Applicable Legislation

National

- Protected Places and Areas Act (1969)
- The National Policies for National Parks in Tanzania (1994)
- Plant Protection Act (1997)
- National Forestry Policy (1998)
- The Forest Act No. 14 (2002)
- The Environment Management Act (2004)
- The Wildlife Policy of Tanzania (2007)
- Wildlife Conservation Act, No. 5 (2009)
- National Environmental Policy (2021)

International

- World Bank Environmental and Social Standards (ESS) 6
- IFC Performance Standard 6

4. Responsibilities

TANESCO is responsible for the Subprogramme and must allocate the financial and human resources necessary for its implementation. TANESCO will have the support of:

- Specialists responsible for drawing up the specific restoration projects.
- A Cadastre Team to obtain the necessary authorisations from the landowners.
- An execution team made up of forestry engineers, biologists and field assistants.

5. Methodology

Edge protection of remnants of native vegetation

The remnants of native vegetation should be inspected periodically, in conjunction with the surveys to be carried out to identify the invasion of exotic species, to assess the edge effects caused by the clearing of vegetation for the installation of the Project.

The surveys should identify the sites most sensitive to impact, based on the structural characteristics of the remaining vegetation, the situation of the surroundings (more fragmented areas are likely to have more significant edge effects) and location in relation to sensitive areas (such as protected areas and critical habitats). These sites should be delimited and vegetation restoration carried out at the edge of the fragment, using one of the methods described below.

Invasive plant removal

The need to implement eradication and control actions, as well as which ones will be applied, should be assessed on a case-by-case basis during monitoring, depending on the invasion situation and the degree of dispersal evidenced. Eradication actions may include the following (ICMBio, 2023; BUISSON *et al.*, 2018):

Manual control: isolated plants or small populations that have not yet reproduced can be uprooted manually, by weeding or manual uprooting. The operation should be monitored and repeated until the seed bank is exhausted. If you notice that there has already been seed production on the site, it is recommended not to uproot, as the seeds can be brought to the surface and germinate.

Chemical control: Some plants break easily, making uprooting inefficient because the root system remains in the soil. In these cases, foliar spraying of a glyphosate-based herbicide at a dilution of 2% for small grasses and 3% for larger grasses is most effective. In the case of tall grasses, mowing should be carried out at the base and subsequent foliar spraying on young leaves 20-30 cm high after regrowth and always before they reach the reproductive period. In areas of high environmental fragility, such as wetlands, the use of a chemical broom is an interesting alternative, as it practically cancels out the risk of the herbicide coming into contact with the soil or water (PEREZ, 2008 *apud* ICMBio, 2023). It should be noted that the use of chemical controls must be preceded by obtaining the necessary authorisations from the environmental agencies responsible.

Control by burning: The use of fire (prescribed burning) can also be considered, usually in combination with chemical or mechanical control of grasses that regrow after burning. The guidelines for controlled burning are presented below (direct sowing).

Management of natural regeneration

This technique is recommended for sites with high regeneration potential, high plant density of regenerating native species and proximity to remnants of native vegetation. It consists of allowing natural processes to act freely so that recomposition can take place and only carrying out management to control degradation factors, such as: the occurrence of invasive species, isolating the area using fences, building/maintaining firebreaks and tracks. Management is restricted to eliminating or mitigating the factors that prevent regeneration (VIEIRA *et al.*, 2018; SAMPAIO *et al.*, 2019; SKORUPA *et al.*, 2021).

Total Area Planting (Seedlings and Direct Seeding)

Total area planting is indicated for sites with low natural regeneration potential, where several major intervention activities will have to be carried out in order to restore native vegetation. This requires pre-planting activities (isolating the area, fire prevention, soil preparation, control of leaf-cutting ants and invasive plants, erosion control and soil fertility correction), planting (seedlings or direct seeding) and post-planting (maintenance, control of degradation effects and monitoring).

For restoring forest areas, planting seedlings has been favoured. In savannah and grassland areas, direct seeding has been used (SAMPAIO *et al.*, 2015; VIEIRA *et al.*, 2020; BUISSON *et al.*, 2018).

Direct Seeding

Direct seeding is a restoration technique in which seeds are planted directly into the soil. With this technique, the plants germinate, establish themselves and always grow in the conditions of the planting site.

In direct seeding, a large number of seeds are used, as not all of them germinate. According to Sampaio *et al.* (2015), this technique is recommended for areas that have been cleared for agriculture and pasture and are dominated by invasive exotic grasses.

To implement this methodology, seed management is essential. Due to the difficulty in obtaining inputs, seeds can be collected (preferably from grass and shrub species), processed and stored. It is recommended to seek technical and scientific partnerships with recognised technical bodies (*e.g.* Embrapa Cerrados), and to seek specific technical advice for this activity.

The areas to be restored using direct sowing can be mechanised, which means that installation and maintenance costs are low. It is also a technique that is widely recommended for restoring grassland and savannah physiognomies.

The steps involved in implementing direct seeding through no-till are: soil preparation, fertilisation, planting, management and monitoring.

Preparing the soil is a very important stage, because as well as making the substrate ready for sowing, it has the function of eliminating invasive species. The recommended form of soil preparation is a combination of controlled burning and harrowing. The use of controlled burning should be planned and carried out before the vegetation dries out completely. Burning should be carried out in the late afternoon and early evening, when the temperature tends to drop and the humidity rises, making it easier to control the fire.

After burning the area, the soil should be harrowed to break up the roots of the exotic grasses and break up the clods. This activity should be repeated, as harrowing the soil only once will promote seed germination. Before planting, the soil should be harrowed again to further reduce the exotic grasses and finish preparing the soil with a levelling harrow. As the seeds of the native herbaceous species to be planted are very small, it is important that the soil is loosened and levelled for better germination. This activity should be carried out during the dry season to better control exotic species. According to the areas to receive this activity in this project, it should first be carried out from the lowest level of the land and following the contour line to avoid problems with soil erosion.

It is not recommended to fertilise the area where the direct sowing will take place, as this allows the exotic grasses to benefit from the fertiliser and grow faster than the native species. It is recommended that the area is ready for seeding at the start of the region's rains.

Planting Seedlings

This technique can be used alone or in combination with the other techniques proposed here for restoring the shrub and tree layer. The planting of seedlings should take place respecting a similar distribution between slower-growing species and fast-growing species. The planting of zoochoric species is fundamental so that spontaneous species emerge more easily due to the visitation of these areas by fauna (DURIGAN, 2011).

Prior to planting, it is recommended that the planting cradle be prepared using organic fertilisers and hydrogel. The seedlings should be placed in this cradle, and soon after planting a layer of burlap should be laid down to protect the soil; if possible, the seedlings should be irrigated soon after planting (DURIGAN, 2011).

Planting should be carried out at the beginning of the rainy season, preferably just after the first heavy rain. In addition, periodic maintenance activities should be carried out just before and at the end of the rainy season:

- Fertilising with an agronomic prescription at the start of the rainy season;
- Control of leaf-cutting ants as long as they attack small seedlings;
- Manual control of scrub competition, especially by fast-growing grasses and herbs that provide a layer of leaf litter (DURIGAN, 2011).

The species selected should give priority to those indicated in the P.07 - Flora Rescue and Relocation Programme and, if possible, from the rescued material itself.

For forested areas, planting at a spacing of 3m x 3m or less is recommended, while for areas of tree and shrub formation, denser planting in denser islands is recommended.

Control and maintenance measures for areas undergoing restoration

According to Sousa & Vieira (2017), ecological indicators (ground cover with native vegetation, density of regenerating native individuals and number of native species) should be monitored in order to assess the sustainability of native vegetation restoration areas. To collect data on these ecological indicators, sampling will be carried out in the focus areas using permanent sample plots measuring 25m x 4m (100 m²). In small areas (where it is not possible to install sample plots) data will have to be collected on the total area for the ecological indicators (density of regenerating native individuals and number of regenerating native species) and 5 sampling lines up to 25 metres long will have to be installed to survey the indicator of ground cover with native vegetation.

To set up the sample plots, we recommend using a tape measure and wooden stakes and/or PVC pipes. The geographical coordinates of the beginning and end of each sample plot should be recorded using GPS. In addition, the data collection should be carried out by a team made up of a specialised professional (biologist, forestry engineer, agronomist or another related field) and a field assistant. It is estimated that 10 field days will be required to carry out the monitoring data collection.

Sampling of the ecological indicator (ground cover with native vegetation) will be carried out using the interception method every metre along the central axis of the sample plots, totalling 26 points/installed sample plot. For forest formations, information will be collected on crown cover (above 2 metres) and for savannah formations, ground cover will be sampled.

Sampling of the ecological indicator (density of native regenerants) will be estimated by counting native trees and shrubs that are regenerating and perennial within the sample plot. Regenerants are considered to be woody individuals of native species with a height ≥ 0.3 m and ≤ 2 m.

Sampling of the ecological indicator (number of regenerating native species) will be carried out by counting the species of native evergreen, regenerating and non-regenerating trees and shrubs contained within the sample plots.

The ecological indicators to be measured include the percentage of vegetation cover, the density of native regenerants and the number of native woody species (richness).

6. Performance Indicators

The Subprogramme's indicators are:

- Carrying out 100% of the vegetation restoration defined;
- Meeting restoration criteria considered satisfactory for the recomposition areas, such as:
 - Control or eradication of invasive exotic species;
 - Restoration by covering the entire area with native species;
 - Good development of seedlings and/or natural regeneration of the shrub and tree stratum, meeting diversity and density criteria similar to those obtained in the ESIA phytosociological survey.
 - In the case of planting seedlings, mortality must be less than 10% 2 years after planting.

7. Reports and Documentation

Periodic reports should be drawn up for each monitoring event, to be finalised within one month of the end of field activities. The periodic reports should include

- Period during which the activities were carried out
- Methodology
- Activities carried out during the period
- Discussion of results
- Conclusions and follow-up recommendations, if necessary
- Proposed corrective measures, if necessary

Consolidated annual reports should also be generated, including a critical analysis of the accumulated results, evaluation of the restoration indicators, discussion of the effectiveness of the measures carried out, corrective measures required, conclusions and follow-up recommendations.

8. Schedule

Restoration actions must be implemented in line with the objective of the measure:

- Actions to restore areas temporarily degraded by the works should be recovered at the end of construction.
- Actions to restore the edge of remaining vegetation should begin during the operational stage. A detailed schedule should be drawn up following the verification surveys to be carried out, in conjunction with the P.08 - Invasive Species Control Programme.
- Actions to restore degraded areas as a biodiversity offset should follow the deadlines established in the P.05 - Biodiversity Offset Plan.

In the case of monitoring restoration areas, this should take place until the restoration is considered satisfactory by experts in the field (biologists, forest engineers, agronomists, among others).

9. References

CAVA, M. G. B.; ISERNHAGEN, I.; MENDONÇA, A. H. & DURIGAN, G. Comparing techniques to restore the woody Cerrado vegetation in abandoned pastures. *Hoehnea* 43 (2) • Apr-Jun 2016

PAPANASTASIS, V. P. (2009), Restoration of Degraded Grazing Lands through Grazing Management: Can It Work?. *Restoration Ecology*, 17: 441- 445. <https://doi.org/10.1111/j.1526-100X.2009.00567.x>

BUISSON, E.; LE STRADIC, S.; SILVEIRA, F. A.; DURIGAN, G.; OVERBECK, G. E.; FIDELIS, A.; FERNANDES, G. W.; BOND, W. J.; HERMANN, J.; MAHY, G.; ALVARADO, S. T.; ZALOUMIS, N. P. & VELDMAN, J. W. (2018). Resilience and restoration of tropical and subtropical grasslands, savannas, and grassy woodlands. *Biological Reviews*, 94.

P.11 – Flora Active Search Programme

1. Justification

According to the critical habitat assessment carried out (Section 7.2.4 of the ESIA) there are 12 priority biodiversity values (PBV) that triggered critical habitat in the project region, considering the entire Indirect Area of Influence (see Chapter 7.0 of the ESIA for details). Although 12 PBV triggered critical habitat, the project will directly intercept the critical habitat of only 2 PBV, the elephant *L. africana* and the wildlife corridor. Other biodiversity trigger values include: (i) the Lake Burigi, trigger for criterion ‘c’, also not intercepted; (ii) two species of fauna, the pangolin *P. tricuspis* and the primate *P. tephrosceles*, both do not occur in the Directly Affected Area, according to the IUCN geographical range (for *P. tephrosceles*) and the primary data collected (for *P. tricuspis* and *P. tephrosceles*); and (iii) seven flora species that were included in the analysis through secondary information, there is no evidence of records of these species in the project’s DAA and the project will not directly intercept the critical habitat delimited for them.

For the CH trigger flora species, although it is understood that there is no direct impact on their population since there is no evidence of their presence in the directly affected area, there is a potential risk, due to uncertainties regarding their population and distribution and the existence of phytophysiognomies that could harbour these species.

Experts were consulted during the development of the ESIA to verify more up-to-date and accurate information on these species, and all of them affirmed that the known records for these species are those available in the herbaria and publications consulted, and more precise data on their presence in the project’s DAA would require a more intensive search in the field.

Therefore, to avoid any potential impact on the population of these species, an active search in certain stretches should be carried out prior to any vegetation clearing.

2. Main Objectives

The main objectives area:

- Verify the presence of the seven flora trigger species in the area directly affected by the project.
- In case individuals of these species are evidenced, refine the executive project (fine-tuning) to avoid potential impacts on the population of these species.

3. Applicable Legislation

National

- Protected Places and Areas Act (1969)
- The National Policies for National Parks in Tanzania (1994)

- Plant Protection Act (1997)
- National Forestry Policy (1998)
- The Forest Act No. 14 (2002)
- The Environment Management Act (2004)
- The Wildlife Policy of Tanzania (2007)
- Wildlife Conservation Act, No. 5 (2009)
- National Environmental Policy (2021)

International

- World Bank Environmental and Social Standards (ESS) 6
- IFC Performance Standard 6

4. Responsibilities

TANESCO is responsible for the Programme and will have to allocate the financial and human resources needed to carry it out. For this task, TANESCO should hire consultants specialising in East African flora to carry out the field work, support the engineering team in re-designing the project and develop offset measures, if necessary.

5. Methodology

5.1. Target flora species

Table 5.1.a details the seven flora trigger species that are the target species for the search. The orange lines highlight those most likely to occur in the project's DAA, according to the existing records.

Table 5.1.a of P.11

Target flora species for active search in the project's DAA

Family	Species	Distribution	Habitat of occurrence (according to IUCN)	IUCN Category	Observations
Acanthaceae	<i>Thunbergia laborans</i>	This species is native to Rwanda and Tanzania where it is found between 1,150–1,550 m asl.	Woodland, bushland and roadsides.	EN	Unprotected localities in rural areas of Biharamulo, Musoma, and Sengerema Districts. There is one record in Kyebitembe, Muleba, near a rural road, about 6 km away from the B8 road.
Asteraceae	<i>Emilia cryptantha</i>	<i>Emilia cryptantha</i> is endemic to S Uganda and NW Tanzania.	Sswamp grassland	EN	The only known records in Tanzania are in unprotected localities near Kitwe and Bugandika in the rural area of Bukoba.
Asteraceae	<i>Vernonia tinctoriosa</i>	Endemic to northwest Tanzania and southwest Uganda.	Wetland areas on sandy lake	EN	The only known record in Tanzania is in the Bukoba, close to the urban area.
Dennstaedtiaceae	<i>Blotiella trichosora</i>	The species occurs in Burundi, Tanzania and Uganda.	Semideciduous moist forest, swamps	EN	The Minziro region is an important site for this species' population (Luke et al., 2024). There are two other records in the

Table 5.1.a of P.11

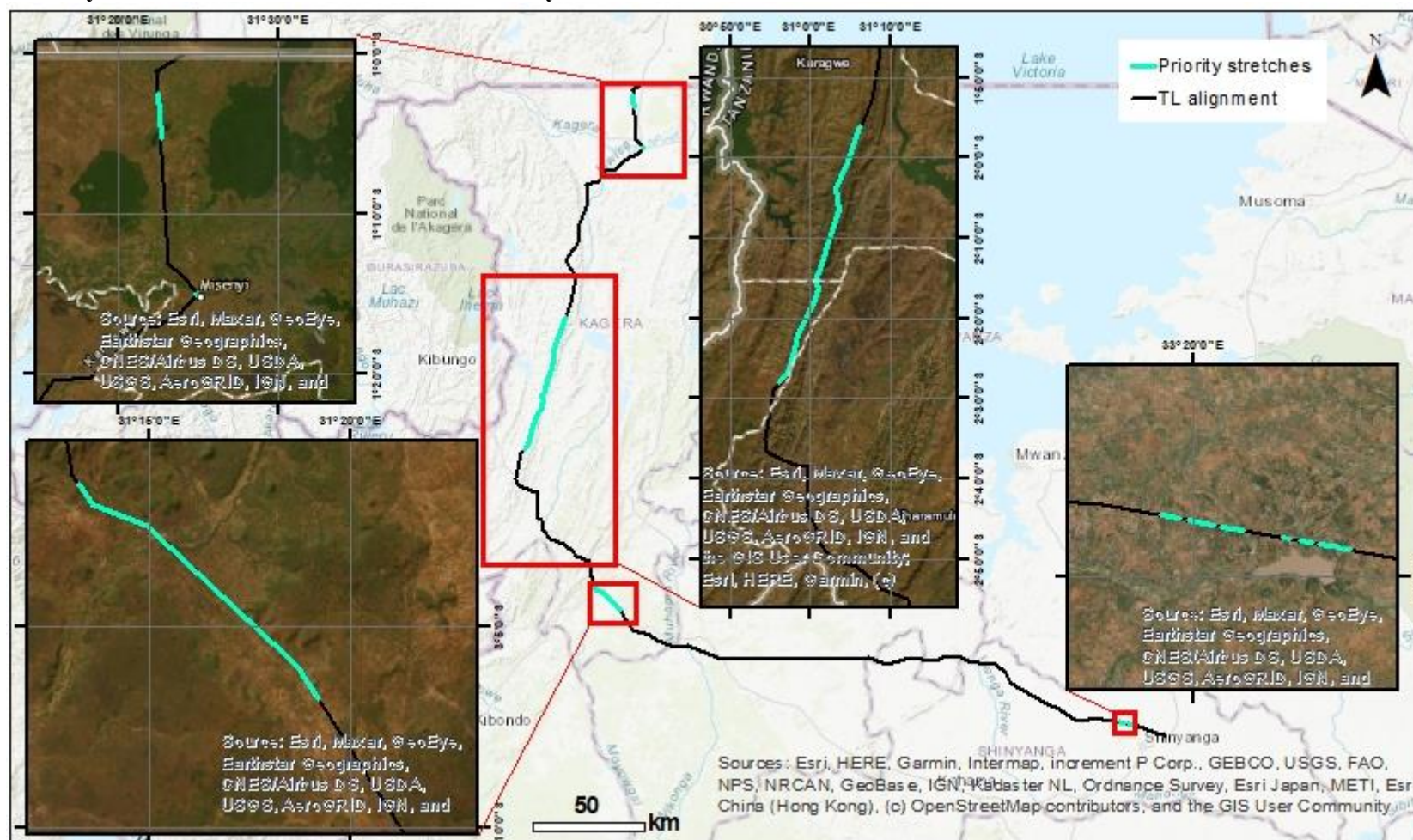
Target flora species for active search in the project's DAA

Family	Species	Distribution	Habitat of occurrence (according to IUCN)	IUCN Category	Observations
					rural area of Bukoba, near Lake Victoria.
Lamiaceae	<i>Tinnea physalis</i>	This species is endemic to Tanzania where it is found between 1,160–1,350 m asl.	Commiphora scrub, rocky outcrops and inselbergs.	EN	The last record of the species dates back to before 1960, near Mantini Hills in the rural area of Shinyanga District, and the region is currently intensely anthropized.
Menispermaceae	<i>Albertisia exelliana</i>	This species is native to Burundi, Rwanda, Tanzania, Uganda between 600–1,250 m asl.	Riverine forest	EN	The Minziro region is an important site for this species' population (Luke et al., 2024), but there is also a register in Nyantakara/Biharamulo, southwest of the B3 road, Kichi Hills in Rufiji District.
Rubiaceae	<i>Oxyanthus ugandensis</i>	The native range of this species is E. Central DR Congo to SW. Uganda and North Tanzania.	Semideciduous moist forest	EN	Experts from Tanzania state that this species is endemic to Uganda. There are 2 records in GBIF in the rural area of Mayondwe, Muleba District, near Lake Victoria.

5.2. Priority stretches

According to the information available in the literature, provided by the experts consulted, and the land use and cover in the project's DAA, four (04) priority stretches were selected to carry out the active search (**Figure 5.2.a**).

Figure 5.2.a of P.11
Priority stretches for flora active search survey



5.3. Active search and Mitigation Measures to be Taken

The flora active search should be carried out in the stretches highlighted in **Figure 5.2.a**, in the entire area directly affected by the project, including the TL, accesses, and any other necessary infrastructure. The flora search team should visit the stretch, equipped with digital GPS files with the polygons of the directly affected, and cards with photos and the characteristics of the species. The team should carry out a thorough search of the species' preferred habitats of occurrence.

The field stage should be preceded by an in-office assessment of the priority search stretches and identification of preferred habitats. In these places, search quadrants should be delimited to ensure that the entire area of potential occurrence is effectively surveyed.

A pre-survey of the area using a drone can be carried out to identify the current state of conservation of the vegetation and optimise searches, for example by identifying recently cleared areas beforehand.

All identified individuals should be georeferenced and photographed. The characteristics of the site should be recorded on a spreadsheet, including at least: species, number of individuals, area occupied, phytosanitary status, phenological status, quality of habitat at the site, and signs of anthropisation.

Locations where individuals of these species are found should be shared with the engineering team so that the necessary adjustments can be made. It is of fundamental importance that the teams work together, under the constant supervision of Tanesco's environmental management team.

In cases where individuals of these species are found, three possible mitigation measures should be adopted:

- 1) If few individuals are found, in a partially anthropised habitat:
 - a) Work on micro-adjustments to the project, without altering the main alignment, such as the location of towers, access, the need to maintain the cleared strip under the line, etc.;
 - b) Draw up offsets, including the rescue and relocation of these individuals and the collection of germplasm for studies related to in-vitro propagation, and/or
- 2) If few individuals are found in a conserved natural habitat, or if a significant number of individuals are found:
 - a) Evaluate adjustments to the project alignment to avoid passing through the site

The parameters relating to the number of individuals and the quality of the habitat should be defined by the botanists with the help of external specialists in the target flora species, if necessary.

Depending on the progress of the botanical team's field research, the stretches already surveyed may be cleared for construction to begin if no trigger species are found.

6. Performance Indicators

The following indicators are proposed to monitor the implementation of this Programme:

- Number of priority areas identified.
- Number of stretches surveyed.
- Number of adjustments made to the project.
- Number of stretches cleared for the beginning of the construction.
- Number of individuals relocated, if any.
- Quantity of germplasm rescued.

7. Reports and Documentation

Firstly, a work plan should be drawn up, detailing the field methodology, the schedule of activities, and the teams involved.

Partial reports must be produced for each stretch surveyed, including: field methodology, field duration, results, mitigation measures adopted, photos, and field sheets. At the end of the activities, a final report should be produced, including the compilation of the results found, a critical evaluation of them, changes made to the project and future actions to be taken if necessary, such as monitoring relocated individuals, or monitoring the production of seedlings from collected materials, etc.

8. Schedule

The programme should begin its activities before the completion of the executive engineering project and before any vegetation clearance activities.



ANNEXES



Annex 13.1 – Documents Received from Stakeholders During the Consultation Process

Questionnaire received from Dra. Siima Bakengesa

1. What are the main conservation objectives of this protected area?
 - a. Biodiversity conservation in general
 - b. Conservation of ecosystems
 - c. Preservation of a specific species of flora and fauna
 - d. Promote the sustainable use of the area's natural resources
 - e. Curbing human activities, such as illegal hunting, deforestation, burning, etc.
 - f. Others. Conservation of water catchment areas

All of above

2. What are the protected area's main species of fauna and flora? Are there any species of special interest (e.g., endangered or endemic species)?

This information will be provided by TFS on specific forest reserves

3. Are there any critical sites for biodiversity in the protected area, for example, areas with intact habitats, places of high concentration of individuals/species, and important areas for reproduction/feeding? Where?

Yes, specific species will be provided by the managing authority TFS

4. What are the main environmental impacts faced by the protected area?
 - a. Uncontrolled extraction of forest products. If so, what is extracted? (Mainly wood and non wood resources- timber, medicinal, mushrooms etc)
 - b. Wild fires
 - c. Others. Which ones?
5. What are the main risks and impacts that the transmission line construction will bring to the protected area and the biodiversity it shelters?
 - a. Habitat fragmentation
 - b. Habitat reduction for native species
 - c. Loss of flora species

6. What mitigation/compensation measures do you suggest avoiding or minimizing the impacts of transmission line construction and operation?

1. Involvement of the Ministry of natural resources and Tourism in all steps of project implementation from the initial plan to implementation.
2. Support in surveillance programmes to curb illegal extraction of forest products, wildfires and invasive species

7. What compensatory measures do you suggest for the potential risks and impacts of transmission line construction and operation?
8. What are the main needs of the protected area today?
 - a. Restoration of degraded areas
 - b. Control of human activities (illegal hunting, fires, etc.)
 - c. Lack of trained personnel for inspection
 - d. Lack of equipment for surveillance (e.g., cars, communicators, weapons, drones, etc.)
 - e. Others. Support to surrounding communities on alternative sources of income
9. How is the local community involved in managing the protected area?
 - a. The local community sustainably extracts products from the forest
 - b. Social responsibility programme geared towards communities



Questionnaire received from TFS

Dear Dr.Siima

Kindly find the answers to the questioner

1. What are the main Conservation objectives of the protected areas?
 - a) The main conservation objectives of the protected areas from Makotopora to Tabora are:
 - b) Biodiversity conservation in general as well as promotion of sustainable use of the area's natural resources .In the mentioned area there is an endemic species of Itigi thickets which requires a special protection model for its existence and sustainability.
 - c) Curbing anthropogenic activities to the lowest level in the protected areas.
2. What are the main environmental impacts faced by the protected areas?
 - a) Illegal extraction of forest products especially timber species and charcoal
 - b) Encroachment of forest reserves for cultivation, mining and grazing in protected areas.
3. What are the main risks and impacts that the transmission line construction will bring to the protected areas and the biodiversity it shelters?

There will be a loss of flora and fauna species and biodiversity in general where the clearance of vegetation will be done to give way to the construction of transmission lines.
4. What mitigation /compensation measures do you suggest avoiding or minimizing the impacts of transmission line construction and operation?

It is proposed that where there is too much vegetation/high concentration of biodiversity the way of the line could be shifted a bit so as to reduce too much removal/clearance of the vegetation hence reduce loss of biodiversity.
5. What compensatory measures do you suggest for potential risks and impacts of transmission line construction and operation?

The compensation of negative impacts caused by construction of transmission lines within the protected areas is clearly stipulated in the Forest Act No.14 of 2002 and the fees payable for such destruction of forest resources caused by the project within a forest reserve is stipulated in the Government Notice (GN) No. 59/28/2022. This will be ascertained by undertaking a resource assessment in collaboration with TFS officers hence compensation fee established and paid according to the aforementioned Act and GN.
6. What are the main needs of the protected areas today?

The main needs of the protected areas today are but not limited to:-

- Creation of awareness of the importance of protected areas to the surrounding communities and the general public.
 - Restoration of degraded areas by planting trees
 - Law enforcement hence control and minimizing illegal activities (fires, charcoal burning, timber harvesting, agricultural encroachment, pastoral activities and human settlement ect)
 - Inadequate trained personnel and working facilities like vehicles, motorcycles and modern photographic equipments (drones) for protection
 - Ranger posts within protected areas
 - Political will.
7. Regarding restoration of degraded areas and Land tenure regularization the priority areas for carrying out the restoration activities will be in those areas whereby the transmission lines are passing through and neighboring areas.
8. How are the local communities involved in managing the protected areas?
The local communities are both sustainably extracting forest products and forest services where permitted while respecting the restrictions and regulations for the wise use of the resources in protected areas.

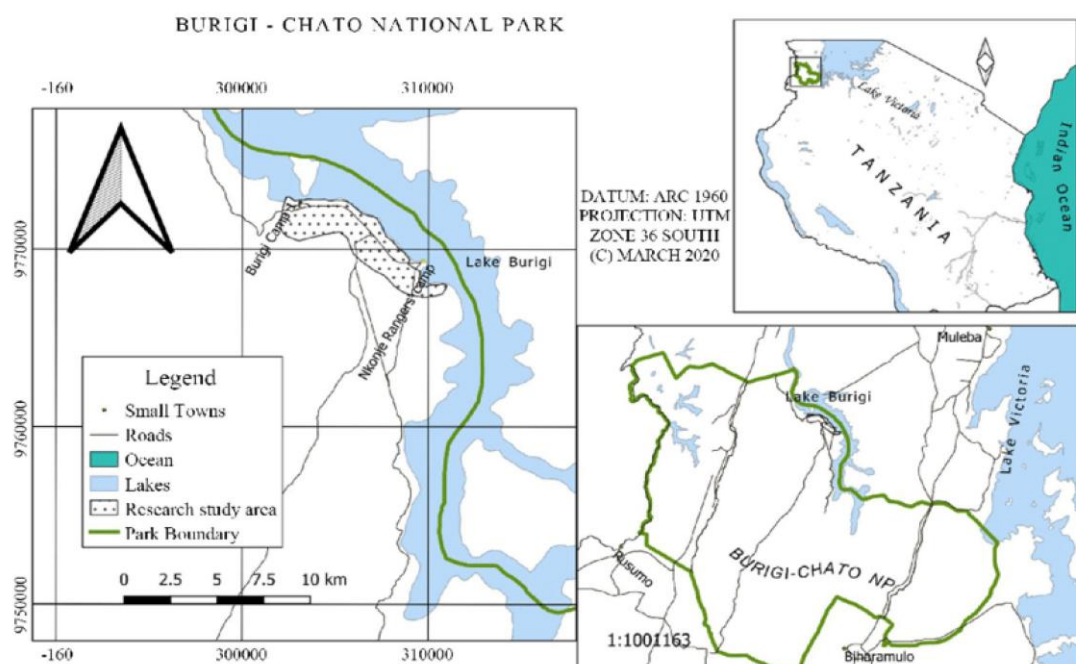
Document received from TANAPA

Burigi-Chato National Park was official approved by the Parliament of the United Republic of Tanzania on 9th February 2019. This new park was formed from three Game Reserves that were upgraded into a National Park status. The Game Reserves were Biharamulo, Burigi and Kimisi.

Biharamulo Burigi and Kimisi Game Reserves were gazetted in 1963, 1972 and 2003 respectively. These were among well-established Game Reserves of Tanzania. Extending from the western shores of Lake Victoria to the high ridges of the Central Rift Valley and interspersed with additional lakes and papyrus swamps. These reserves contain some splendid scenery and a wide diversity of habitats. On rich fertile soils and within a high rainfall zone these reserves are renowned for their diversity and tremendous wildlife populations. Among Biharamulo, Burigi and Kimisi Game Reserves the largest GR was Burigi with an area of 2,941 km² followed by Kimisi 1,030 km² and the smallest in this cluster was Biharamulo with an area of approximately 736 km² thus making the current park's total area of 4,707 km².

The Burigi-Chato National sits in northwestern Tanzania between the Kagera swamps in Rwanda, and Bunkwe Bay on Lake Victoria, it is the nation's fourth largest national park after Serengeti, Ruaha and Nyerere. The landscape is heterogenous, encompassing rivers, freshwater lakes, swamps, undulating hills, rocky escarpments, deep-set valleys lined with forest, open plains, floodplains and hundreds of square kilometres of medium and tall grass wooded savanna.

Figure 1
Burigi-Chato National Park and Lake Burigi and their location in Tanzania

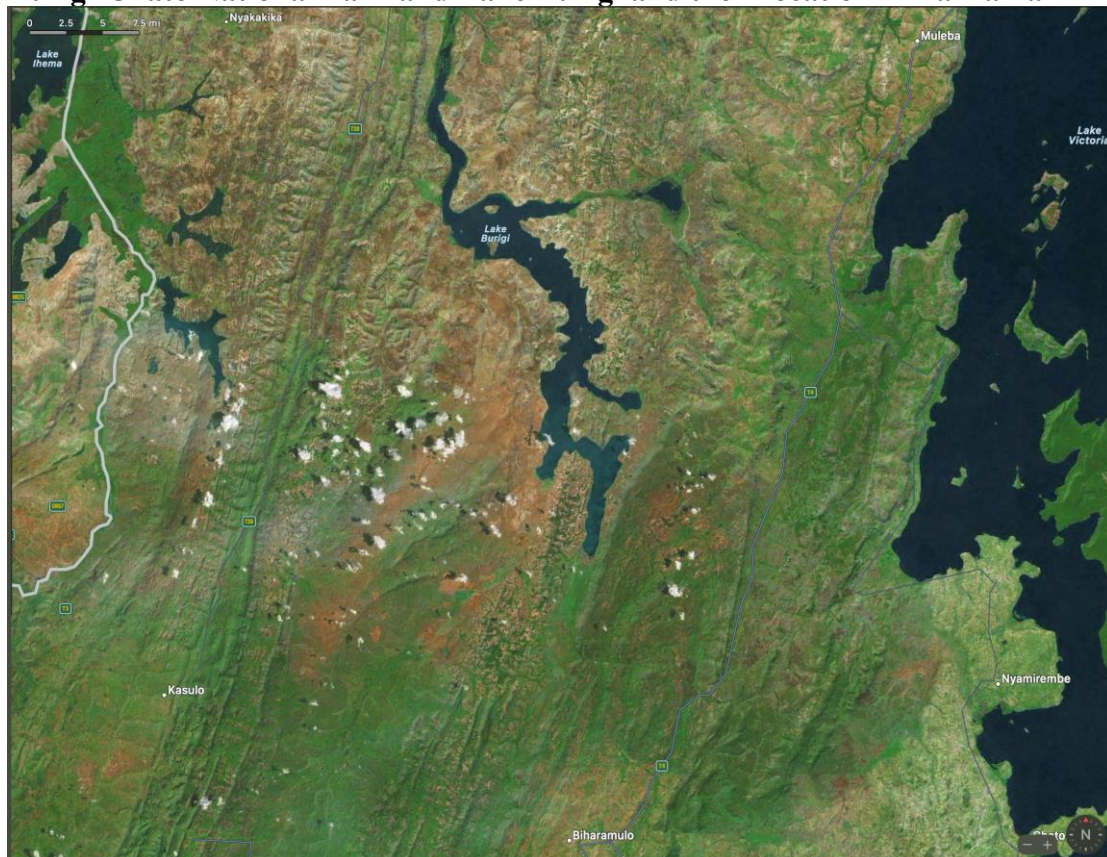


More specifically, the park is characterized by a series of north–south ridges, separated by drainage lines and rivers flowing north. In one of these drainage lines is Lake Burigi, some 30 km long and 4 km wide. To the east the land slopes towards Lake Victoria where large stands of *Acacia xanthophloea* dominate on the poorer soils. On the higher ground the woodland is largely *Brachystegia speciformis* (rather stunted at its northern limits) and *B. boehmii* in the east, with *Protea-Combretum* on the drier ridges in the west and extensive areas of *Combretum* and *Terminalia* (Miombo). On the slopes there are considerable areas of open grassland and, in the steeper valleys and gullies, remnants of Guinea-Congo Forest. Relict sclerophyll forest on some hillslopes suggests much more extensive forest cover historically.

The area is an Important Bird Area (IBA) and by default until re-analysis a Key Biodiversity Area (KBA). Only approximately 200 of the possible 500 species of bird have thus far been recorded, with notable species including shoebill stork (*Balaeniceps rex*), papyrus gonolek (*Laniarius mufumbiri*), red-faced barbet (*Lybius rubrifacies*), corncrake (*Crex crex*), great snipe (*Gallinago media*), miombo rock thrush (*Monticola angolensis*) and Arnot's chat (*Myrmecocichla arnotti*).

Figure 2

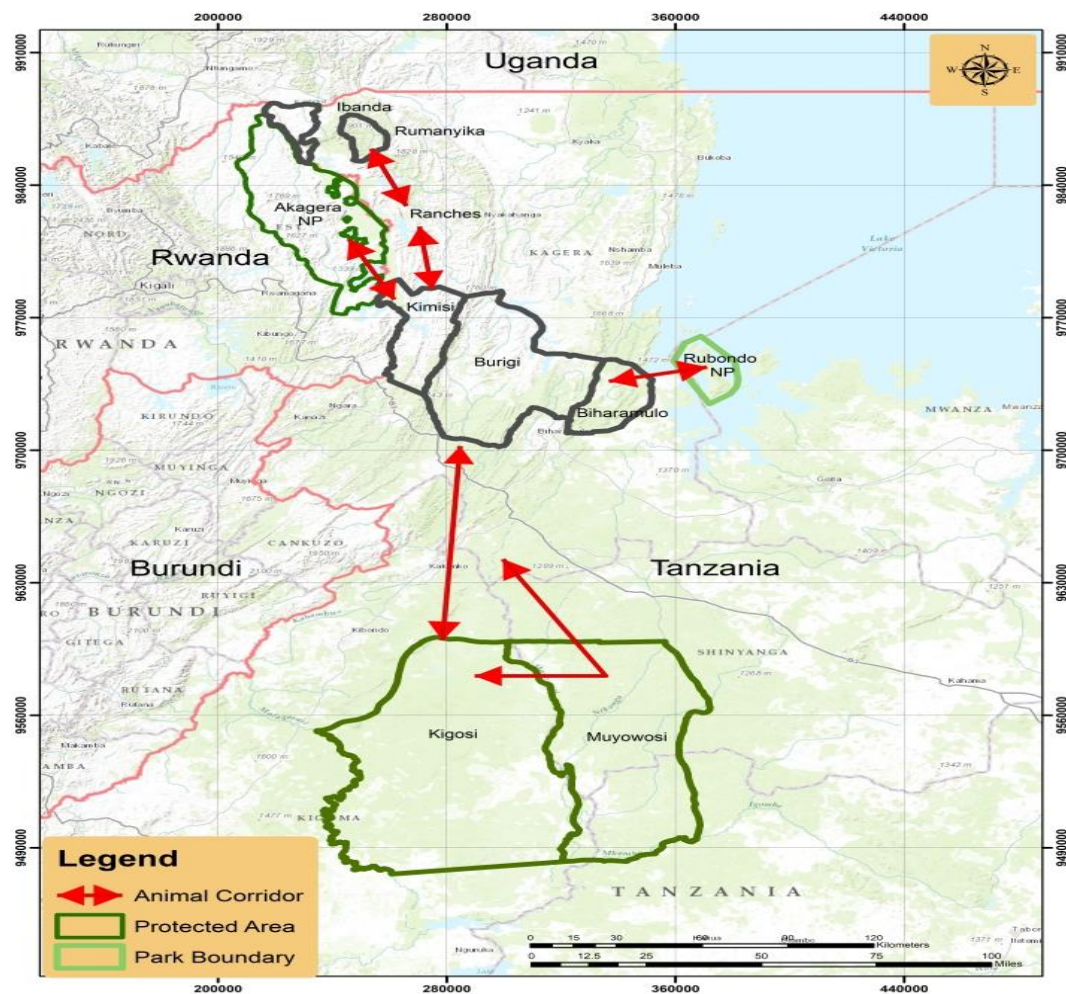
Burigi-Chato National Park and Lake Burigi and their location in Tanzania



Regarding Wildlife, with the exception of the larger mammals such as elephant, buffalo, eland, lion, leopard, zebra, giraffe, it is not well known faunistically in the savannah. It is

regarded as having been heavily hunted (legally and illegally) over the years, leading to low numbers of almost all game species. **In this regard**, there is a need to support and maintain diverse and abundant wildlife population within Burigi-Chato National Park, to conserve and grow the population of threatened species, particularly elephants, topi, buffalo and impala and black rhino. This will be done through scientific establishment of the migratory corridors of wildlife and in particular by elephants. The red arrows in **Figure 3** show potential BURIGI-CHATO corridors to study.

Figure 3
Burigi Chato National Park Potential wildlife corridor



Document received from the expert Neduvoto Mollel

Sn.	Scientific name	Family	Habit/Form	Herbarium Specimen	Distribution (FTEA)
1	<i>Albertisia exelliana</i> (Syn. <i>Epinetrum exelliatum</i>)	Menispermaceae	Climber	Present. T1: Biharamulo District-Nyakanazi	Uganda (U4)
2	<i>Blotiella trichosora</i>	Dennstaedtiaceae	Fern	Not Present	T1: Bukoba District, around Kahororo Secondary school
3	<i>Emilia cryptantha</i>	Asteraceae	Herb	Not Present	T1: Bukoba District-Kitwe
4	<i>Oxyanthus ugandensis</i>	Rubiaceae	Shrub 1m tall	Not Present	Only found in Uganda
5	<i>Thunbergia laborans</i>	Acanthaceae	Perennial herb with white hairs	Present. T1: Biharamulo District	T1: Mwanza, Geita, Butiama, and Musoma
6	<i>Tinnea physalis</i>	Lamiaceae	Shrub 1-3m tall	Present. T1: Ukiriguru-Mwanza	T1: Shinyanga, T2: Mbulu District
7	<i>Vernonia tinctoriosa</i>	Asteraceae	Perennial herb with many stems 15cm tall	Not Present	T1: Bukoba

Document received from the expert Fandey Machimba

Family	Species	Distribution in Tanzania	IUCN Status
Menispermaceae	<i>Albertisia exelliana</i>	Minziro NFR, an unprotected locality in Biharamulo Dist., Kichi Hills in Rufiji Dist.	Not Evaluated
Dennstaedtiaceae	<i>Blotiella trichosora</i>	Minziro NFR, unprotected localities near Bukoba town	Not Evaluated
Asteraceae	<i>Emilia cryptantha</i>	Unprotected localities near Kitwe and Bugandika in Bukoba Rural Dist.	Not Evaluated
Rubiaceae	<i>Oxyanthus ugandensis</i>	Not in Tanzania; endemic to Uganda	Not Evaluated
Asteraceae	<i>Vernonia tinctoriosa</i>	Bukoba town	Not Evaluated
Acanthaceae	<i>Thunbergia laborans</i>	Unprotected localities in Biharamulo, Musoma Rural, and Sengerema Dists.	Not Evaluated
Lamiaceae	<i>Tinnea physalis</i>	Unprotected locality N of Babati town, unprotected locality in Magu Dist., in and near Mantini Hills in Shinyanga Rural Dist.	Not Evaluated



Annex 13.2 – Photographic Record, Consultation with TANAPA

TANAPA/BENE CONSULT MEETING
ON 14 NOVEMBER 2024, 10:00 AM AT TANAPA
ATTENDANCE REGISTER

1	Ade Moore	Mwanga	TANAPA-WS
2	PCO	...	TANAPA-WS
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97	PCO	...	TANAPA-WS
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Photo 01: Attendance list of the consultation held with TANAPA and TFS in November, 2024.

Photo 02: Participants of the meeting: TANAPA, TFS and Bene Consult



Photo 03: Participants of the meeting: TANAPA, TFS and Bene Consult

Photo 04: Participants of the meeting: TANAPA, TFS and Bene Consult



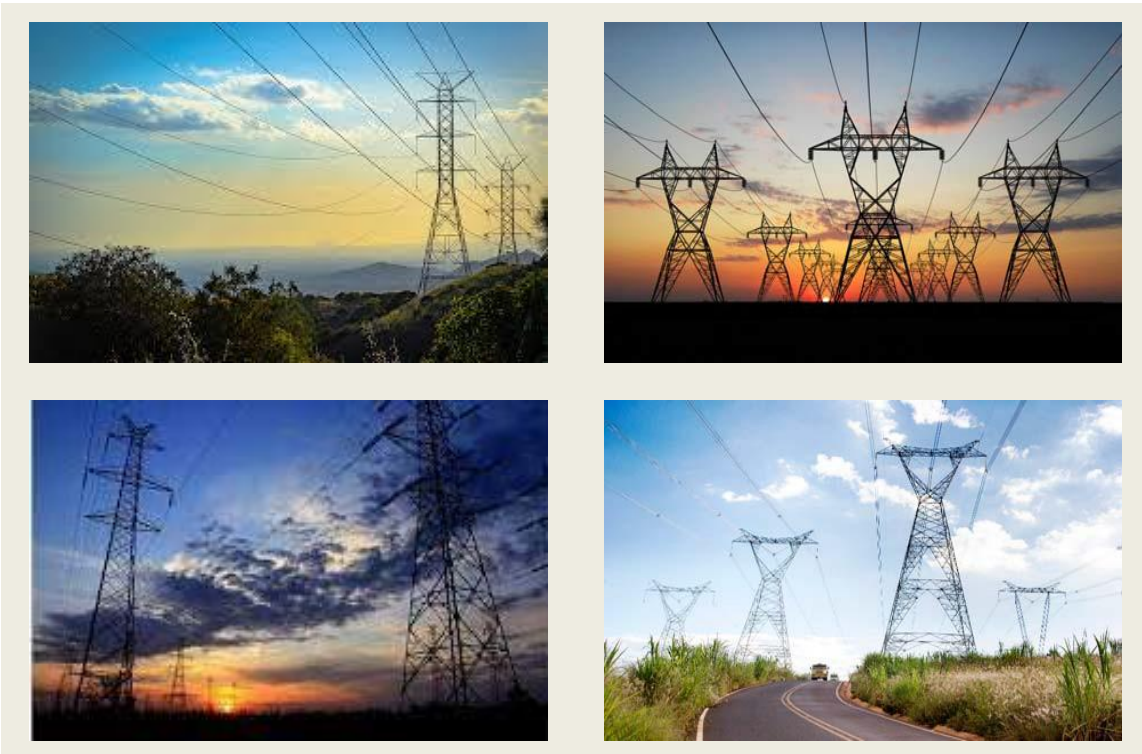
Photo 05: Participants of the meeting: TANAPA, TFS and Bene Consult

Photo 06: Participants of the meeting: TANAPA, TFS and Bene Consult



Annex 14 – P.12. Stakeholder Engagement Plan (SEP)

PROPOSED 400kV UGANDA-TANZANIA INTERCONNECTOR PROJECT (UTIP) FROM IBADAKULI SUBSTATION IN SHINYANGA REGION VIA GEITA REGION, NYAKANAZI AND KYAKA SUBSTATIONS IN KAGERA REGION TO MASAKA WEST IN UGANDA (548.91km)



P.12 - STAKEHOLDER ENGAGEMENT PLAN (SEP)

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The successful completion of the Stakeholder Engagement Plan for the UTIP project was made possible by the dedicated participation, commitment, and hard work of a multidisciplinary team of specialists in ESIA studies from various countries. Over the course of more than a year, international consultants from JGP Consultoria e Participações collaborated closely with experts from BENE Consult Limited (T) in Dar es Salaam. TANESCO's continued support and involvement in all field activities was crucial to the success of this endeavour.

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A special thanks to the Ward Executive Officers and Village Executive Officers, as well as to the local leaders and all the villagers where the T-line will pass through, who organized and participated in the public meetings where the project was presented, and for the information and opinions provided. The support, availability and participation of the Regional and District administrative secretaries and local government authorities was crucial for the implementation of the consultation.

Last but not least, we would like to express our sincere gratitude to the Vice President's Office, particularly the National Environment Management Council (NEMC), for their technical inputs, cooperation and guidance during the whole period of undertaking this EIA

EXECUTIVE SUMMARY

- UTIP project will develop a strategy to engage with different stakeholders, including institutions, authorities, members of the communities and People Affected by the Project. To do so, it will implement the Stakeholder Engagement Plan throughout the span of the project.
- The SEP has been elaborated following Tanzanian law, the ESS 10 of the World Bank and the recommendations received through the consultation process.
- The main goal of the SEP is to define a program for stakeholder engagement, including public information disclosure and consultation throughout the entire project cycle. This will facilitate the implementation of the project itself, will be one of the bases for the impacts' management and will help to ensure that the project is beneficial to the population.
- To achieve these goals, the SEP will map and analyse the stakeholders interested and affected by the Project; conduct consultations to ensure participation in the environmental and social issues that require stakeholders' involvement; inform the population and other stakeholders about the commitments and responsibilities of TANESCO and Contractors with respect to E&S issues; systematically identify the perceptions of affected parties or stakeholders regarding the Project and its impacts and risks; implement a mechanism to receive and respond the questions, concerns and grievances of affected parties.
- The SEP will pay special attention to vulnerable populations, such as single mothers, people with disabilities, the elderly, children, victims of violence, etc. It will make an especial effort to listen to them and incorporate their opinions in the decision-making process. To achieve this, the team will analyse and identify who are in a position of vulnerability; will find ways to reach them and bring them timely and pertinent information and will help them to be heard.
- A Grievance Redress Mechanism (GRM) will be implemented. It will aim to listen to the population, to identify any problems that may be occurring in the implementation of the project and the EIA and to identify any potential conflict on an early stage. The GRM will help to identify the corrective measures that shall be implemented.
- The GRM will be implemented in a participatory manner, through the creation of Grievance Redress Committees, where members of the population will be elected to participate. The committee will receive grievances, discuss them and will coordinate with TANESCO and the contractor to solve the problems. It will help to channel disagreements within the community too.
- The SEP implementation will be accompanied by a monitoring and evaluation process that will help to demonstrate the achievements and identify any adjustments that may be necessary to reach the goals.

DEFINITIONS

Grievance Redress Mechanism (GRM): A Grievance Redress Mechanism is an accessible and inclusive system, process or procedure that receives and acts upon complaints and suggestions in a timely fashion and facilitates the resolution of concerns and grievances arising in connection with the project.

Personal with Disability: any person with any physical, sensory, mental, psychological or other impairment, condition or illness that has, or is perceived by significant sectors of the community to have a substantial or long-term effect on an individual's ability to carry out ordinary day-to-day activities.

PAP: Persons Affected by the Project. Refers to all persons who are affected by the different impacts that the project may bring, including displacement, environmentally induced social impacts, those related to health and safety, among others.

Stakeholder. Any individual, organization or group that has a participation or an interest, directly or indirectly from a project, a change in a policy or other activity.

Stakeholder engagement. The continuing and iterative process by which a two-way dialogue is facilitated. It takes into account the different access and communication needs of various groups and individuals, specially the most disadvantaged.

Vulnerable or disadvantaged populations. Those who may be more adversely affected by the project impacts and/or more limited than others in their ability to take advantage of a project's benefits. They are also more likely to be excluded from or unable to participate fully in the mainstream consultation process. Due to this, require specific measures and assistance.

LIST OF ACRONYMS AND ABBREVIATIONS

AIDS	Acquired immunodeficiency syndrome
dB	decibel
DAI	Direct Area of Influence
DC	District Council
DSWO	District Social Welfare Officer
ECOP	Early Career Ocean Professional
E&S	Environmental and Social IAI – Indirect Area of Influence
ESIA	Environmental and Social Impact Assessment
ESS	Environmental and Social Standard
EWURA	Energy and Water Utilities Regulatory Authority
GBV	Gender Based Violence
GRC	Grievance Redress Committee
GOT	Government of Tanzania
GRM	Grievance Redress Mechanism
HIV	Human Immunodeficiency Virus
ICNIRP	International Commission on Non-Ionizing Radiation Protection
kV	kilovolt
LMP	Labour Management Plan
MAPEC	Missenyi AIDS & Poverty Eradication Crusade
NELICO	New Light Children Organization
NEMC	National Environment Management Council
NGO	Non-Governmental Organization
OSHA	Occupational Safety and Health Administration
PAP	Population Affected by the Project
PAS	Public Address System
RAP	Resettlement Action Plan
RAS	Regional Administrative Secretary
RMO	Resident Mining Officer
ROW	Right of way
RPF	Resettlement Policy Framework
SEP	Stakeholder Engagement Plan
SHDEPHA+	Service, Health, and Development for People living positively with HIV/AIDS
STD	Sexually Transmitted Disease
SWO	Social Welfare Officer
TAA	Tanzania Airport Authority
TANESCO	Tanzania Electric Supply Company Limited
TANROADS	Tanzania National Roads Agency
TARURA	Tanzania Rural Roads Agency
TASAF	Tanzania Social Action Fund
TFS	Tanzania Forest Service
TL	Transmission Line
TOSO	Tumaini Orphans Support Organization
UTIP	Uganda-Tanzania Interconnector Project
VAC	Violence Against Children



VEO	Village Executive Office
WB	World Bank
WEO	Ward Executive Office

1.0 Introduction

This document describes the Stakeholder Engagement Plan that will be implemented as part of the UTIP Project. It also explains the activities that have been previously carried out for its design.

1.1 Project description

The Governments of the East Africa Community Member States agreed to interconnect their power systems by implementing the 400 kV Uganda-Tanzania Interconnector Project (UTIP), which consists of the construction of a high voltage transmission line system. To implement it, UTIP will require the establishment of an easement in a strip 52 meters width and the acquisition of land in the places where the towers will be emplaced. Although UTIP is structured as a regional project spanning both Uganda and Tanzania, this Resettlement Policy Framework (RPF) applies exclusively to the portion of the project located within Tanzanian territory. All land acquisition and resettlement considerations presented in this document refer solely to the physical investments planned in Tanzania.

The main objectives of the 400 kV Uganda-Tanzania Interconnector Project (UTIP) are to: (i) enhance electricity trade; (ii) improve security and reliability of electricity supply; (iii) foster economic development and regional integration. To reach these, the project will establish a 400 kV Transmission Line of 548.8 kilometres of extension. It will cross three regions (Shinyanga, Geita and Kagera) and, within them, twelve districts and forty-seven wards.

As per Feasibility Study Update (CESI, 2023), the Project will comprise:

- A new 548.91 km long transmission line premised on 400 kV. The line will connect Ibadakuli and Nyakanazi, Kyaka and Mutukula on the Uganda and Tanzania border.
- Clearing of the right-of-way (52m for 400kV TL as per TANESCO standards).
- Expansion works of the existing substations (SS), the SS Kyaka (8.65 ha), SS Nyakanazi (13.7 ha), and SS Ibadakuli (12.2 ha), providing space for the TL and transformer bays and for future expansion.
- Construction of access roads, that in some cases will need to be implemented along alignments that extrapolate the limits of the right-of-way.
- Construction of workers camps and storage facilities and other support infrastructure, as necessary.
- Other construction support infrastructure (conductor launching sites, surplus soil deposits, borrow areas for fill material, quarries, other).

The easement strip will be 52 meters wide, totalling around 2,855 ha along the entire length of the three T-lines segments. Considering an average distance between towers of around 400 meters and a footprint per tower of around 100 square meters, this gives an approximate area of 14 ha to be permanently occupied by the base of the towers.

UTIP transmission line is divided into three main segments:

- Mutukula to Kyaka (31 km): This segment follows Option B, covering a route close to the Uganda border and requiring approximately 161.2 hectares of land for the right-of-way (ROW).
- Kyaka to Nyakanazi (235.8 km): This segment adopts Option A, which is 235.8 km long, requiring approximately 1,226.2 hectares for ROW. It traverses primarily rural areas in northwest Tanzania, passing through sparsely populated regions and forested zones.
- Nyakanazi to Ibadakuli (282 km): The longest segment, this route follows Option 1, stretching 282 km and requiring 1,466.4 hectares of ROW.

Right-of-Way (ROW) Requirements

The ROW, according to TANESCO standards, must be 52 meters wide throughout, with a total ROW footprint of 2,853.8 hectares. This corridor will be cleared of vegetation and maintained to ensure safe operation of the line.

Tower Distribution and Footprint

Approximately 1,385 self-supporting metal towers will be erected along the transmission line route, with an average distance of 400 meters between towers. The tower types vary based on load-bearing needs and location:

- Suspension towers (50.07 m high), light angle towers (49.69 m), heavy angle towers (49.17 m), and dead-end towers are designed for stability in varied terrains.
- Each tower's base occupies roughly 100 square meters, totalling about 13.62 hectares of permanent land occupation for tower bases.
- Foundations: Tower foundations vary according to soil type, employing methods such as rock anchors in hard rock areas and raft or piled foundations in areas with soft, water-logged soil. The excavation depth and type depend on the load-bearing capacity required, with foundations engineered for durability and stability.

Environmental Considerations

- Audible Noise and Radio Frequency Interference: The project's design meets international noise standards, with anticipated levels around 50 dB in heavy rain and lower in rural areas.
- Electromagnetic Fields: The electric field levels are within ICNIRP limits, ensuring that public exposure does not exceed 5 kV/m at the ROW edge. Magnetic field exposure is controlled to meet a maximum of 100 μ T at the ROW boundary, following WHO and ITU recommendations.
- Vegetation Management: Selective clearing within the ROW and vegetation management will minimize ecological disturbance and maintain operational safety.

Construction Logistics

- **Camp Sites:** The project includes nine camp sites distributed along the transmission line route, providing facilities like administrative offices, worker accommodation, storage yards, and workshops. Major camps are located near substations in Kyaka, Nyakanazi, and Ibadakuli, and others are set up approximately every 70-80 km along the route.
- **Access Roads:** Construction will require both new and existing access roads, specifically built or enhanced to facilitate transport of heavy equipment and materials. Roads will be designed with a maximum width of 4 meters.

Budget and Timeline

The project's total investment is estimated at USD 372.3 million, allocated across the three transmission line segments and substation expansions. Construction is expected to last 36 months, with an estimated peak workforce of 1,350 direct and 650 indirect employees, including local hires for material supply, transport, food services, and security.

1.2 Project Location

The project crosses the regions of Shinyanga, Geita and Kagera.

The area of influence identified for the preferred alignment so far is presented in the following **Table 1.2.a**.

Table 1.2.a
Indirect and Direct Area of Influence

Region	District	Ward	Villages
<u>Shinyanga</u>	Shinyanga Municipal Council (former Shinyanga Urban)	Mwamalili	Seseko
		Ibadakuli	Uzogore
			Ibadakuli
		Old Shinyanga	Ihapa
			Old Shinyanga
	Shinyanga District Council (former Shinyanga Rural)	Solwa	Mwasekagi
			Mwiseme
			Solwa
			Mwabuki
		Mwakitoloyo	Mwasenge
			Nyang'ombe
		Salawe	Nzoza
		Iselemagazi	Mwamakaranga
			Ichongo
			Iselemagazi
		Nyamalogo	Mwang'osha
		Pandagichiza	Pandagichiza
			Shilabela
		Mwenge	Mwongozo
			Zunzuli
			Ipango

Table 1.2.a
Indirect and Direct Area of Influence

Region	District	Ward	Villages
Geita	Shinyanga DC (former Shinyanga Rural)	Lyabusalu	Mwajiji
			Lyabusalu
			Bukamba
			Mwabagehu
	Msalala	Bugarama	Igwamanoni
			Ilogi
			Buyange
		Lunguya (Runguya)	Kalole
	Nyung'u	Bulyan'hulu	Busulwangili
		Bukoli	Ntono
Kagera	Geita DC	Butobela	Shahende
		Kafita	Kayenze
			Bukulu
			Isonda
	Nyung'u	Nundu	Igeka
		Bukwimba	Kasubuya
			Bukwimba
	Mbogwe DC	Ikobe	Kagongo
			Bugalagala
			Busabaga
		Lulembela	Kashelo
		Ilolangulu	Ilolangulu
		Mbogwe	Nambubi
			Bwendaneko
			Mwanza
		Ngemo	Nyitundu
			Bwendamwizo
	Bukombe DC	Busonzo	Bulongo
			Kadoke
			Nampalahala
			Nalusunguti
			Busonzo
			Kabagole
		Butinzya	Nakayenze
	Chato DC	Ipamasa	Butinzya
			Ibambilo
			Bulega
			Bulega
Kagera	Karagwe DC	Kihanga	Mnekezi
			Mwabasabi
			Songambele
			Katanda
		Kayanga	Kihanga
			Kishoju
		Bugene	Mulamba
			Miti
			Omurushaka
			Nyakahanga
			Chagati
			Bujuruga
		Ihembe	Kishao
			Ihembe I

Table 1.2.a
Indirect and Direct Area of Influence

Region	District	Ward	Villages
		Nyaishozi	Rukale
			Nyakayanja
		Rugu	Kasheshe
		Nyakasimbi	Nyakasimbi
			Bujara
			Kahanga
			Muungano
		Nyakahanga	Rwandaro
			Bisheshe
	Biharamulo DC	Nyakahura	Nyabugombe
			Ngararambe
			Busiri
			Mabare
			Rugese
		Lusahunga	Nyakanazi
			Kabale
			Lusahunga
			Kikoma
			Nyakasenga
		Kaniha	Mavota
			Mkunkwa
		Nyantakara	Mgera
			Nyantakara/Iyengamulilo
			Nyakayenze
	Ngara	Kasulo	Rwakalempera
	Missenyi	Mutukula	Byeju
			Mutukula
		Kassambya	Bunazi
			Nyabihanga
			Omudongo
		Nsunga	Byamutemba
			Ngando
		Kyaka	Kyaka

Source: JGP/BENE based on NBS 2022. Regions and Districts Official Public Shapefiles (2019) and Wards Official Public Shapefiles (2022). The United Republic of Tanzania (URT); Ministry of Finance and Planning; Tanzania National Bureau of Statistics and President's Office-Finance Planning; Office of the Chief Government Statistician, Zanzibar. The 2022 Population and Housing Census: Administrative Units Population Distribution Report. Tanzania, December 2022.

The area of influence is formed by three regions (Shinyanga, Geita and Kagera), twelve districts, forty-seven wards and 105 villages. The direct area of influence is formed by the villages that will be intercepted by the alignment, while the indirect area of influence is formed by the wards, districts and regions to which the villages belong.

1.3 Purpose of the SEP

This Stakeholder Engagement Plan (SEP) identifies stakeholders and describes how TANESCO and the contractor will engage with them throughout the entire project's cycle, to involve their participation. The SEP will ensure that stakeholders receive the information they require to better engage with the project; are able to participate in

dialogues and be consulted when pertinent and have access to channels where they can express their concerns, grievances, suggestions, among others, and are heard. In this way, the project will be responsive and able to incorporate changes when necessary. The SEP specifically emphasizes methods to engage groups considered most vulnerable and that are at risk of being left out of project benefits.

The Plan describes how the project will provide information, implement consultations and channel grievances. In this way the Project will be able to consider the stakeholders' interests in a balanced manner and establish a continuous flow of information exchange. The Plan should ensure that any disputes related to project impacts are properly managed.

1.4. Objectives of the SEP

The main goal of the SEP is to define a program for stakeholder engagement, including public information disclosure and consultation throughout the entire project cycle.

Specific objectives:

- Map and analyse the stakeholders interested and affected by the Project, periodically updating this map.
- Conduct consultations to ensure participation in the environmental and social issues that require stakeholders' involvement.
- Inform the population and other stakeholders in the area of IAI of the Project about the commitments and responsibilities of TANESCO and Contractors with respect to E&S issues and ensure that potentially affected people access the information they need regarding potential impacts and actions taken. Systematically identify the perceptions of affected parties or stakeholders regarding the Project and its impacts and risks, as well as prevention, mitigation, monitoring and compensation measures and control plans, so that, where possible, they can be adapted and revised to adequately respond to local demands and needs.
- Establish a formal channel for receiving stakeholder consultations and complaints, as well as develop specific review procedures and a formal response mechanism.

Monitor, evaluate and report on communication and stakeholder engagement activities.

1.5 Stakeholder Engagement Principles

The SEP will follow these principles in general:

- *Transparency*: Promote a culture where information is shared on a transparent manner, as a basis for a relationship of trust.
- *Inclusiveness*: The SEP will promote the participation of different stakeholders, for which they will be identified. This identification will be progressive during the project, and will consider that groups are not homogeneous and that they may have imbalances of power within them, due to which participation spaces and activities will intend to be as ample as possible.
- *Respect*: The SEP, and the project in general terms, will be respectful of the local

cultures, taking into consideration how they communicate, how they are organized, the times they require to process their decisions, etc. At the same time, this should not imply not addressing issues such as the low participation of women in the decision-making processes.

- *Meaningful:* Information and communication in general will be based on an understanding of what the stakeholders need to know and to understand in order to be able to participate and to interact with the project. The project will identify what information is relevant for the population as it affects their daily lives or their access to opportunities, benefits and resources, among other issues.
- *Timely:* Stakeholders will be engaged with the project throughout the different phases and since an early stage. PAPs should always receive information on a timely manner, with enough time to process decisions and to get prepared.

The principles that must be followed when implementing this GRM to meet ESS1 are:

- Accessibility and inclusion - it should be easily accessible to everyone in the community, including vulnerable groups (women, indigenous peoples, people with disabilities, etc.), free of charge and without language or cultural barriers.
- Transparency and clarity - the community must be informed about how the mechanism works, how to submit complaints and what the deadlines are for a response.
- Confidentiality and protection against retaliation - people should be able to file complaints anonymously if they wish, and there should be guarantees against reprisals.
- Independence and impartiality - the process must be conducted in a fair and neutral manner, without favouring specific stakeholders.
- Efficiency and timely resolution - complaints must be processed quickly and efficiently, avoiding excessive bureaucracy and ensuring that problems are resolved in a timely manner.
- Based on dialogue and mediation - whenever possible, complaints should be resolved through dialogue and mediation, promoting acceptable solutions for all parties involved.
- Monitoring and continuous improvement - the mechanism should be reviewed regularly to identify shortcomings and improve its effectiveness based on feedback from communities.
- Alignment with legislation and human rights - it must respect national laws, human rights and international principles of community participation.

2.0 Legal requirements for stakeholder engagement

2.1 Tanzanian requirements for stakeholder engagement for projects

The requirements for stakeholder engagement and public consultation are guided by national laws and policies. According to the Tanzanian Environmental Management Act (EMA, No. 20 of 2004) and the Environmental Impact Assessment (EIA) and Audit Regulations (No. 349 of 2005) and its amendments, the proposed Project falls under type “A” requiring a full EIA. The First Schedule of the EMA under category 7 (a) states that energy projects including the transmission of electricity require a mandatory EIA.

The EIA and Audit Regulations is the major legislation in Tanzania defining the process of stakeholder engagement when undertaking projects that requires EIA. Part 1 of the Regulation, Article 17 (Public Participation) requires the developer to seek views of any person who is or is likely to be affected by the Project. It further explains that in seeking the views of the public, the following shall be done:

- Publicize the Project and its anticipated effects and benefits by.
- Posting posters in strategic public places near the site of the proposed project informing the affected parties and communities of the proposed project.
- Publishing a notice on the proposed project for two successive weeks in a newspaper that has a nationwide circulation.
- Making an announcement of the notice in both Kiswahili and English languages in a media with a nationwide coverage for at least once a week for two consecutive weeks.
- Hold, where appropriate, public meetings with the affected parties and communities to explain the project and its effects, and to receive their oral or written comments.
- Ensure that appropriate notices are sent out at least one week prior to the meetings and that the venue and times of the meetings are convenient for the affected communities and the other parties concerned.
- Ensure that a suitably qualified coordinator is appointed to receive and record both oral and written comments and any translations of it as received during the public meetings.

Nowadays, newer and faster means of communication are employed (e.g. mobile phones) to inform the public. Generally, meetings are organized locally through the village leadership unless a project covers the whole country, and the meetings are at a national level.

According to the EMA, the review of the Environmental Impact Statement needs to also be conducted through public participation. In this context, all relevant reports, documents and written submissions need to be made publicly available during and after the period of review until the public participation is finalized.

2.2 International Requirements

World Bank Environmental and Social Standards (ESS)

The Environmental and Social Standards (ESS) set out the requirements for Borrowers relating to the identification and assessment of environmental and social risks and impacts associated with projects supported by the Bank through Investment Project Financing. The Bank believes that the application of these standards, by focusing on the identification and management of environmental and social risks, will support Borrowers in their goal to reduce poverty and sustainably increase prosperity for the benefit of the environment and their citizens.

Stakeholder engagement requirements are outlined in EES 10: Stakeholder Engagement and Information Disclosure. The key requirements for stakeholder engagement and disclosure through the life of the project are summarized below.

- To establish a systematic approach to stakeholder engagement that will help Borrowers identify stakeholders and build and maintain a constructive relationship with them, in particular project-affected parties.
- To assess the level of stakeholder interest and support for the project and to enable stakeholders' views to be considered in project design and environmental and social performance.
- To promote and provide means for effective and inclusive engagement with project-affected parties throughout the project life cycle on issues that could potentially affect them.
- To ensure that appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format.
- To provide project-affected parties with accessible and inclusive means to raise issues and grievances and allow Borrowers to respond to and manage such grievances.

EBRD Guidance Note on Grievance Management

The EBRD Guidance Note on Grievance Management is considered a benchmark for good practice regarding defining grievance mechanisms and managing grievances. The Guidance Note advocates that managing grievances is essential for a robust stakeholder engagement strategy and, implicitly, for successful project implementation. The Guidance Note outlines how the grievances process should be set up, with human resources allocated to it, as well as arrangements made by the project developer around maintaining confidentiality and keeping timelines defined for resolving grievances.

The timeline indicated as best practice in the Guidance Note provides for 7 days for acknowledging grievances and overall, 30 days for resolving them. The Guidance Note also provides best practice templates for the grievance forms and database, outlines the type of information to be captured in these tools, and how grievances are generally to be managed.

3.0 Impacts

According to the phases of the project, the main impacts that can be faced by the population are:

Previous to construction

- Physical displacement: permanent loss of homes, or partial loss. Potential loss of social networks and access to services (if the displacement is to another village).
- Economic displacement: permanent or temporary loss of land and livelihoods; of sources of income (rentals) or of jobs.
- Risks of increase in gender-based violence due to access to discussions around family access to compensations.
- Loss of communal assets, including affectation to public institutions.
- Loss of natural resources, such as medicinal herbs, due to clearance of vegetation.
- Risks of conflict within the communities due to land acquisition.

During construction

- Potential impacts on health due to dust emissions and noise.
- Impacts on quality of life due to dust emissions and noise.
- Risks of accidents due to increase of traffic.
- Risk of damages to infrastructures.
- Risks of increase of insecurity due to influx of workers.
- Risk of unwanted pregnancies and sexual work among vulnerable women and of gender-based violence, sexual exploitation and abuse and sexual harassment in general.
- Risk of increase of child labour, and of increase of dropouts.
- Economic opportunities: creation of jobs and provision of services.
- Risk of transmission of communicable diseases.
- Occupational health and safety labour risks.
- Community expectations with respect to electrification.
- Risks to cultural heritage and gravesites.

Operation

- Risks of accidents.
- Impacts due to noise.

The main social impacts will happen during the land acquisition and establishment of the wayleave. During construction, they will be mainly related to how the population is affected by the environmental impacts. During operation the impacts will be minimal.

The SEP will take into consideration these impacts, and any other that may surge, to manage the engagement of the stakeholders.

4.0

Stakeholder identification and analysis

4.1

Methodology

The stakeholders mapping will be a continuous process. It will consist on identifying who are those who have any interest on the project and on analysing their level of knowledge and understanding of the project, their position regarding the project and the reasons for it.

Identification of stakeholders

Project stakeholders will be mapped, including persons or groups who are directly or indirectly impacted by the Project; persons who may influence the outcomes of the Project or the operations of TANESCO; and persons who have an interest in or who may be affected in some way by the Project. Stakeholder groups to be considered include:

- Authorities of the villages, wards and districts of the IAI.
- Local organisations and organisations with influence in the Project area.
- E&S NGOs active in the Project's IAI.
- Academics, including specialists in local fauna and flora, among others.
- Governmental institutions (National Environment Management Council - NEMC, Energy and Water Utilities Regulatory Authority – EWURA, others).
- Population of the villages in the DAI, especially those affected by the establishment of the wayleave easement and those closest to the work fronts and construction sites.
- Vulnerable stakeholders affected by the Project.
- Miners, mining companies and mining organizations.
- E&S entities in the public sector.
- Potential local suppliers.
- Media.
- Entities representing workers.
- Other stakeholders.

Identification and description information (name, title or position in relation to the Project, institution, contact address) should be organised for all stakeholders, allowing direct contact with them.

Building on the stakeholder mapping already carried out as part of the ESIA for the social baseline, the TANESCO Management Team will expand the contacts and carry out a complete and detailed stakeholder inventory. This inventory will guide the communication and consultation activities.

The stakeholder inventory should be updated quarterly during the construction phase.

Analysis of stakeholders

Stakeholders should be analysed to know their experiences with the project, opinions and expectations and determine the level of acceptance of the project and the risks associated. From this analysis, the team will be able to determine:

- If the stakeholders know and understand the project. Any gap of information, misinformation or distortion of information will be identified to be dealt with.
- What are the opinions and postures regarding the project. Any negative opinion will be identified and the causes for that will be analysed to determine to if it constitutes a risk and possible actions to be taken. Understanding the reasoning behind the posture will be essential.

The risks of conflict with the Project will be mapped and analysed, this analysis should be updated systematically. The following are some potential conflicts with stakeholders of this Project:

- Temporary interference with activities of the population near the Project (accesses closures, etc.).
- Social tensions during construction works (conflict between workers and community, others).
- Discomfort caused by construction activities (noise, dust, vibration, etc.);
- Impacts on culturally important sites for communities.
- Air and water pollution.
- Increased local traffic volume and risk of accidents.
- Overloading of local infrastructure and public services, especially health services.
- Increased crime.
- Increase in crimes of a sexual nature, sexual harassment, aggressive and abusive behaviour against women.
- Increase in sexually transmitted infections and diseases.
- Other direct social and environmental impacts caused by the construction and operation of the Project.
- Unmet expectations with respect to local job creation.
- Unmet expectations regarding electrification.
- Unfulfilled expectations with regard to the contracting of local suppliers.
- Unmet expectations with respect to compensation/indemnisation measures for lands, housing and other improvements affected by the Project for easement institution.

4.2

Identified stakeholders

A first identification of stakeholders has been done. As previously mentioned, this will be developed and updated throughout the lifespan of the project, and especially during the preparation and implementation of the Resettlement Action Plan (RAP) and at the commencement of the construction.

4.2.1

Affected parties

In general terms, affected parties are the members of the villages identified in **Table 1.2.a** where the components of the project will be installed (towers and easements). In principle, this also includes the location of roads and other auxiliary components; however, this must be defined once these are defined. These villages are in rural areas, where the main economic activities are agriculture, livestock keeping and mining. More specifically, the affected parties include:

- Farmers, who can be landowners, tenants, leaseholders or extra-legal land users.
- Miners, who can be small scale or artisanal, with or without licenses.
- Livestock keepers.
- Residents, who can be homeowners, leaseholders, tenants or extra-legal users.
- Large-scale industries.
- Public institutions, such as schools.
- Communities, as their assets may be impacted.
- Ritual sites, including churches

Businesses have not been identified and it is unlikely that they will be affected by the project.

The specific individuals/households who will be directly affected will be identified during the RAP preparation.

4.2.2

Other interested parties

The stakeholders also include those who, despite not being directly affected, hold an interest in the project. They are presented in **Table 4.2.2.a**.

Table 4.2.2.a

List of identified stakeholders and their relevance to the Project

Stakeholder Groups	Stakeholder	Relevance to project
Central government	President Office – RALG	Overall supervision
	Vice President Office – Division of Environment	Meeting the requirements of country's environmental policy during the implementation of the Project.
	Ministry of Energy	Client and beneficiary
	Ministry of Water (especially Lake Tanganyika and Lake Victoria Basin Water Board)	Water use issues related to implementation of the proposed project and management of water resources.
	Ministry of Land, Housing and Human Settlement	Land acquisition and land rights (titles); Resettlement issues
	Ministry of Minerals (especially Resident Mining Offices)	Land acquisition issues and mining licenses; resettlement issues.
	Ministry of Finance and Planning.	Coordination of financial and economic issues related to project implementation
	Ministry of Natural Resources and	Natural resource base (water, land, wildlife,

Table 4.2.2.a**List of identified stakeholders and their relevance to the Project**

Stakeholder Groups	Stakeholder	Relevance to project
	Tourism	forest) use, management and issues
	Tanzania Airport Authority (TAA)	Defines security measures for the airports.
Regional and local government: administrative and technical	Shinyanga Regional Secretariat, Geita Regional Secretariat, Kagera Regional Secretariat, Shinyanga Municipal Council, Msalala District Council, Nyang'wale District Council, Geita Municipal Council, Mbogwe District Council, Bukombe District Council, Chato District Council, Biharamulo District Council, Karagwe District Council and Misenyi District Council.	Beneficiaries from employment and direct and indirect economic opportunities.
Government agencies	Tanzania Forest Service (TFS) Tanzania Rural Roads Agency (TARURA) Tanzania Roads Agency (TANROADS) TANAPA (Tanzania National Parks)	Natural resource base (water, land, wildlife, forest) use, management and issues.
	Occupational Safety and Health Authority (Lake zone office) Firefighter and Rescue Management Regional Police Commander of Shinyanga, Geita and Kagera Regions	Responsible for worker safety during all stages of the project
Ward, Villages and Mtaa	Ward, Village Executive Officers and Communities from proposed project site.	Local government Leaders (Ward and Village leaders and communities from proposed project areas
Civil Society	National and regional NGO's Shinyanga Region (NELICO, KIWOHEDE, TOSO, Green Community Initiatives, SHDEPHER+ and Thubutu Africa Initiative) Geita Region (NELICO, BULAO, TOSO, Mbogwe Legal Aid, SHEDPHER+, KIWOHEDE) Kagera Region (MAPEC, SHEDPHER+, KKKT, TOSO, KIWOHEDE, Compassion International Tanzania (CITZ)).	Protection of rights of residents of local communities and environment during project implementation. Education and raising awareness

Elaboration: JGP/BENE. Sources: Fieldtrips (2023 and 2024).

4.2.3**Disadvantaged/vulnerable individuals or groups**

Within the Project, the vulnerable or disadvantaged groups may include but are not limited to the following:

- Female headed households including widowers, separated and single women.

- Women with no participation in the property of the land and buildings.
- Persons living with HIV/AIDS or other serious health issues.
- People living in poverty.
- Extra-legal land users.
- Children who are heads of families.
- Persons with disabilities.
- The elderly.

They may not find opportunities to access information as they may not be the direct representatives of the family (such as women), or they may not have the possibility to participate due to their multiple activities. Those who participate may feel intimidated to express their opinions.

To manage this, the actions to be taken include:

- Identify who, specifically, are in situation of vulnerability.
- Identify if their participation is necessary to preserve their own interests.
- Invite them directly to the meetings.
- Hold one-to-one interviews with them to better know and understand their interests.
- Organize meetings exclusively for their sole participation (focus group discussions).
- Verify that they are accessing all the information they need and that it is clear to them through direct meetings.

Annex 9 of the ESIA enlists the different NGOs that have been identified in the area of influence of the project and with whom interactions could be established to implement the works with vulnerable groups.

5.0 Stakeholder Engagement Program

5.1 Summary of stakeholder engagement done during project preparation

As reported in **Section 7.5.5** of the ESIA, a first round of consultations has already been held during one of the field visits carried out for the social baseline. These consultations/meetings were held by TANESCO, JGP and BENE Consult teams between October 2023 to November 2023 and were attended by 39 stakeholders. The results obtained are presented in **Table 1.0** in **Annex 1**.

The second phase was conducted between May 27th to July 13th, 2024, and it counted with the participation of the consultant (BENE team) and TANESCO representatives, a total of 93 consultation meetings in the villages were implemented, with the participation of the villages that are part of the Direct Area of Influence. Most meetings were carried out with the participation of one village only, while in one meeting participated 3 villages and in others 2 villages were present. This organization was defined in dialogue with the WEOs and VEOs with whom a previous coordination took place. A total of 5,250 persons participated. The results obtained are presented in **Table 2.0** in **Annex**.

A third phase was carried out in October-November 2024 by BENE team, with the participation of TANESCO and the World Bank. A total of 57 meetings were held, with the participation of 646 persons (432 female and 214 male and 52 authorities). The minutes of these meetings are presented in **Annex**.

During the consultations, information was provided on the elaboration of the EIA and on the plans that it will contain. It was informed that public disclosure will be carried to all the stakeholders including the general public in order to share the survey finds and get more opinions from them.

The key issues discussed in these meetings included:

- *Access to electricity*: In general terms, participants valued positively the project as they considered it will attend the population's necessities (more energy and more stability in its provision) and bring development, as industries require more power. However, one expectation was that villages in rural areas, specifically those of the DAI, would be able to access electricity through the connection to the grid. It was necessary to clarify that this is not the case, as this is only a transmission and not a distribution project.
- *Concerns regarding resettlement*: The most feared impact is displacement, loss of lands, assets and homes. In concrete, due to previous experiences, potentially affected population fears they will be displaced without receiving their compensation and that the price to be paid will not be fair. They are also afraid, especially women, regarding the displacement itself as it may mean they will lose their social networks, and will find resources, as water, more difficult to access. Authorities and leaders fear the compensations will raise conflicts, as land's

ownership is not always clear, and that delays on payments or unfair prices may also create conflicts. They demanded that the resettlement should be carefully handled. They also pointed out that resettlement may be complex due to problems such as conflicts between farmers and livestock keepers, problems due to the lack of delineation of village boundaries and conflicts with artisanal miners. Both authorities and villagers advised that financial education prior to compensation payment shall be provided to the population affected by the project so that they can make the most of the compensations that will be received. In some cases, they expressed that it will be better to receive a house instead of cash compensation.

- *Impacts on livelihoods:* The participants expressed concern regarding the loss of crops and agricultural land, potential impacts on livestock keeping and on mining activities. Authorities advised that the project may consider bypassing areas and camps sites of miners, since compensations will be complex and costly.
- *Information about the project:* They demanded to receive information about the alignment. Different stakeholders also mentioned that local leaders should be consulted in the different stages of the project.
- *Influx of workers:* The influx of workers raised concerns among villagers regarding public security. They also expressed that because of the influx of immigrant workers interacting with locals, STDs and HIV/AIDS would increase. Also, construction crews and drivers can cause social upheaval in nearby communities. Large gatherings of workers can potentially spread STDs and HIV/AIDS among workers and communities if preventive measures are not taken. Unwanted pregnancies are also a concern that was raised by different villages. They demanded to know what measures will be taken.
- *Use of local labour:* The creation of jobs was perceived as a benefit, including both skilled and unskilled workers. Stakeholders also expect that local businesses will be contracted to provide services. In the consultations, the members of the communities demanded equal access to this opportunity, also involving women.
- *Use of local materials:* The participants asked that Project's contractors outsource all materials such as cement, aggregate, sand and gravel from authorized dealers who are available locally.
- *Concerns regarding safety:* Concerns regarding accidents, risks, and hazards were expressed by the stakeholders as construction workers will be exposed to the risk of accidents and injuries during construction, including accidental falls from high elevations, injuries from hand tools and construction equipment, cuts from sharp objects, and vehicular accidents, among others. Municipal and district councils expressed their concern about the safety risks associated with TL construction, especially high-tension electricity and the movement of construction equipment. Villagers also expressed concern regarding children's security, as they like to play with the towers and climb them. Also expressed fear related to the potential fall of the towers or the poles, and the possibility of being affected by the electricity (radiation).
- *Impacts on natural resources:* Villagers expressed concern for the loss of trees and other vegetation due to the construction of the transmission line. Villagers demanded to know if the trees will be compensated and what will happen with them once they are cut.

Archaeological issues: Cultural tourism stakeholders, district councils, municipals and

regional cultural officers the area of influence has cultural heritage resources that should be considered during project implementation. Ward officials mentioned the presence of archaeological and cultural heritage resources in their wards. Community ritual sites are likely to be affected. While some villages have burial areas, most people prefer to bury loved ones in their own homes.

Main actions to follow up involve:

- Implementation of the ESIA and the different programs
- The implementation of the RAP, ensuring that construction and PAPs' displacement are undertaken only after the RAP has been implemented.
- The implementation of the RAP will also attend and deal with concerns regarding livelihoods. Information will be provided on what the impact will be, the measures, emphasizing the accompaniment that will be given until their livelihoods are restored.
- Potential conflicts related to land will be dealt through the GRM specialized on resettlement issues.
- Regarding expectations of access to electricity, this information has been clarified, however, it will be necessary to continue doing so. If feasible, TANESCO will provide information and orientation on the steps the localities must take to fulfil this necessity.

Detailed information on the consultations done, issues addressed, and responses given is presented in **Annex 1**.

5.2

Summary of stakeholder needs and methods, tools and techniques for stakeholder engagement

The Stakeholder Engagement Plan below outlines the engagement process, methods, including sequencing, topics of information and consultations and target stakeholders. The World Bank and the Borrower do not tolerate reprisals and retaliation against project stakeholders who share their views about Bank-financed projects.

The SEP summary table does not include stakeholder consultation regarding the ESIA as the stakeholder consultation undertaken for ESIA was done at the same time as for SEP preparation. Actions described in the table can be modified accordingly to the findings of the fieldwork, as far as it helps to reach the goal of informing and implementing meaningful consultations.

Table 5.2.a
SEP Summary Table

Project stage	Target stakeholders	Topics	Method used	Responsibilities	Frequency/ Timeline
Prior to construction	Government institutions. Local leaders of the wards and villages.	Inform of the completion of the EIA. Present the impacts identified and the plans to be implemented to manage them. Indicate the activities that will be implemented in the zone, consulting if any adjustments are required for the area (district, ward, village). Agree on how the relationship will be carried out (define with whom the coordination will be carried out, topics, channels or spaces, and frequency).	Meetings in the district level. Meetings with wards and village officers (including different local institutions).	TANESCO and social consultant.	Prior to the construction.
	Members of the villages of the DAI. PAPs.	Inform of the completion of the EIA. Present the impacts identified and the plans to be implemented to manage them in the village. Explain the next steps that will be taken and how the work will be organized, with special emphasis on Labour Management Plan (how local labour will be hired); SEP (channels for communication, how they can participate, grievance mechanism); Gender-based violence plan (actions to be taken); health and safety measures and biodiversity plan. Gather opinions for final adjustments. Agree how communication will be carried out.	Public meetings to inform and dialogue.	TANESCO. Including consultant social, environmental and technical teams.	Prior to the construction.
	Specialists on biodiversity, cultural aspects, gender-based violence, violence	Specialized plans (such as Biodiversity Management Plan; Gender-based violence management plan; Archaeological, Historical and	For each case, the team in charge will define the best way or ways to gather the specialists' opinion (if in	TANESCO: teams and consultants in charge of the mentioned plans.	Prior to construction.

Project stage	Target stakeholders	Topics	Method used	Responsibilities	Frequency/ Timeline
	against children and health and safety.	Cultural Heritage Protection Plan) will be presented to the institutions specialized on these topics. They will be presented in written.	written, meetings with each institution and/or groupal meetings). The process will ensure that information is provided, and opinions are gathered.		
Preparation stage Introduction of the commencement of the valuation and resettlement.	Local leaders (WEOs, VEOs, institutions within the village and communities).	Inform that the project is about to start, inform of any work to be done. Coordinate public consultations with villagers. Introduce the GRM, coordinate its functioning.	Letter. Public Address system (PAS) Meetings.	TANESCO: consultant social team, RPF team, valuation team.	Once, prior to resettlement and prior to the entry of any team to the zone.
	Members of the villages of the DAI. PAPs.	Present and gather feedback on: Disclosure of the alignment. How the RAP will be designed and implemented. Census, valuation and cut-off date. Grievance Redress Mechanism (GRM).	Public meetings to inform and dialogue. Visits to houses of PAPs to inform in them detail.	TANESCO. Including consultant social and technical teams. Call for the meeting done by VEOs.	Once, prior to resettlement and prior to the entry of any team to the zone.
Implementation of the RAP	Local Leaders of the wards and villages	Information and coordination for the implementation of the RAP: Census, how and when it will be implemented Valuation, how it will be done, information to be provided (results of the valuation). Presentation of the Plan and packages offered. Consult if any adjustment is required. Gender component: how this is being incorporated in the RAP, gather feedback.	In door meetings with the leaders. Visits PAPS to their houses/Properties.	TANESCO: team in charge of RPF, valuation, and consultant social team.	Continuous. Meetings with Local leaders of wards and villages will precede every activity with the community, and village leaders will be accompanied during implementation of calls if necessary.

Project stage	Target stakeholders	Topics	Method used	Responsibilities	Frequency/ Timeline
		Coordination for the Grievance Redress Committee: organization, roles, how it will work. Once it is functioning share information on the grievances received by all, measures already taken and agree on how to deal with them.			
	PAPs (villagers, institutions, miners, large-scale companies, ritual sites, others). Vulnerable population.	Information and education on: Census: reinforcement on what it is, why is it done, how it is done and cut-off date. Valuation: How is it done, what it is done for. Participation of PAPs in the valuation. Results of the valuation.	Visits to each house. The team will ensure that all vulnerable population is visited, that the issues are understood by them and their concerns and needs are being considered.	TANESCO, team in charge of the RPF, valuation, social team.	. During the census and the valuation. . Once the results of the valuation are ready. . With a higher frequency with vulnerable population.
		Information and negotiation on: Entitlement packages for each family. Information and consultation on: . The organization and implementation of each measure (graves, replacement of community assets, others). . How crops will be dealt with. Gather feedback/verification of the implementation, agree adjustments (during the implementation). GRM: purpose, channels.	Visits to each house for providing information, clarification and develop a continuous dialogue. Explain that it is a benefit for the family and that women shall also participate and be included.	TANESCO, team in charge of RPF, consultant social team.	During the resettlement. Information on crops' handling will be done as soon as possible.
Prior to the construction phase	Local Leaders of the wards and villages. Villagers of the DAI.	Inform them of commencement of the construction, explaining how it will be carried out.	Public meetings with neighbours. If pertinent, flyers to help remembrance.	TANESCO's consultant social team.	Prior to the commencement of the construction.

Project stage	Target stakeholders	Topics	Method used	Responsibilities	Frequency/ Timeline
	Education and health providers, NGOs, religious leaders (to reinforce information).	<p>Inform them about the impacts that can be expected, reinforcing information provided about the ESIA, measures that will be taken, reinforcing the information on the different plans that will be implemented (labour management plan: job opportunities and Code of Conduct; GBV plan, health and safety regulations, SEP, among others). Gather feedback to include adjustments on the plan.</p> <p>Inform of any adjustments on the alignment.</p> <p>Advance information on accesses to be built, including accesses outside of the wayleave.</p> <p>Inform about the accesses that will be restricted for people and livestock (especially if this affects sources of water for the livestock) and on which alternative accesses will be open or available. Consult if any adjustment on this is necessary.</p> <p>Information on clearance of trees and vegetation.</p> <p>Inform and educate on gender and children violence: risks and measures to be taken.</p>	<p>If feasible, radio (spots, participation in programs). Workshops on gender risks and measures.</p> <p>The activities will combine the provision of information with meetings where opinions can be gathered to introduce any necessary adjustment.</p>	<p>Contractor's social team.</p> <p>Coordination with environmental and construction team.</p>	

Project stage	Target stakeholders	Topics	Method used	Responsibilities	Frequency/ Timeline
		<p>Reinforcement of information of the GRM (purpose, channels, how it works).</p> <p>Inform on job opportunities: how it will be implemented.</p>			
Construction phase	<p>Local Leaders of the wards and villages</p> <p>Education and health providers (to reinforce information).</p>	<p>Inform and coordinate joint work on: GRM: functioning, grievances received, responses given.</p> <p>Inform and gather feedback on: Channels of communication with the project. Potential impacts and measures. Landmarks on the construction, Accesses closure (at points where cables will be launch) schedule. Information on noise-emitting activities and their duration. Health and safety awareness programmes. Plan on GBV and VAC, coordination of activities and advancements. Results of awareness campaigns among workers and the community about the gender violence risks, including spread of HIV/AIDS and unwanted pregnancies.</p> <p>Inform on: Progress of construction activities. Hiring policies, employment opportunities and training of local workers.</p>	<p>Formal and informal meetings, in person and through mobiles.</p> <p>The social team will appraise the usefulness of producing a quarter or biannual printed bulletin to address the issues mentioned.</p> <p>If feasible, radio (spots, participation in programs), use of social media.</p> <p>The activities will combine the provision of information with meetings where opinions can be gathered to introduce any necessary adjustment.</p>	<p>TANESCO's social team.</p> <p>Contractor's social team.</p> <p>Coordination with environmental and construction team.</p>	<p>Continuously throughout the construction, and especially prior to any landmark that may cause impacts affecting the population.</p>

Project stage	Target stakeholders	Topics	Method used	Responsibilities	Frequency/ Timeline
	Villagers of the DAI.	<p>Opportunities for suppliers of construction goods and services.</p> <p>Inform and gather feedback on: Channels of communication with the Project (how they can reach the project). Reinforcement of information of the GRM (purpose, channels, how it works). Workers' Code of Conduct. Job opportunities: how it will be implemented. Construction landmarks that may cause nuisance to neighbours. Opportunities for suppliers of construction goods and services. Accesses closure (at points where cables will be launch) schedule. Information on noise-emitting activities and their duration. Accesses that can be used by the livestock.</p> <p>Educate on health and safety awareness programmes.</p>	<p>Group meetings. Visits to the neighbouring houses. Distribution of flyers, if pertinent, to reinforce the channels to present grievances. The activities will combine the provision of information with meetings where opinions can be gathered to introduce any necessary adjustment.</p>	<p>TANESCO's social team. Contractor's social team. Coordination with environmental and construction team.</p>	<p>Continuously throughout the construction, and especially prior to any landmark that may cause impacts that affect the population.</p>
	Contractors and workers.	<p>Inform and educate on: Code of Conduct, relationship with communities.</p> <p>GRM for communities. How to channel consultations and grievances. Gather their feedback.</p> <p>Role of the social team. Social conflicts prevention.</p>	<p>Training during the induction. Trainings throughout the construction phase.</p>	<p>Contractor's social team. Human Resources. TANESCO social team supervises.</p>	<p>Induction at the beginning of the construction in each new community. Monthly reinforcements and when identifying any red flag (such as people complaining about wrongful information</p>

Project stage	Target stakeholders	Topics	Method used	Responsibilities	Frequency/ Timeline given by the workers).
	Civil society. Media. Institutions in general.	Inform on: Construction activities of the Project. Objectives and justifications of the Project. Importance of the Project for the development of the region. Socioeconomic benefits. Development of E&S Plans and Programmes, presenting results in terms of performance indicators. Prevention, control and mitigation measures adopted and their effectiveness. Information on channels for consultations and complaints. Contact channel for consultations and complaints.	Periodic communication campaigns through a publication. TANESCO website. If necessary, visits to the project with the media and key institutions, among others.	TANESCO communications team.	Quarterly.
Operation	Leaders of the wards and villages Education and health providers (to reinforce information).	Inform on: Start of operations. New activities to be implemented by the Project. Channels of communication. Functioning of the GRM. Information of all health and safety risks (kite flying, tower climbing). Coordinate how to educate the population on this. Project's maintenance activities.	Letters of information. Meetings with leaders. Workshops directed to the population. The activities will combine the provision of information with meetings where opinions can be gathered to introduce any necessary adjustment.	TANESCO's social and operation teams.	In the end of the construction/start of operation for the introduction of the new phase. Quarterly to inform about the project, the maintenance activities and deal with health and safety issues. According to grievances throughout the operation.
	Civil society.	Inform on:	Periodic communication	TANESCO	Quarterly.

Project stage	Target stakeholders	Topics	Method used	Responsibilities	Frequency/ Timeline
	Media. Institutions in general.	Objectives and justifications of the Project. Importance of the Project for the development of the region. Socioeconomic benefits. Development of E&S Plans and Programmes, presenting results in terms of performance indicators. Results of noise and electromagnetic field monitoring. Information on channels for consultations and complaints. Contact channel for consultations and complaints.	campaigns through a publication. TANESCO website. If necessary, visits to the project with the media and key institutions, among others.	communications team.	

Elaboration: JGP / BENE.

5.3

Proposed strategy to incorporate the view of vulnerable groups

The Project will seek to actively engage and incorporate the views of vulnerable groups, such as women, children who are head of families, people living with HIV/AIDs or other significant health issues, People with Disability, elderly who may be affected by the project. The aim is to incorporate them in the decision-making processes to ensure that any benefit from the Project reaches them and that any negative impact that may affect them is prevented, mitigated or compensated. Incorporating the views of vulnerable population implies taking into consideration that these are persons who are usually not heard, which poses specific obstacles.

For the Project to be able to do so it will:

- Identify those who can be vulnerable to the diverse impacts of the project. This will be done in two key moments: during the census of the RAP for the displaced PAPs, and prior to the construction phase, for those persons who can be vulnerable to the impacts of the project other than the displacement.
- Work with the Local Government at the district levels such as District Community Development officers, District Social Welfare Officers and the Police Gender Desk, and NGOs that work with these groups to inform them about the project and consult about the best ways to communicate with them (i.e. use the spaces they have already created, such as group or face-to-face meetings).
- Identify what is the information these groups need. Verify if they have the background information needed to understand the topics addressed.
- Provide information in a clear manner, asking for feedback to ensure it has been understood, reiterate the information to secure its remembrance.
- Organize workshops specifically directed to them to educate them in the issues that are of their interest. For example, workshops on the RAP, addressing why the resettlement will take place, how it will be organised, how they will be affected, measures that will be implemented, what benefits they will receive, what decisions will be taken. In these workshops their opinions and preferences will be asked.
- For the functioning of the GRM, vulnerable groups will be periodically visited to identify if they have any grievance. In case they present them, the response will be as quick as possible, and the monitoring of the adequacy of the measure implemented will include a double verification.

To remove obstacles and enable their participation, the following activities will be implemented:

- Create a bond of trust with the vulnerable groups through a personalized and continuous contact.
- Communicate to the wards and villages authorities and leaders, the interest of the Project of establishing a direct communication with these groups and agreeing with them how this can be done. The suggestions will include the organization of specific meetings to be held with them, either as a group or individually.

Specifically ask them to share the information with those groups.

- Create differentiated spaces of participation without the participation of persons who can be intimidating (specific meetings for women and for children).
- In the case of couples (or other familial relationships that may constrain the participation in decision-making) explicitly inform that the information will be shared with, for example, the wife and her participation and consent will also be required. In the case of areas where polygamy is practiced, ensure that the affected wife, or wives, participates.
- Explicitly ask the local leaders and authorities to invite them to the public meetings. During the meetings, make explicit that the Project wants to know if they have any questions or concerns. Expressing interest with them is a form of validation that helps to motivate them to participate.

Regarding the involvement of vulnerable populations during the different cycles of the Project, these are the strategies that will be implemented:

- *Pre-construction:* The most important process will be the resettlement. The aim will be to incorporate vulnerable population in the decision-making process so that their needs and aspirations will be considered. To do so, it will be necessary to consider that vulnerable populations maybe families as such (those who live in poverty, those who have a high dependency on affected livelihoods) but, at the same time, they can also be individuals within the families (persons with disabilities, women with little or no capacity to participate in the decisions, children). Their involvement will incorporate: a) identification of families and individuals in situation of vulnerability; b) identification of the best ways to engage with them both for the provision of information (most adequate channels and forms), and for listening to their opinions; c) a stage of coordination with those who exercise power over them (leaders, husbands, other family members) to explain that the project needs to engage with all members of the community and why this is important; d) a set of actions to directly inform and dialogue with vulnerable populations only and e) the organization of activities, workshops or focus groups, where all the groups participate and are heard.

All must be aware that a condition that the Project needs to fulfil is the involvement of all members of community (that cannot be put into discussion), but that the process will be constantly informed to the leaders and agreed with them. An example of this is that the team will inform in advance that the meetings where decisions will be made (i.e., presentation of individual/familial packages of measures) both husband and wife(ves) must be present. The strategy will be adjusted by the team according to the characteristics of each community. A check list of the interests expressed by all, but particularly by vulnerable population, will be done to verify that these are considered in the final decisions.

Every time a training is done for the community, the team that organizes it will verify that identified vulnerable populations are invited to participate, and understand what the training is about and how it will benefit them. The language and methodology of the training will facilitate their involvement.

- *Construction.* The contractor social team will identify the negative impacts that

may affect in a special manner to vulnerable groups (i.e., related to health, bad building conditions of dwellings due to poverty). The mapping will link impacts with vulnerable groups. Once done this, and once implemented the general engaging strategy, the team will verify that these groups or persons have a) pertinent and relevant information; b) channels to be heard; c) will verify from time to time how they are being affected. It will be particularly important that vulnerable populations are aware of the GRM and that the contractor social team reaches them periodically (every week or every two weeks, depending on how much they can be impacted during a specific moment of the construction) to verify if they have any concerns or grievances. If a problem that is harming a vulnerable group is identified, this will be attended as soon as possible.

Regarding positive impacts, the contractor will communicate to the vulnerable populations the opportunities they have available (jobs, opportunities to provide services), ensuring that they know in a timely manner what benefits they can access and how.

- *Operation.* During the operation the team in charge will identify the information that may be particularly relevant for the different vulnerable groups and persons and will verify that they are accessing it. The team will also inform them about how the GRM works and will visit them periodically (bi-annually) to identify if they have any concerns. For the implementation of the health and safety trainings, the team in charge will identify who are the groups most at risk and will develop special trainings for them.

6.0

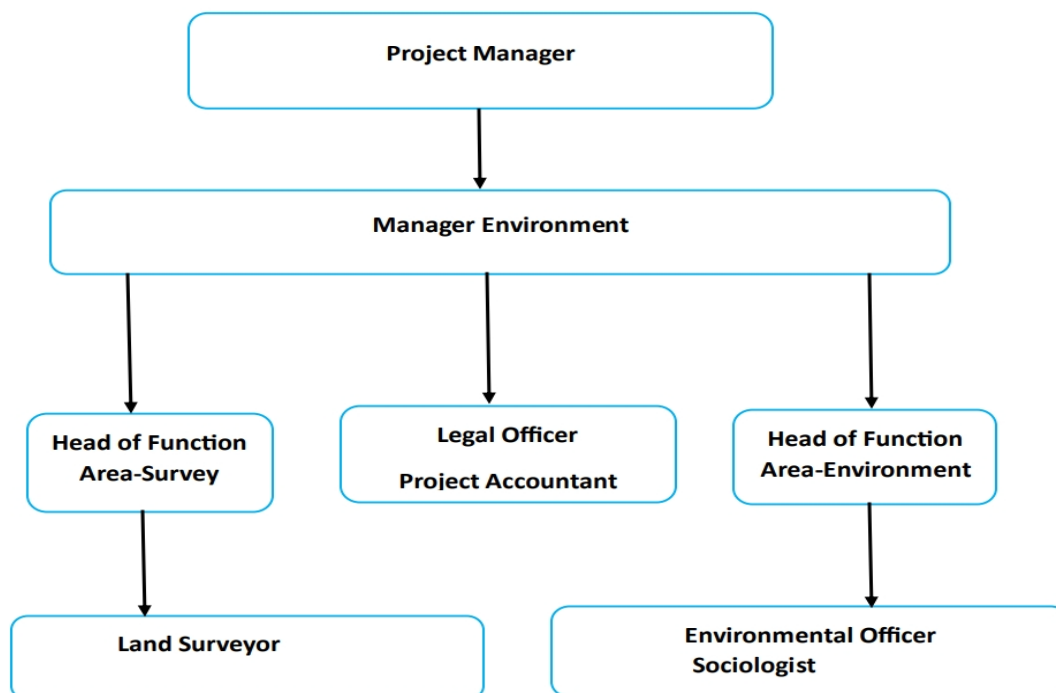
Resources and Implementation Agreements

TANESCO has an overall responsibility to prepare and implement the SEP. The implementation of the proposed project is expected to have a Project Implementation Unit (PIU). TANESCO's Resettlement and Compensation Management Unit (RCMU) will coordinate with PIU the implementation of the project activities. RCMU will be assigned to implement the Stakeholder Engagement Plan due to its existing role in managing community interactions, particularly in land acquisition and livelihood impacts, its experience in stakeholder coordination and its existing community outreach mechanisms. RCMU will also be assigned the lead role in SEP implementation to ensure consistency and continuity in stakeholder communication across all project components.

Figure 8.a presents the RCMU flowchart.

Figure 8.a RCMU's flow chart

TANESCO- Resettlement and Compensation Management Unit (RCMU)



Elaboration: TANESCO, 2025.

Table 8.a describes the functions of each member of RCMU.

Table 8.a Description of RCMU members' functions

Member	Key Role and Responsibilities
Project Manager	<ul style="list-style-type: none"> Leading implementation of E&S obligations (community engagement, information sharing & grievance management, livelihood restoration and corporate social responsibility) Coordinate the day-to-day project activities including, RAP implementation and other construction activities Supervising and monitoring the performance of other PIU in executing their daily implementation of RAP Receiving and review the reports which submit to his office from Manager Environment Accountable for reporting to TANESCO and Lenders on E&S matters Establishing appropriate organizational structure and scrutiny of suitable resources to implement the RAPs, SEP and LRP Contribute to the project appraisal processes by reviewing, analysing, and advising on social and environmental impact/risks Play a role of report the progress of RAP implementation to the high level of TANESCO management
Manager Environment	<ul style="list-style-type: none"> Advise the project manager on the project environmental & Social issues, and advise on the best ways to mainstream environmental and social aspects into project design including RAP implementation, livelihood restoration and corporate social responsibility, capacity building, awareness raising and public consultation Managing the E&S team and third parties involved in the implementation of E&S obligations Receiving the report from Head of Function Area, Project Accountant and Legal officer Reporting the progress of RAP implementation to Project Manager.
Head of Function Area (HOFA)-Survey	<ul style="list-style-type: none"> Sorting Land acquisition issues including valuation and reporting to Manager Environment for discussion and actions Assigned the task Land surveyor for handling RAP issues. Reporting to Manager Environment on the day-to-day implementation of RAP
Head of Function Area (HOFA) -Environment	<ul style="list-style-type: none"> Reviewing the E&S report submitted by environment officer, Sociologist and third parties during RAP implementation Reporting to Project Manager any raised E&S issues Assigned task to Environmental officer and sociologist
Project Accountant	<ul style="list-style-type: none"> Controlling financial issues and preparing budget for implementation of RAP activities Effecting compensation payments to PAPs and other cost relating to RAP implementation Reporting to Manager Environment on the cost relating to daily project implementation. Works in collaboration with Environmental officer, legal officer, sociologist and land surveyor for handling all project RAP issues

Member	Key Role and Responsibilities
Legal Officer	<ul style="list-style-type: none"> • Providing legal advices about the project and sharing the legal ideas with other project implementor team • Responding to legal matters raised by PAPs regarding the compensation payments • Works in collaboration with Environmental officer, accountant, sociologist and land surveyor for handling all project RAP issues
Environmental Officer	<ul style="list-style-type: none"> • Reporting HOFA-environment on environment safeguards issues during project implementation. • A key focal point for project on environmental matters • Works in collaboration with sociologist, legal officer, accountant and land surveyor for handling all project RAP issues • Ensuring compliance on environmental aspects are implemented as Nation Laws and World Bank ESS requirements
Sociologist	<ul style="list-style-type: none"> • Reporting to HOFA-environment on social safeguards issues • A key focal point for project on social matters • Works in collaboration with Environmental officer, legal officer, accountant and land surveyor for handling all project RAP issues • Ensuring compliance on social aspects as indicated in RAP are implemented as Nation Laws and World Bank ESS requirements
Land Surveyor	<ul style="list-style-type: none"> • Reporting to HOFA-Survey all matters relating with Land Acquisition issues • A key focal point for project on Land Acquisition matters • Works in collaboration with Environmental officer, legal officer, accountant and land sociologist for handling all project RAP issues • Ensuring compliance on Land Acquisition issues are implemented as Nation Laws and World Bank ESS requirements

Elaboration: TANESCO, February 2025.

As can be seen, RCMU has only one social specialist (sociologist). She will be in charge of conducting and overseeing the adjustment and implementation of the SEP. If not feasible, due to the burden of work, a coordinator of the SEP will be hired and will report to TANESCO's sociologist.

The SEP's coordinator will lead the team, supervise it and coordinate with other areas. The coordinator will also overview the community's GRM. This professional will be responsible for formalising the receipt and handling of enquiries and complaints during construction, as well as regularly monitoring, tracking, documenting and assisting in the resolution of complaints. Ensure that this professional is known to all construction teams as well as the local population. All TANESCO, Contractors and subcontractors' employees should be directed to this professional if they have complaints to make or complaints and consultations received through other channels. TANESCO will appraise if, due to the load of work, the GRM needs a person exclusively dedicated to it.

A team will be created for the implementation of the SEP. The SEP team will be composed of by professionals specialising in community relations, who will be responsible for visits, consultations and other communication activities. The number of

community relations professionals to be hired will depend on the demands during the various phases of the Project. Approximately, three social specialists per regions will be necessary. They will be in charge of mapping stakeholders; liaising with the communities and members of the population; designing and implementing specific strategies and activities; disseminating and implementing the GRM, ; keeping records of the work done and participating in the monitoring and evaluation.

TANESCO Management Team will be actively involved in the communication and stakeholder relations activities provided for in this Plan, with the support of the Contractors at the construction sites and work fronts, as appropriate. However, as the Contractors will have more frequent and intense contact with the population closest to the work fronts, they will provide an initial response to any complaints that may arise, informing the coordinator of the social team as quickly as possible. Any hostile attitude from stakeholders will also be reported, even if there is no formalised complaint.

The cost of implementing the SEP has been estimated at US\$ 735,000 (Tshs. 1,899,240,000.00), as detailed in **Table 8.b** and in chapter 12 of the ESIA.

Table 8.b Budget allocation – SEP – 36 months of construction

Item	First year		Second year		Third year		Total
	Quantity	US\$	Quantity	US\$	Quantity	US\$	US\$
Social team labor and fringe benefit costs: 9 members (3 per region) plus 1 leader on 1 st year; 2 per region plus 1 leader on 2 nd and 3 rd year	10	90,000.00	7	60,000.00	7	60,000.00	210,000.00
Administrative and office costs for social team (estimated at 15% of total labor and fringe benefit costs)	global	13,500.00	global	9,000.00	global	9,000.00	31,500.00
Three vehicles (including fuel, maintenance, insurance)	3	118,000.00	3	108,000.00	3	108,000.00	334,000.00
Other logistics for communal meetings in the villages to disclose information, discuss project implementation (105 villages 1 quarterly meeting in the first year, every four months in the second and third year).	420	12,000.00	315	9,000.00	315	9,000.00	30,000.00
Other logistics for visits to the villages and meetings every month with leaders of villages and wards. First year: 1 village per month, plus wards and other stakeholders, aprox. 1680 meetings per year. Second and third year: every two months.	1,680	10,000.00	840	6,000.00	840	6,000.00	22,000.00
Other logistics for meetings with families and members of the communities to present different processes of the project (census for the RAP, valuation, initiation of construction, follow-up). Aprox. 1200 families.	6,000	10,000.00	4,800	8,000.00	3,600	4,000.00	22,000.00
Grievance Redress Mechanism. Implementation in Tanesco's offices. Meetings of Grievance Redress Committees.	72	10,800.00	72	10,800.00	36	5,400.00	27,000.00
Printed material for main issues: presentation of the project, on what consists the GRM, construction impacts. 2 brochures or other graphic materials per year. Circulation of 3,000 per material	2	8,000.00	2	8,000.00	2	8,000.00	24,000.00
Trainings to workers on how to liaise with the communities.	12	3,000.00	12	3,000.00	12	2,000.00	8,000.00
Trainings to members of the communities on the project and its plans.	40	5,000.00	40	5,000.00	40	5,000.00	15,000.00
Use of social media or local media (radios)	global	3,000.00	global	2,000.00	global	2,000.00	7,000.00
Annual brochure to be distributed to different stakeholders	1	1,500.00	1	1,500.00	1	1,500.00	4,500.00
TOTAL							735,000.00

Elaboration JGP/BENE Consult

Communication between TANESCO and the Contractors and Subcontractors

As the Project works commence, TANESCO's Social team and the construction team (Consultant's Social Expert) will interact on a regular and formal basis to ensure that policies and procedures for communication and stakeholder engagement are properly implemented by Project Contractor(s).

The Contractors will prepare monthly reports to inform the TANESCO Management Team representatives in charge of the SEP about activities under their responsibility and the results thereof.

In addition to the reports, regular meetings will be held with the participation of the social specialist(s) of TANESCO Management Team and the Contractors and subcontractors, in which the relations developed with the community and any problems that may arise from the construction activities will be discussed.

As the Contractors will have closer contact with the population in many ways, the main topics for discussion during the meetings should be:

- Changes in the opinion or attitude of the population towards the Project.
- Construction activities and impacts and risks to be communicated to the community.
- Review of complaints received, and status of activities undertaken to resolve them.
- Estimated number of jobs and selection, hiring and training of local workers.
- Construction sites and relations between workers and the local population.
- Conflicts between construction teams and community.
- E&S problems.
- Sexual or gender-based violence issues.
- Community health and safety.
- Other.

Throughout the works phase, the Contractors' community relations teams must be prepared to provide correct and appropriate information to affected people. This management must be demonstrated to the TANESCO Management Team through the monthly reports and meetings mentioned above.

In accordance with the provisions of **Section 7**, the most serious consultations or complaints made by collective groups shall be communicated immediately to the coordinator of the SEP by the Contractors, without waiting for periodic meetings or the issuance of monthly reports. Likewise, the Contractors must immediately notify the TANESCO Management Team about the receipt of fines and disputes, among other more urgent matters that cannot wait for the frequency of reports and meetings.

7.0

Grievance Redress Mechanism

7.1

Grievance Redress Mechanism from External Stakeholders

The social specialist(s) of TANESCO Management Team will implement a mechanism for handling consultations, complaints and suggestions from affected people, DAI communities and other interested parties on the E&S performance of the Project during the planning, construction and operation phases. Although this is a specific Grievance Redress Mechanism (GRM) for external stakeholders, a contact channel will be set up to receive complaints and requests from consultants hired by TANESCO to carry out the ESMP Plans and Programs

The Grievance Redress Mechanism must:

- Be adapted to the risks and negative impacts of the Project;
- Be designed to quickly respond to the concerns of the population using a comprehensive, transparent and culturally appropriate process that is easily accessible to all segments of the affected communities and other stakeholders, free of charge and without retribution.
- Do not impede access to judicial or administrative resources.

The GRM incorporates the participation of the villages through the Grievance Redress Committee. It will be formed in every village, leaving open the possibility of also crating them in the wards.

The Grievance Redress Committee (GRC) will be formed prior to the beginning of the project. To conform it, Tanesco and the contractor will convene a village meeting where all the community, including the PAPs, participate for the purpose of electing the GRC members. Its composition includes the Village Government Charman, who will be the chairman of the GRC, and 3 members of the community (including both men and women) selected by the Village meeting by voting. The criteria to select the members of the RC include that he or she must be a permanent resident of the village; accepted by people; who likes development; likes volunteering; is above 18 years of age; knows how to read and write; should not be in another committee within the village and is ready to serve others without prejudice and available all the time. The GRC will work for the period of project life span. Once the GRC receives a grievance, it will communicate it to TANESCO and the contractor, which will register the grievance. Both will coordinate the next steps to take.

The social specialist(s) of TANESCO Management Team will inform the population of the Project's areas of influence about the GRM and the available contact channels, which will be widely publicized and will include:

- Direct registration at the work fronts by community relations team.
- Through the Contractors.

- By email.
- By WhatsApp.
- Through public information centres.
- Through TANESCO website.
- By telephone.
- The Grievance Redress Committee.

The population will also be informed about the existence of the World Bank Grievance Redress Service, which can be used as a last resort to present any complaints or consultations about the Project, once the intentions have been exhausted through previous channels enabled by TANESCO. Communities will be informed that access to this Portal is via the following link: <https://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>.

A specific channel will be made available and publicized regarding the process of compensation/indemnisation for the impacts of the establishment of the wayleave easement. A specific channel will also be made available for complaints and reports related to sexual and gender violence, so that anonymity is guaranteed, as for example an independent help line or a cell phone number specific to this type of complaints (see **P.15 - Gender Based Violence (GBV) Action Plan**).

At the beginning of the works, posters will be put up on visible and accessible locations of the DAI villages with the following information:

- Local telephone numbers of the Contractors for consultations and complaints.
- Name of the person responsible for construction (resident engineers of the Contractors).
- Local TANESCO telephone number for consultations and complaints.
- WhatsApp number and email of the social specialist(s) of TANESCO Management Team for consultations and complaints.
- TANESCO website.
- Establishment of public information centres.
- Members of the Grievance Redress Committees.

All consultations and complaints received will be classified immediately, separating those that do not involve E&S or health and safety problems, for their direction to the responsible sectors and process in accordance with the applicable procedure, based on the SEP.

Consultations and complaints received by other media (through local authorities or others) will also be included in the GRM and will be treated in accordance with the procedure. Anyone who requests information on simple matters that can be answered immediately will be responded to by the TANESCO community relations team and will be registered in a special section of the GRM.

The GRM Registration System will contain at least the following information:

- Date of the complainant.
- Date of reception.
- The channel of reception.
- The consultation or complaint category (grievance, consultation/question, request).
- A list of all those involved in preparing the response.
- Date of sending the response.
- Answer given by TANESCO.
- The position of the Grievance Committee.
- Measures implemented (or actions taken).
- The final result, if the person who presented the grievance is satisfied or not with the response and actions taken or not, and why.

Each month, the coordinator of the SEP will distribute an update of the records of consultations and complaints (Registry of Project Complaints and Consultations) for the period, for inclusion in the ESMP Reports to be produced in the scope of ESS 10 and distributed to External Interested Parties (WB, NEMC, others) as defined in Section 10 (Reports and Documentation) of this Program. In this update, consultations and complaints that have not been answered within the corresponding period will be highlighted. As a minimum, the following categories will be considered to register any consultations and complaints:

- Requests for information.
- Complaints from the community related to construction activities.
- Complaints related to sexual and gender violence.
- Complaints related to the compensation / indenisation process for impacts caused by the establishment of the easement.
- Complaints on behalf of the community related to the operation of the Project.
- Complaints from Contractors' and subcontractors' workers involved in the implementation of the Project.
- Complaints from TANESCO workers involved in the Project.
- Complaints from other stakeholders related to construction activities.
- Complaints from other stakeholders related to the operation of the Project.
- Suggestions for improvement.
- Others.

Requests for assistance, support and/or partnerships for any local social activity or programme will not be considered as consultations or complaints. However, such requests will be sent to the social responsibility area of TANESCO (or equivalent) and will also receive a formal response in all cases and will be registered in the matrix.

Applications for employment will not be considered as consultations or complaints and will therefore be sent directly to the Contractors' human resources department.

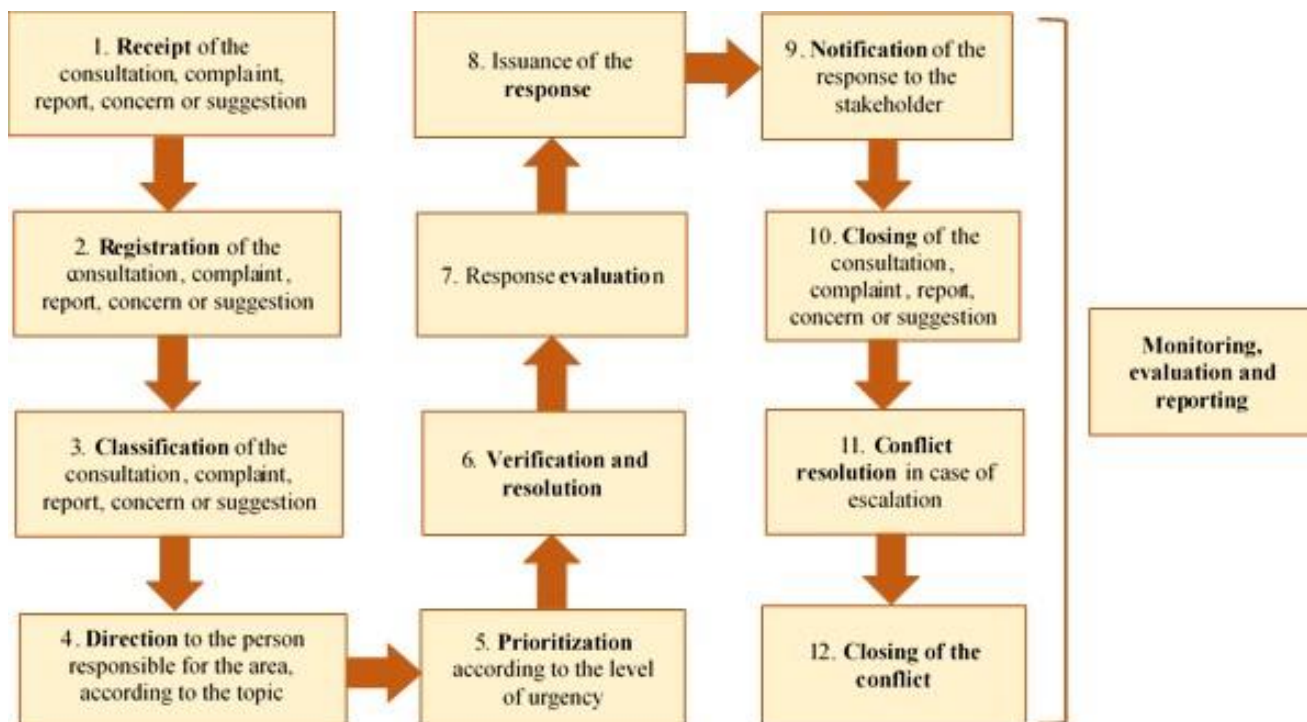
The social specialist(s) of TANESCO Management Team will ensure that consultations

and complaints are answered correctly and promptly. All consultations and complaints will be answered within fifteen (15) working days, except when there is a fair reason for a longer response time. Refusal to provide information will only be considered in cases where confidentiality is required and such refusal is legally justified.

Consultations and complaints will be answered following this procedure:

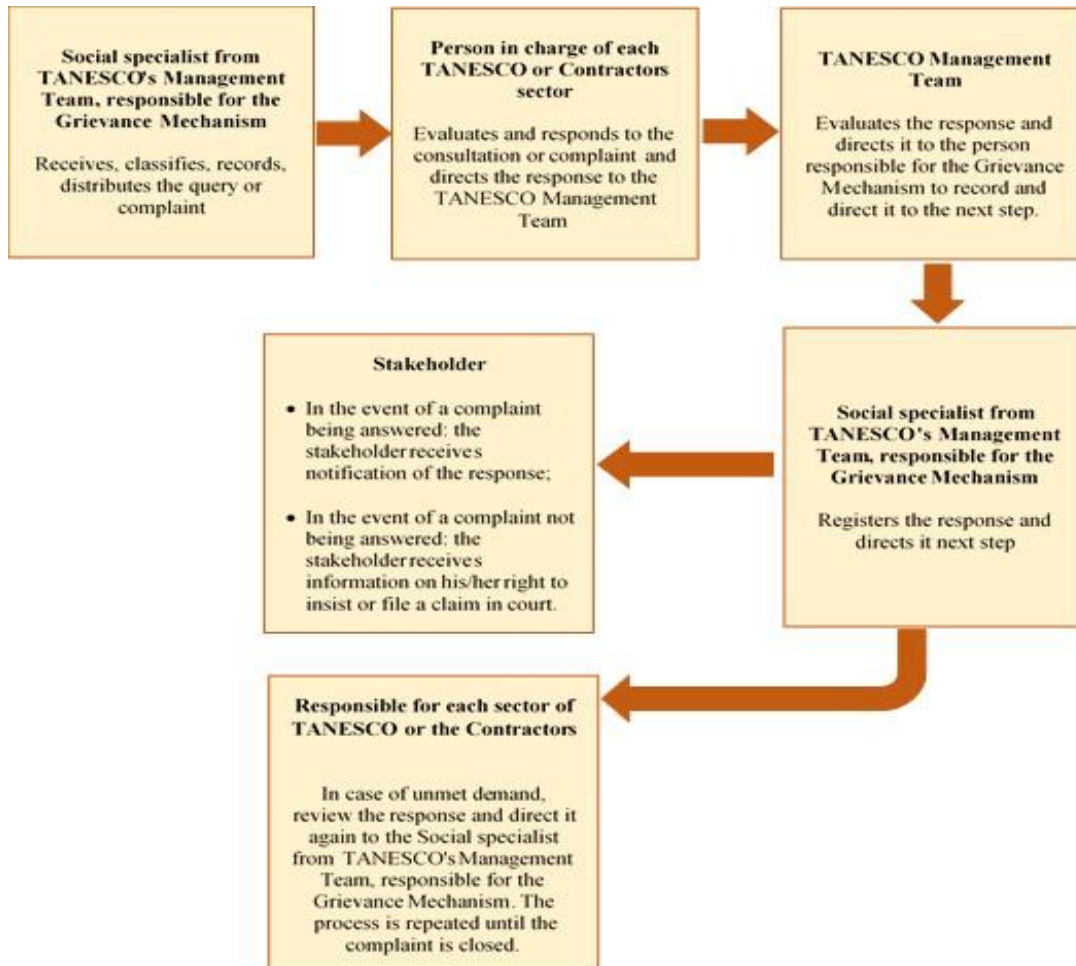
- Consultations, complaints, reports, concerns or suggestions will be received, classified and recorded according to the information required by the GRM Registration System mentioned above.
- Consultations, complaints, reports, concerns or suggestions will be distributed to the corresponding TANESCO sector or to the Contractors and subcontractors, as appropriate.
- The initial response will be reviewed by the person in charge of the TANESCO Management Team in all cases where the complainant's request has not been fully met.
- When the response is favourable, the registration will be made in the Registration System and the complaint will be considered closed, with notification to the stakeholder. The preparation of an action plan must be foreseen, including the schedule and expected results, and the presentation of evidence/documentation of full compliance with the proposed actions to the complainant.
- When the response is not favourable (fully or partially), it must also be registered in the system and contain an adequate justification.
- In the case of grievances received by the GRC, this instance will participate in the response, reviewing the proposal of response and being present when the response is given.
- The complainants will be informed of their right to insist on the consultation or complaint until the case is closed.
- The response will be delivered in writing in all cases.
- The complainants will be informed of the possibility of filing a legal claim if they so wish.

Figure 7.1.a
Stages of grievance handling mechanism



The roles and responsibilities for these actions are in the following **Figure 7.1.b**.

Figure 7.1.b
Roles and responsibilities



Complaints addressed to the Contractors will be handled in accordance with the specific procedure described below.

Additionally, TANESCO and the contractor's social team will hold regular meetings with the Grievance Redress Committees, collecting information on the grievances they have received and analysing the cases that concern the committee. Members of the committee will have clear information on how to contact TANESCO and the Contractor.

7.2

Specific Mechanism for Complaints Addressed to the Contractors in the Construction Phase

Contact details of the Contractors' Resident Engineer and the of the SEP Coordinator will be available at the construction camps.

As the Contractors will have more frequent contact with the population, it is expected that

a large part of the complaints and consultations will be received by its representatives. The Contractors will make available and disclose a local telephone number or WhatsApp for consultations and complaints related to construction. All complaints from workers and other internal stakeholders will also be recorded, along with the measures taken to respond to them.

Each Contractor shall have a Social Specialist assigned to the works on a permanent basis, who will act as Community Relations Coordinator. This professional will receive specific training on the Project's GRM and must provide an initial response to any complaint addressed to the Contractor. He/she will also coordinate with the GRC, verifying if they have received any grievances, and coordinating with them how it will be handled.

The Community Relations Coordinator will maintain a consolidated logbook of complaints and consultations received at the construction sites and work fronts. This consolidated logbook will be sent weekly to the social specialist(s) of TANESCO Management Team for consolidation in the Registry of Project Complaints and Consultations.

The Contractors shall inform the social specialist(s) of TANESCO Management Team as soon as possible of any complaints relating to aspects not directly related to the works under its responsibility and also of those that, although they are aspects of the Contractors' responsibility, are considered to be of greater seriousness according to criteria to be established by TANESCO at the beginning of the works and periodically updated during construction. Any hostile attitude of the stakeholder shall also be reported, even if there is no formal complaint.

All complaints and consultations related to construction shall be evaluated and responded to by the Contractors. Subcontractors who receive complaints shall, by contract, pass them on to the Contractors within 24 hours. Complaints against subcontractors shall also be recorded in the Complaints Register.

In all cases, the Contractors shall respond to complaints within 10 (ten) days, with longer deadlines provided there is justification.

The social specialist(s) of TANESCO Management Team will hold weekly meetings with the Contractors to verify the entries in the logbook of complaints and its responses.

The social specialist(s) of TANESCO Management Team will review and pre-approve the responses of both TANESCO and the Contractors in the following cases:

- Complaints received from local authorities-
- Complaints in which authorities or any sphere of government are copied, as well as those referred by lawyers.
- Complaints submitted by non-governmental organizations (NGOs), public interest civil society organizations or similar organizations-
- Complaints on issues of collective interest to the community.
- Complaints involving some kind of legal non-compliance by the Contractors.

- Complaints about damage to third party property.
- Complaints against the conduct of any worker involved in the construction works, including complaints concerning cases of sexual harassment or abuse.
- Complaints with which the Contractor does not agree and intends to refuse to take the corrective measures requested by the complainant.

Consultations and requests for information will also be answered by TANESCO and the Contractors within 10 (ten) days. The social specialist(s) of TANESCO Management Team will be consulted in cases where information is refused for confidentiality or other reasons.

Complaints received by the Contractors, but addressed to TANESCO, will be sent to the social specialist(s) of TANESCO Management Team within 24 hours, for referral to the sector responsible for compliance.

In the event that the works are stopped for any reason, TANESCO Management Team and the Contractor will plan and implement a communication plan for the population. Interested parties will be informed of the reason for the stoppage, the procedures adopted and the expected date for restarting work.

TANESCO Management Team will monitor the implementation of the actions proposed and agreed upon by TANESCO and the Contractors to address E&S issues.

For the operation phase, the TANESCO Management Team will adapt the GRM based on the experience during the construction phase.

The Contractors will also establish a specific GRM for their workers and for the subcontractors' workers, so that they can raise their concerns and problems. All workers must be informed about the existence of this mechanism and the procedures to be adopted, and they must be encouraged to use it. As part of its GRM TANESCO will also establish a contact channel for complaints and requests from the consultants hired to carry out the ESMP Plans and Programmes.

Like the GRM for external stakeholders (**Section 7.1**), this GRM for workers must also follow certain principles in order to be aligned with EES2, which are presented below:

- Accessibility - the mechanism must be easily accessible to all workers, regardless of their function, contracting company, location or literacy level.
- Confidentiality and non-retaliation - the process must guarantee the anonymity of complainants, whenever necessary, and protect workers from reprisals.
- Transparency and clarity - the mechanism must be clear about the procedures, deadlines and possible solutions to complaints.
- Independence and impartiality - complaints must be analysed fairly, avoiding conflicts of interest.
- Efficiency and rapid response - complaints must be dealt with in a timely manner, avoiding delays that could harm workers.
- Based on dialogue and conflict resolution - the mechanism must promote

communication and seek satisfactory solutions through mediation and dialogue.

- Monitoring and continuous improvement - there should be a process for reviewing and improving the mechanism based on feedback from workers and the effectiveness of resolutions.

Alignment with legislation and human rights - the mechanism must comply with national labour laws and relevant international standards.

TANESCO and the Contractors will maintain an "open door" policy, providing confidential and fair treatment to all workers, including those of the contractors, subcontractors and consultants. Workers will be provided with information on viable channels to express their complaints without having to discuss them directly with their immediate supervisor.

Channels for receiving complaints and suggestions from workers may be suggestion boxes to be distributed in the construction sites, which must be sealed and guarantee the confidentiality of the complainant. The GRM for workers must have a specific alternative channel for complaints of sexual and gender-based violence, in order to guarantee anonymity and confidentiality, such as an independent helpline or a specific cell phone number for this type of complaints.

The maintenance of confidentiality by the GRM for workers must be made clear in its disclosure, especially to ensure that the system will be used in cases of complaints of acts of sexual and gender-based violence. In this regard, it is highlighted that the Contractors' Community Relations Coordinators, responsible for the GRM for workers, must be specifically trained to handle complaints of sexual and gender-based violence and discrimination based on gender, sexual orientation and/or gender identity, and to treat complaints in a confidential, compassionate, empathetic, respectful and sensitive manner, without discrimination and without passing judgment.

These channels must be disclosed to workers during induction training and in E&S 0education for workers under the LMP

The Contractors must also inform, in a visible place in the construction sites, the contact details of the persons responsible for community relations.

The specific GRM for workers must also indicate a deadline for responding to complaints, allowing for the extension of the deadline if justified.

The regular meetings between the social specialist(s) of TANESCO Management Team and the Contractors, already mentioned, in addition to discussing complaints received from the population, will also discuss the handling of complaints from workers. In case of more serious consultations or complaints made by collective groups, the social specialist(s) of TANESCO Management Team will be immediately informed, without waiting for regular meetings or monthly reports.

Among the contact channels to be disclosed to workers, direct contact with TANESCO

will be reported. That is, the social specialist(s) of TANESCO Management Team must be able to directly receive consultations and complaints from the Contractors' and subcontractors' workers, and from the workers of companies that provide equipment, supplies and services for the Project.

The opening of a channel to receive consultations and complaints from the Contractors' and subcontractors' workers, as well as from suppliers, does not imply that TANESCO will assume responsibility for the established labour or contractual relationships. This will simply have the function of allowing its Management Team to supervise the proper management of labour and contractual relationships by the Contractors and subcontractors, and to request that corrective actions be considered when such management is considered to be inappropriate or may imply a risk for the Project.

8.0

Monitoring

The social specialist(s) of TANESCO Management Team will ensure that a periodic review of the implementation of the SEP is carried out, focusing on the effective implementation of the Plan, taking into account the requirements of Tanzanian legislation and international reference standards (WB ESS 10). They will also assess whether or not the Plan meets its objectives, including the following verifications:

- Public consultations: review of comments from stakeholders and the feedback provided to them.
- Disclosure methods and materials: types, frequency and place of disclosure of Project information.
- Management of expectations.
- Community attitudes and perceptions about the Project.
- GRM.
- Implementation adjustments, including the adequacy of staff and methodology.
- Reports.

9.0

Performance Indicators

The following indicators are proposed for the SEP:

Measure	Indicators
Project Stakeholder Mapping and Analysis	<ul style="list-style-type: none"> Review and expansion of the Project's stakeholder mapping
Public Consultation with Stakeholders	<ul style="list-style-type: none"> Number of authorities contacted in relation to the number of authorities identified in the stakeholder mapping Number of authorities actually present at the consultations Number of invitations sent to the population and authorities Number of participants in each consultation in relation to the number of invitations Number of women participating in the consultation in relation to the total public Number of posters installed compared to what was planned Number of publications in newspapers Number of hours of dissemination through mobile public address system/sound trucks compared to what was planned Percentage of consultations answered Number of days to respond to consultations (maximum 10 days)
Social Communication During the Works	<ul style="list-style-type: none"> Preparation of monthly reports by the Contractors addressed to the social specialist(s) of TANESCO Management Team Number of bulletins prepared and distributed to the population, either by mail, WhatsApp or at distribution points Number of meetings held between the social specialist(s) of TANESCO Management Team and the Contractors Evidence of publications on the TANESCO website and in the press with the planned periodicity (quarterly)
Continued Disclosure of the Project	<ul style="list-style-type: none"> Evidence of publications on the TANESCO website and in the press with the planned frequency (semi-annual)
GRM from External Stakeholders	<ul style="list-style-type: none"> Evidence of disclosure of the GRM and available channels Evidence of implementation and disclosure of a specific channel for complaints of sexual and gender-based violence Evidence of implementation and disclosure of a specific channel for complaints and consultations regarding the compensation/indemnisation process for the impacts of the establishment of the wayleave easement Evidence of training and continuous updating of the GRM Registration System Complaints / consultations handling rate and responses within the specified time frame Number of complaints / consultations attended to/resolved in relation to the total received
Specific Mechanism for Complaints Addressed to the Contractors in the Construction Phase	<ul style="list-style-type: none"> Evidence of disclosure of the Contractors' GRM channels Evidence of training of the Contractors' social communication team Evidence of training and continuous updating of the Contractors' consolidated complaints logbook Complaints / consultations handling rate and responses within the specified time frame Number of meetings held between the social specialist(s) of TANESCO Management Team and the Contractors

Measure	Indicators
	<ul style="list-style-type: none"> • Submission of complaints / consultations received by subcontractors within the established 24 hours] • Evidence of the installation and disclosure of suggestion boxes in the Project construction sites • Evidence of implementation and disclosure of a specific channel for complaints of sexual and gender violence
Monitoring	<ul style="list-style-type: none"> • Evidence of the periodic review of the SEP's measures

Elaboration: JGP/BENE.

10.0

Reports and Documentation

As already mentioned, the Contractors shall prepare monthly reports to inform the social specialist(s) of TANESCO Management Team about the activities of the SEP under their responsibility and the results thereof.

The social specialist(s) of TANESCO Management Team, in turn, will produce a series of internal and external reports to describe the progress of the implementation of the SEP.

The reports to be disseminated to local stakeholders will be prepared in languages and formats appropriate for their understanding and access.

On a quarterly basis during construction, the social specialist(s) of TANESCO Management Team will issue a social communication report that includes at least the following:

- Activities carried out during the period and their results.
- Schedule of activities for the following period.
- Statistics related to the GRM (complaint/consultation response rate and responses within the agreed time frame, according to the complexity of the complaint/consultation).
- Identify, based on the incidence of similar questions, the degree of information of the population in the area of influence regarding the Project.
- During the operation, TANESCO Management Team will be responsible for issuing the social communication reports on a half-yearly basis.

A consolidated annual report must also be prepared, with the activities of the SEP.

The preparation of this report on the results of the Plan, which will be produced for the stakeholders, must follow these guidelines:

- Decide what type of information needs to be communicated, to which interested parties, by what method and with what frequency.
- Regularly update the record of commitments and communicate progress to interested and affected social actors.
- In particular, disclose any significant changes that have occurred in the commitments or implementation measures that cause an incompatibility with respect to publicly disclosed documents (in accordance with the previous paragraph).
- Disseminate monitoring results, especially monitoring reports from external agents.
- Report periodically on the process of communication and relations with stakeholders in general, both those directly affected and other stakeholders.
- Present information to stakeholders in language and format that is easy to understand.

Annex 1 – Results of the Consultations

Table 1.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 1 (July 19th-27th 2023)

Region	Name	Institution	Position	Concerns	Responses
Geita	Prof. Godius W. Kahyarara (RAS)	Regional Commissioner's Office	Regional Administrative Secretary (RAS)	<p>He advises that the consultant and TANESCO management provide the information to the affected communities before and during the implementation of the project.</p> <p>He advises the Experts and TANESCO to consult the District officials from the initial stage of the project to the implementation stage.</p> <p>The issue of compensation is very critical and should be handled with care and involve the respective councils since they know people with their properties.</p> <p>The alignment should be known by erecting signs such as concrete bicornes.</p>	<p>There will be a consultation process and information about the project will be provided.</p> <p>A Resettlement Plan will be designed and implemented. It will include information to the population and their participation.</p> <p>The final alignment will be well known to everyone to identify the affected areas once it is defined.</p>
	Lutengano G. Mailwiba	Bukombe District Council	District Executive Officer	<p>Their experience shows that compensation usually is a problem between the PAPs and the neighbours and the village government.</p> <p>There is presence of small-scale miners in the district. The alignment should be known to the small-scale miners.</p> <p>He advises the Experts and TANESCO to consult the district officials from the initial stage of the project to the implementation stage.</p> <p>The project is good for development, and it fulfils the government initiative of having an industrial economy. This means without electricity we</p>	<p>Compensation will be careful done to avoid unnecessary conflict and delay of project implementation.</p> <p>Before implementation of the project in the respective areas, the stakeholders and affected communities will be clearly informed during scoping study and full ESIA study</p>

Table 1.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 1 (July 19th-27th 2023)

Region	Name	Institution	Position	Concerns	Responses
				cannot achieve the expected goals.	
	Peter Wambura Sylvester Mayala	Mbogwe District Council	District Executive Director's office Ag. District Executive Officer District Secondary Education Officer	<p>The existing electricity is not sufficient, and they get power through rationing, and not reliable.</p> <p>He advises that the consultant and TANESCO management provide the information to the affected communities before and during the implementation of the project.</p> <p>The issue of compensation is very critical and should be handled with care and involve the respective councils since they are the ones who know people.</p> <p>The alignment should be made known to the small-scale miners to avoid conflicts of interest.</p> <p>Concern about the impact (and possible destruction) of socio-economic activities in the alignment.</p> <p>Ugandan oil Pipeline passes through their district. He suggested that TANESCO liaise with ECOP Management.</p>	<p>The project will reinforce the power supply in the country, improving it. The project focuses on the transmission line.</p> <p>The consultants and TANESCO officials will provide accurate information to the affected communities before and during implementation of the project.</p> <p>Compensation will be considered before implementation of the project.</p> <p>The final alignment will be clearly known in every area once it has been defined.</p> <p>The potential impacts are being taken into consideration in the definition of the alignment.</p> <p>The recommendation to liaise with different stakeholders will be considered.</p>
	Kaunga O. Amani (DAS) Manyonyi Emmanuel Sarah	Nyang'wale District Council	District Commissioner District Executive Director's office Ag. District Executive	<p>They advise that the consultant and TANESCO management provide the information to the affected communities before and during the implementation of the project.</p> <p>The issue of compensation is very critical and</p>	<p>The information will be provided to all stakeholders and communities in region, districts wards and village levels.</p> <p>Compensations will be provided. The recommendation to coordinate with</p>

Table 1.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 1 (July 19th-27th 2023)

Region	Name	Institution	Position	Concerns	Responses
	MSiliarius Prumu Ulzeli Makwaiya		Director	<p>should be handled with care and involve the respective councils since they know people with their properties.</p> <p>The Ugandan oil Pipeline passes through their district. suggested that TANESCO liaise with ECOP Management.</p> <p>There are artisanal miners in most places in the region. The district has several small-scale miners hence the UTIP should consider bypassing their clamps and camps sites since compensation will be very costly due to the value of the land that consists of minerals and most of them are licensed.</p> <p>Concern about the impacts on the socio-economic activities in the area of the alignment.</p>	<p>councils will be considered.</p> <p>The recommendations to liaise with ECOP will also be considered.</p> <p>Compensation will be considered to all affected socio-economic activities in the project alignment</p>
	Kashinje Bukombe	Geita District Council	District Executive Director's office Ag. District Executive Director	<p>There are artisanal miners in most places within the district. The alignment should be known to the small-scale miners.</p> <p>The Ugandan oil Pipeline passes through their district. Suggested that TANESCO liaise with ECOP Management.</p> <p>Advised the experts and TANESCO to consult the district Council officials from the initial stage of the project to the implementation stage.</p> <p>Impacts on the socio-economic activities in the</p>	<p>The project will be well communicated to all affected communities before its implementation</p> <p>The recommendations to liaise with ECOP will also be considered.</p> <p>Consultation will be effectively done in all levels.</p> <p>Compensation will be considered</p>

Table 1.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 1 (July 19th-27th 2023)

Region	Name	Institution	Position	Concerns	Responses
				alignment. The possibility of having problems due to compensation issues to the people affected by the project.	Before compensation all affected people will be accurately identified to avoid unnecessary problems.
Kagera	Toba A. Nguvila	Regional Commissioner's Office	Regional Administration Secretary	<p>He advises that the consultant and TANESCO management provide the information to the affected communities before and during the implementation of the project.</p> <p>The issue of compensation is very critical and should be handled with care and involve the respective councils since they know people with their properties.</p> <p>The alignment should be known by erecting signs such as concrete bicornes.</p> <p>The oil pipeline project may affect the alignment.</p> <p>Expects the project will create jobs and reduce the price of power.</p> <p>Their experience shows that compensation usually is a problem between the PAPs and the neighbours and the village government.</p> <p>He advises the Experts and TANESCO to consult the district officials from the initial stage of the project to the implementation stage.</p>	<p>Consultation will be effectively done to all affected communities before the implementation of the project.</p> <p>Yes, compensation is very important for smoothly implementation of the project and will be done before implementation of the project.</p> <p>The alignment will be clearly identified for everyone to understand and informed once it is defined.</p> <p>The recommendations to liaise with ECOP will also be considered.</p> <p>Potential conflicts related to land ownership will be taken into consideration.</p>
	Geofrey	Misenyi District	District Executive	Expectation of reduction of the power cost, as	UTIP will reinforce the supply of

Table 1.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 1 (July 19th-27th 2023)

Region	Name	Institution	Position	Concerns	Responses
	Biashara Betreace Sanga		Director's Office Ag. District Executive Director	<p>currently they are not part of the national grid.</p> <p>Advises that the consultant and TANESCO management provide the information by liaising with the district official for them to write letters to the Wards Executive Officers who will then inform the village councils.</p> <p>Since the alignment will pass through the Sugar Industry land considers it will be good to consult them.</p>	<p>electricity in the country. This is a project focused on transmission.</p> <p>Official information will be provided to all stakeholders to raise awareness and asking for support on how to access local levels such as wards and villages.</p> <p>The recommendation to involve Kagera sugar management will be taken in consideration.</p>
	Julius K. Leizer DC) Michael F. Mryumu Kitila Brayson	Karagwe District Council	District Executive Director's office Ag. District Executive Director District Commissioner	<p>Currently, they relay power from Uganda. They think being connected to the national grid will reduce the high tariff of electricity in the district.</p> <p>The consultant and TANESCO management should provide the information by liaising with the district official for them to write letters to the Wards Executive Officers who will then inform the village councils.</p> <p>Concern on impact on trees. Considers TANESCO should grow trees after cutting them.</p> <p>TANESCO should consider the use of underground cables since they are more environmentally friendly.</p>	<p>UTIP will reinforce the supply of electricity in the country. This is a project focused on transmission.</p> <p>Official information will be provided to all stakeholders to raise awareness. Consultants and TANESCO will also ask for support on how to access local levels such as wards and villages.</p> <p>Plans to manage environmental impacts (such as loss of trees) will be implemented.</p>
	Solomon Kimulike	Ngara District Council	District Executive Director	Currently there is an acute shortage of electricity in the district which affects so much the health facilities including schools. Expects the project	UTIP will reinforce the supply of electricity in the country. This is a project focused on transmission.

Table 1.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 1 (July 19th-27th 2023)

Region	Name	Institution	Position	Concerns	Responses
				<p>will help on this respect.</p> <p>The consultant and TANESCO management provide the information by liaising with the district official for them to write letters to the Wards Executive Officers who will then inform the village councils.</p> <p>Concerns on how land compensation will be managed, since there are problems such as land conflicts between the farmers and livestock keepers and conflicts/ problems with village boundaries between the villages that will benefit the project alignment.</p> <p>If compensation is not handled properly can create misunderstandings among the PAPs and in the council in general.</p>	<p>Information will be provided to all stakeholders and affected communities.</p> <p>All affected people will be accurately identified for compensations to avoid unnecessary conflict during project implementation.</p> <p>Compensation will be properly handled to avoid misunderstandings.</p>
	Innocent T. M. Mukandara Thomas Milimo	Biharamulo District Council	District Commissioner District Executive Director District Economist District Planning Officer	<p>Currently, there is an acute shortage of electricity in the district which affects so much the social services and economic activities. The expectation is that the project will help with this.</p> <p>Concerns on how land compensation will be managed since there are problems such as land conflicts between the farmers and livestock keepers and conflicts/ problems with village boundaries between the villages that will benefit the project alignment.</p> <p>If compensation is not properly handled can create</p>	<p>UTIP will reinforce the supply of electricity in the country. This is a project focused on transmission.</p> <p>Clear identification of landowners will be done to avoid misunderstandings among groups and villages.</p> <p>Compensation will be well handled to avoid unnecessary conflicts.</p> <p>Planting tree projects will be considered</p>

Table 1.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 1 (July 19th-27th 2023)

Region	Name	Institution	Position	Concerns	Responses
				<p>misunderstandings among the PAPs and council in general.</p> <p>Loss of trees. The project should consider the restoration of the trees and other vegetation losses.</p>	to replace loss of trees.
Shinyanga	Alex Mpsa Leo Mwakataobe (RM) TANESCO	Regional Commissioner's Office	Regional Administrative Secretary (RAS)	<p>For easy accessibility to the local communities, you need to have an interpreter who knows sukuma and other local languages in the respective areas.</p> <p>The project is good and will stimulate development in the countries</p> <p>The issue of compensation must be carefully handled.</p> <p>Prior information must be provided to all stakeholders and affected wards and villages.</p>	<p>Local government official who knows the languages will accompany us to simplify communication with local communities in respective areas.</p> <p>Compensation will be accurately done to all affected people.</p> <p>The project will be effectively communicated to all stakeholders and local communities.</p>
	Duncan Kasembe	Shinyanga Municipal Council	Municipal Executive Director's office Ag. Municipal Executive Director	<p>Advised that the consultant and TANESCO management provide the information to the affected communities before and during the implementation of the project.</p> <p>Ibadakuli substation is located near the Airport and part of the land will be used by the alignment. Suggested that TANESCO liaise with Tanzania Aviation Authority Management.</p> <p>Expect that the project will create jobs, both direct and indirect, for the population.</p>	<p>TANESCO and the project teams will provide required information to all affected communities and take note of their concerns for clarification.</p> <p>The recommendation to contact the airport authorities will be considered, to provide them information and simplify project implementation.</p> <p>During the project implementation direct and indirect employment opportunities will be available. Local communities</p>

Table 1.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 1 (July 19th-27th 2023)

Region	Name	Institution	Position	Concerns	Responses
				<p>Potential destruction of socio-economic activities in the alignment.</p> <p>Advised the Experts and TANESCO to consult the Municipal Council officials from the initial stage of the project to the implementation stage.</p>	<p>will be considered as well.</p> <p>Compensation will be considered</p> <p>Consultation will be made to all stakeholders from region to village levels.</p>
	Katimba Khamis J Eikana Zablon Teddy Jacob Priscia J. Pius Judica J. Sumari Elikana Daud Zabron	Msalala District council	District Director District Planning Officer District Community Development Officer Ward executive officer – Lunguya Ward executive officer – Bugarama	<p>Clear information must be provided to all communities where the alignment is passing through.</p> <p>Communities will not have any problem with this project since they will benefit from it.</p> <p>The major issue is compensation to the affected socio-economic activities and land which will be taken during the project implementation.</p> <p>For effective implementation of UTIP local leaders such as WEO and VEO must be involved and accompany the project teams to the local communities</p>	<p>UTIP will reinforce the supply of electricity in the country. This is a project focused on transmission.</p> <p>Communities will be informed during the meeting in ward and village levels.</p> <p>Compensation will be done to all affected people in the alignment.</p> <p>Local leaders will be involved in the project and will help to introduce the teams to their communities during the meetings.</p>

Table 2.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 2 (May – July 2024)

Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
Shinyanga	Anamy Tarimo	Regional Manager – TANESCO Shinyanga	Ag. Regional Manger	<ol style="list-style-type: none"> 1. Shinyanga is experiencing electricity outages since the existing distribution lines are from Mabuki and Ibadakuli substations, hence the proposed Transmission line of 400KV will be of great help since the outages experienced. 2. Ibadakuli substation will have high capacity of distributing electricity to many users within Shinyanga region. 3. The project will improve the Socio - economic activities of Shinyanga Region, Geita and Kagera at large 4. In case of any challenge don't hesitate to consult us, we are here to help 	<ol style="list-style-type: none"> 1. Noted 2. Noted 3. Noted 4. Thank you for your continued cooperation
	Alex Mpasa Leo	RC -Shinyanga Office	Ag. Regional Administrative Secretary	<ol style="list-style-type: none"> 1. There are a lot of issues concerning power availability. 2. A lot of investors are raising complaints about power availability, hence this proposed project of 400KV came be a cure for all the complains. 3. There are areas where REA contractors are supplying electricity and we have received a lot of complaints about villagers are not connected with electricity. We shall follow-up and see what is happening. 	<ol style="list-style-type: none"> 1. Noted 2. Noted 3. We shall note this for more information and feedback
	Mwacheni Judith Peres Kamugisha Josephat P Mushi	Shinyanga Municipal Council and Shinyanga	Ag. Municipal Human Resource Officer Municipal Community Development	<ol style="list-style-type: none"> 1. We are expecting that the Municipal Council will benefit since the Contractor shall pay service levies to the Council. 2. We hope that the proposed transmission line route has avoided the designated area for the bus stand/station. 3. It is important to estimate the amount of solid waste 	The initiative has more advantages than disadvantages when it comes to the advancement of the country and people as a whole.

Table 2.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 2 (May – July 2024)

Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
	David Rwazo Charles Victor Enock Magese Edward Mayenga Joseph Nyomelo	District Council	Officer Land Officer Ag. District Executive Officer Engineer of Works Land Officer Environmental Officer District Community Development Officer	<p>to be generated during project implementation.</p> <p>4. PAPs grievances should be handled carefully and should be given knowledge regarding their compensation payments on how to use it wisely should be given to them adequately.</p> <p>5. Preparation of the mitigation plan for the expected impacts should be considered.</p> <p>6. TANESCO should ensure there is mechanism to control encroachments from the community to the way leave corridor during operation phase of the project</p> <p>7. Awareness on the spread of HIV/AIDs and unwanted pregnancies should be considered throughout the project implementation</p> <p>8. The contractor should consider employment opportunities during construction to the youth within the respective villages traversed by the transmission line project.</p> <p>9. Gender Based Violence (GBV) and Violence Against Children (VAC) should be avoided during implementation of the proposed TL project.</p>	<p>Yes, the project to the large extent has avoided sensitive areas like that one.</p> <p>Noted. However, TANESCO will enter into agreement with Village government for security and clean-up of way leave area of transmission line after construction completion.</p> <p>This will control encroachments problem caused by community. This is well noted, all mechanism for preventing GBV and VAC will be formulated and implemented during execution of the proposed TL project.</p>
		District Executive Director Msalala (includes Environmental		<p>1. We are grateful for the initiatives of the GOT for the decision to implement the proposed project on our side we see more benefits</p> <p>2. We acknowledge your initiatives towards the implementation of this project</p> <p>3. The proposed TL project will enhance our</p>	<p>This is well noted and RMO office will be consulted and work together during the assessment.</p> <p>Noted, Contractor will</p>

Table 2.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 2 (May – July 2024)

Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
		Management Officer, Forest, Engineer of works and Community Development Officer) officer, Natural resources officer		<p>international diplomacy with our fellow neighbours of Uganda.</p> <p>4. The compensation payment should be fair and prompt to all affected villages</p> <p>5. Consider consulting local leaders in all stages of project implementation</p> <p>6. Kalole area has a lot of mining activities going on, hence need to work hand by hand with Resident Mining Officer (RMO) office.</p> <p>7. During implementation of the proposed TL project, contractor should abide with our laws and regulations especially on paying a minimum wages and other statutory benefit to workers accordingly.</p> <p>8. The project's contractor(s) should source all materials for works such as cement, aggregate, sand and gravel from authorized dealers who available within our Council</p> <p>9. Our major concern is on the impact of the compensation payments, people should be educated on the financial management before the compensation payment has been affected.</p> <p>10. In case of any problem the Contractor / TANESCO should consult the district officials</p>	<p>follow our national laws and regulations during implementation of the proposed TL project.</p> <p>Thanks for your continued cooperation.</p> <p>All observations and recommendations have been noted.</p>
	Fabian Balele Franaeli Sumari Victor Nkya	Tanzania Forest Service (TFS) – Shinyanga Region	District Forestry Conservation Officer Bee Keeping Officer Conservation	<p>1. During implementation of the proposed TL project, TANESCO together with project's contractor should involve TFS when clearing trees in the way leave.</p> <p>2. Indigenous trees need special ways of removing it once encountered, hence TFS should be informed so that they can provide professional advice.</p>	<p>Thanks for your continued cooperation. All observations and recommendations have been noted.</p>

Table 2.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 2 (May – July 2024)

Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
			Officer I	3. There are three reserved forests namely Lubega, Mwantini and Nindo in Shinyanga council. Nindo reserved forest is located in Iselamagazi village. 4. Fair and prompt compensation must be attained prior implementation of the proposed TL project construction. 5. They mentioned that the proposed TL project will fasten development to people who are in need of sustainable electricity for their daily activities. 6. In case of any problem consult us, TFS is here to help anytime.	
	Daniel L Mapunda Selemani y Shemlugo	Shinyanga Resident Mining Office	Residence Mining Officer Mining Licensing Officer	1. The proposed project will ensure sustainability of power to many miners who are in need of power to operate their plant and crushers. 2. TANESCO need to share designed route of the proposed TL project to know where exactly the affected mining area will be. 3. RMO office will be happy to work together with TANESCO all the time during implementation of the proposed project.	Noted, TANESCO promised to share the design route with Resident Mining Office. Thanks for your continued cooperation. All observations and recommendations have been noted.
	Kennedy Mgawe	Police - Shinyanga	SO I	1. The Shinyanga region is safe to all, and the police is willing to corporate with all parties (TANESCO/Contractor and Consultant) during implementation of the proposed TL project. 2. No big crime scene occurred in past three years in Shinyanga region 3. Gender Based Violence and Violence Against Children occurred in Shinyanga region. However,	Noted, various awareness campaign including GBV, VAC, STDS and HIV/AIDS will be disseminated during implementation of proposed TL project. Thanks for your continued

Table 2.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 2 (May – July 2024)

Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
				<p>Police Shinyanga disseminate the knowledge about GBV and VAC frequently</p> <p>4. Shinyanga police have Gender desk and social Police officer at district and ward level respectively.</p> <p>5. Awareness campaign regarding GBV, VAC, STDs and HIV/AIDS during implementation of the proposed TL project is highly recommended.</p> <p>6. In case of any problem consult us, Police Shinyanga region is here to help anytime.</p> <p>7. They also provided the list of Crime for the past three years.</p>	<p>cooperation.</p> <p>All observations and recommendations have been noted.</p>
	Kipamila F. Hans	TANROADS	Ag. Regional Manager	<p>1. Where the TL cross the roads, headroom height should be more than 6m to allow smooth passing of vehicles and other machines.</p> <p>2. TL poles should be installed at the edge of road Right of Ways to allow future expansion of the roads without need additional costs for reallocation of utilities including TANESCO electrification lines.</p> <p>3. In case of underground transmission, TANESCO should inform TANROADS for approval and supervision prior cutting off/ dismantling the roads.</p> <p>4. TANESCO should work together with TANROADS during implementation of the proposed TL project. TANROADS is willing to collaborate with the project when need arise.</p>	<p>Thanks for your continued cooperation.</p> <p>All observations and recommendations have been noted.</p>
	Samson Pamphili	TARURA	Ag. Regional Manager	<p>1. Where the TL cross the roads, headroom height should be more than 6m to allow smooth passing</p>	<p>Noted, Contractor(s) will be guided accordingly.</p>

Table 2.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 2 (May – July 2024)

Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
				<p>of vehicles and other machines</p> <p>2. Allowable weight for load vehicle is 10 tons, hence the Contractor's vehicles should abide with this weight to protect their bridges and culverts designed for 10 tons maximum from damage. Any above 10 tons of load, TARURA should be informed in order to grant for permit.</p> <p>3. TANESCO should work together with TARURA during implementation of the proposed TL project. TARURA is willing to cooperate with the project all time.</p>	<p>Thanks for your continued cooperation.</p> <p>All observations and recommendations have been noted for consideration.</p>
	SF. Martin Nyambala	FIRE AND RESCUE FORCE	AG. RFO	<p>1. Construction campsites should have all infrastructure for fire control and accident when occurs.</p> <p>2. Adequately firefighting equipment such as water reserve, fire extinguishers etc. should be in place and fire warden/safety officer should be present at the sites.</p> <p>3. Way leave of TL should be clearly demarcated and clean to avoid fire incident to happen.</p> <p>4. Fire rescue drill should be performed during implementation of the proposed TL project.</p> <p>5. TANESCO should work together with Fire and rescue force during implementation of the proposed TL project. Fire and rescue force Shinyanga is willing to cooperate with the project all time.</p> <p>6. Ensure involvement of the local leaders in this exercise in order to gain cooperation from them</p> <p>7. It is good to note that at Buchambi, Masagala,</p>	<p>Thanks for your continued cooperation.</p> <p>All observations and recommendations have been noted for consideration.</p> <p>Thanks for your continued cooperation.</p> <p>All observations and recommendations have been noted for consideration.</p>

Table 2.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 2 (May – July 2024)

Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
				Mwadui Luhumbo and Maganzo Villages are areas for small miners 8. We have no objection since the Government has a good intention in the people by implementing this project.	
	Jeremiah Kileo Bernard W. Maloko	Tanzania Airport Authority (TAA)	Airport Security Officer Civil Engineer	1. The height of towers should be considered to avoid unnecessary aerodrome traffic accidents. However, the proposed TL project site does not enter into TAA area 2. TAA is willing to corporate with TANESCO during implementation of the proposed TL project.	Thanks for your continued cooperation. All observations and recommendations have been noted for consideration.
Geita	Lucas Karoli Husna Toni Ntiryo Ezekiel Mrema M Juma Mabula E Kanga Livinos J Bampabura Juliet Mfinanga	TANESCO Nyangwale Nyang'wale District Council officer,	District Manager District Executive Director, Environmental Management Officer, Forest officer, Land Officer, Planning Natural resources officer, Engineer of works Community Development Officer)	1. We are grateful for the initiatives of the GOT for the decision to implement the proposed project on our side we see more benefits 2. We acknowledge your initiatives towards the implementation of this project 3. The proposed TL project will enhance our international diplomacy with our fellow country of Uganda. 4. The compensation payment should be fair and prompt to all affected villages 5. Consider consulting local leaders in all stages of project implementation. 6. Isonda area has a lot of mining activities going on, hence need to work hand in hand with Resident Mining Officer (RMO) office. Furthermore, Council has area planned for small mining industries. 7. Isonda and Igeka village owned forest reserved area of 888 hectare, if happen the proposed TL	This is well noted, local leaders will be involved in all stages of project implementation. Noted with consideration of contacting RMO office. Noted, Environmental and Social Management and Monitoring plans including restoration plan will be formulated during implementation of the proposed TL project. Noted and Project's contractor(s) will be guided accordingly.

Table 2.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 2 (May – July 2024)

Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
				<p>project pass through village reserved forest, restoration activities should be implemented accordingly.</p> <p>8. No historical heritage founded in the village affected by the proposed TL project.</p> <p>9. During implementation of the proposed TL project, contractor should abide with our laws and regulations especially on paying a minimum wages and other statutory benefit to workers accordingly.</p> <p>10. The project's contractor(s) should outsource all materials for works such as cement, aggregate, sand and gravel from authorized dealers who available within our Council.</p> <p>11. Our major concern is on the impact of the compensation payments, people should be educated on the financial management before the compensation payment has been affected.</p> <p>12. In case of any problem consult us.</p>	<p>Thanks for your continued cooperation. All observations and recommendations have been noted for consideration.</p>
	Amon C Mimata	Police - Geita	Regional Police Commander	<p>1. The Geita region is safe to all, and the police is willing to corporate with all parties (TANESCO, Contractor and Consultant) during implementation of the proposed TL project.</p> <p>2. No big crime scene occurred in past three years in Geita region</p> <p>3. Sustainable availability of electricity in Geita is crucial due to the fact that electricity creates a lot of employment of people at mining industries available in Geita region, absence of it means no job to people hence number of crimes will be increased and vice versa.</p>	<p>Thanks for your continued cooperation.</p> <p>All observations and recommendations have been noted for consideration.</p>

Table 2.0
Meetings held with stakeholders
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Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
				4. Geita police will provide adequately security of people and project properties during implementation of the proposed TL project. 5. Gender Based Violence and Violence Against Children occurred in Geita region. However, Police Geita disseminate the knowledge about GBV and VAC frequently 6. Geita police have Gender desk and social Police officer at district level only, plan to go up to ward level. 7. Awareness campaign regarding GBV, VAC, STDs and HIV/AIDS during implementation of the proposed TL project is highly recommended. 8. In case of any problem consult us, Police Geita region is here to help anytime 9. He provided the list of crime for the past three years.	
	Joseph Kumburu	Resident Mining Office (GEITA & MBOGWE)-Kahama Office	Residence Mining Officer	1. The proposed project will ensure sustainability of power to many miners who are in need of power to operate their plants and crushers. 2. TANESCO need to share designed route of the proposed TL project to know where exactly the affected mining area will be. 3. RMO office will be happy to work together with TANESCO all the time during implementation of the proposed project.	Noted for consideration that TANESCO will share designed route for the proposed TL project Thanks for your continued cooperation. All observations and recommendations have been noted for consideration.
	Jerry Mwakapemba Eng. David J.	TARURA - Geita	Regional Engineer Regional	1. Where the TL cross the roads, headroom height should be more than 6m to allow smooth passing of vehicles and other machines	Noted, project's contractor will be guided accordingly

Table 2.0
Meetings held with stakeholders
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Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
	Msechu Godfrey Vedastor Robert Daudi		Manager Sociologist Environmental Management Officer	<p>2. Allowable weight for load vehicle is 10 tons, hence the Contractor's vehicles should abide with this weight to protect our bridges and culverts designed for 10 tons maximum from damage. Any above 10 tons, TARURA should be informed and apply for permit. However, some of bridge and culverts in GEITA where there is route for public buses, their culverts and bridge designed for 20 tons capacity.</p> <p>3. Project's contractor should apply dust control mechanism when use TARURA gravel roads when passing village towns and centres.</p> <p>4. Project's contractor should take road safety measures such as speed limits when using TARURA roads.</p> <p>5. TANESCO should work together with TARURA during implementation of the proposed TL project. TARURA is willing to support the project all time.</p>	<p>Thanks for your continued cooperation.</p> <p>All observations and recommendations have been noted for consideration.</p>
	Kalila King Sarah Membo Juma Marcel Manase Nkuli Sospeter Mashamba	Mbogwe District Council	<p>Ag.District executive officer</p> <p>Ag District community development officer</p> <p>Environmental officer</p> <p>Land officer</p> <p>Human Resource</p>	<p>1. They mentioned that they totalaccept the project with no objection.</p> <p>2. Mbogwe Council has experience in pipeline from Tanga to Uganda projects by EACOP.</p> <p>3. They proposed the TANESCO to adhere with all Environmental rules and regulations before starting to implement the project.</p> <p>4. Since the proposed transmission line route is already known and valuation exercise is not yet done, they advised TANESCO to either conduct pre-valuation exercise i.e., counting everything within the power transmission line to minimize chances of cheating and compensation costs. There</p>	<p>Thanks for your continued cooperation.</p> <p>All observations and recommendations have been noted for consideration.</p>

Table 2.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 2 (May – July 2024)

Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
			Officer	<p>is a tendency of people who are not faithful to either construct buildings and plant trees with the purpose of gaining more money within the entire line.</p> <p>5. Ensure the public engagement involves local leaders in order to get positive response and cooperation. It is good to use community development officers since they are familiar with such projects in the district.</p> <p>6. During implementation of the proposed TL project, contractor should abide with our laws and regulations especially on paying a minimum wages and other statutory benefit to workers accordingly.</p> <p>7. The project's contractor(s) should outsource all materials for works such as cement, aggregate, sand and gravel from authorized dealers who available within our Council</p> <p>8. Our major concern is on the impact of the compensation payments, people should be educated on the financial management before the compensation payment has been affected.</p> <p>9. In case of any problem the district official should be consulted.</p>	
	Muyungu J Frumeni	TANESCO Bukombe	Ag. District Manager	<p>1. They are willing to offer 100% support to the project during implementation</p> <p>2. No authorized and designated dumping site located within Bukombe area; they use executed borrow pits located at Liobaika area in Luzewa village as dumping site.</p> <p>3. The project's contractor(s) should outsource all</p>	All observations and recommendations have been noted for consideration.
	Melania D Kwai	Bukombe District Council	Ag. District Executive Officer		

Table 2.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 2 (May – July 2024)

Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
	Lutengano g. Mwaliba		District Executive	materials for works such as cement, aggregate, sand and gravel from authorized dealers who available within our Council	
	Elisha W, Jengela		Director	4. No forest reserve which will be affected by the proposed TL project	
	Jackson S. Miagio		District Environmental Management Officer	5. Before clearing of the way leave, the Contractor should notify District Council Forest department.	
	Augustino H Simbeye		District Infrastructure Rural and Urban Development Officer	6. There are group of people who are dealing with plantation of trees in the district, during restoration activities of the project, these group must be considered.	
	Dorice Kinyaga		District Land Officer	7. Bukombe council has seasonal river known as Nyikonga river, However, if contractor want to extract water from it must obtain extraction permit from Lake Victoria Basin Water Board.	
	Anastella Athanase		District Natural Resources and Environmental Conservation Officer	8. Fair and timely compensation must be attained prior implementation of the proposed TL project to avoid future conflict from communities who will be affected by project.	
			District Community Development Officer		
Kagera Region	ACP. Yussufu Daniel	POLICE Kagera	Staff Officer	1. Provided the data on crime records for the past three years.	All observations and recommendations have been noted for consideration.
	ACP. Juma Jangila		RFBO Kagera		

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Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 2 (May – July 2024)

Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
	A/NSP S. S. Kamwaga	Kagera Region	Gender Desk		
	Godfrey Surera	TANESCO Chato	Ag. District Manager	<ol style="list-style-type: none"> 1. We are grateful for the initiatives of the Government of Tanzania for the decision to implement the proposed project on our side we see more benefits 2. We acknowledge your initiatives towards the implementation of this project 3. The proposed TL project will enhance our international diplomacy with our fellow Ugandan. 4. The compensation payment should be fair and prompt to all affected villages 5. Consider consulting local leaders in all stages of project implementation 6. During implementation of the proposed TL project, contractor should abide with our laws and regulations especially on paying a minimum wages and other statutory benefit to workers accordingly. 7. The project's contractor(s) should outsource all materials for works such as cement, aggregate, sand and gravel from authorized dealers who available within our Council. 8. Chato council has seasonal river known as Ipalamasi river, However, if contractor want to extract water from it must obtain extraction permit from Lake Victoria Basin Water Board. 9. No sewage system available in Chato council, waste treatment pond are located in Geita region. 10. Hazardous waste will be incinerated at Chato Zonal referral hospital located in Chato. 	All observations and recommendations have been noted for consideration.
	Cosmas Maganga	Chato District Council)	Ag. DFAO		
	Joseph Nyamko		Ag. DCDO		
	Issa Mohamed		DIRUDO		
	Philip M George	TARURA Kagera	DNRECO		
	Mwenda Aloyce		Ag. DLDO		
	Willson Charles		Regional Manager		

Table 2.0
Meetings held with stakeholders
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Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
				11. Our major concern is on the impact of the compensation payments, people should be educated on the financial management before the compensation payment has been affected. 12. In case of any problem consult us.	
	Col. Hamisi M. Manga	Misenyi District Council	District Commissioner	1. For some years we have been depended on electricity from Uganda of which currently start to be not enough due to increase of demand of electricity. This new proposed TL project will carter all the challenge we face right now. 2. We are grateful for the initiatives of the Government for the decision to implement the proposed project on our side we see more benefits. Due to war occurred at 1977-1979, some of the area (in this project ie. Nsungu and Mutukula ward) still have underground explosive booms materials which are not yet removed by special task military force expert, hence special attention is need during implementation and TANESCO should work together with the military force to disarm the explosive materials. The Military force agreed to work together with TANESCO.	Noted, during implementation of the proposed project, TANESCO will work together with this special task All observations and recommendations have been noted for consideration.
	John P Wanga Beatrice N. Sanga	Missenyi District Executive Directors Office	District Executive Director District Community Development Officer	1. The proposed TL project will boost industries development in our district due to the fact that Kyaka substation will have high capacity of distributing enough power to all who are in need of electricity. 2. The project's contractor should pay statutory service levies accordingly 3. During implementation of the proposed TL project, contractor should abide with our laws and	All observations and recommendations have been noted for consideration.

Table 2.0
Meetings held with stakeholders
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Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
	Michael Fidelis	TANESCO Missenyi	District Manager	<p>regulations especially on paying a minimum wages and other statutory benefit to workers accordingly.</p> <p>4. The project's contractor(s) should outsource all materials for works such as cement, aggregate, sand and gravel from authorized dealers who available within our Council</p> <p>5. Our major concern is on the impact of the compensation payments, people should be educated on the financial management before the compensation payment has been affected.</p> <p>6. In case of any problem consult the district officials.</p>	
	Merichelavan Mani Catherine Helle Verngon Van Bleark Baraka C. Mgheni Sira Philip Laurent	Kagera Sugar Co.	Ex I Manager Electrical Engineer Project Engineer Project Engineer Factory Manager Environmentalism	<p>1. TANESCO should consult the management and share the TL drawings which cross the company premises.</p> <p>2. The company is ready to cooperate with TANESCO</p> <p>3. The proposed TL project will boost industries development in our district due to the fact that Kyaka substation will have high capacity of distributing enough power to all who are in need of electricity.</p>	All observations and recommendations have been noted for consideration.
	Henrietta Willam (DCDO)	Karagwe District Council	(DED, EMO, Land officer, Planning officer, DCDO, engineer of works,)	<p>1. For some years they have been depended on electricity from Uganda of which currently start to be not enough due to increase of demand of electricity. This new proposed TL project will carter all the challenge we face right now.</p> <p>2. We are grateful for the initiatives of the government for the decision to implement the proposed project on our side we see more benefits</p> <p>3. The proposed TL project will boost industries</p>	<p>Noted, yes, the proposed project will enhance the capacity of Kyaka substation from 220KV to 400KV.</p> <p>Noted, project's contractor(s) will be guided accordingly to ensure all</p>

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Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
				<p>development in our district due to the fact that Kyaka substation will have high capacity of distributing enough power to all who are in need of electricity.</p> <p>4. During implementation of the proposed TL project, contractor should abide with our laws and regulations especially on paying a minimum wages and other statutory benefit to workers accordingly.</p> <p>5. The project's contractor(s) should source all materials for works such as cement, aggregate, sand and gravel from authorized dealers who available within our Council</p> <p>6. The project's contractor should pay statutory service levies accordingly.</p> <p>7. Our major concern is on the impact of the compensation payments, people should be educated on the financial management before the compensation payment has been affected.</p> <p>8. Since the proposed transmission line route is already known and valuation exercise is not yet done, I would advise TANESCO to either conduct pre-valuation exercise i.e., counting everything within the power transmission line to minimize chances of cheating and compensation costs. There is a tendency of people who are not faithful to either construct buildings and plant trees with the purpose of gaining more money within the entire right of way</p> <p>9. Ensure the public engagement involves local leaders in order to get positive response and</p>	<p>statutory service levies are paid.</p> <p>All observations and recommendations have been noted for consideration.</p>

Table 2.0
Meetings held with stakeholders
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Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
				cooperation. It is good to use community development officers are experts in this exercise. 10. In case of any problem consult us.	
	Thomas Mahenge George Geoffrey Lydia I Nyeme Abbas Rwegamya Darra Silla N Flora Mwakalirene	Biharamulo District Council	Ag.DED, EMO, CDO, District engineer, Land officer TFS Biharamulo	1. We are grateful for the initiatives of the government for the decision to implement the proposed project on our side we see more benefits 2. We acknowledge your initiatives towards the implementation of this project 3. The proposed TL project will enhance our international diplomacy with our fellow Ugandan. 4. The compensation payment should be fair and prompt to all affected villages 5. Consider consulting local leaders in all stages of project implementation 6. During implementation of the proposed TL project, contractor should abide with our laws and regulations especially on paying a minimum wages and other statutory benefit to workers accordingly. 7. The project's contractor(s) should outsource all materials for works such as cement, aggregate, sand and gravel from authorized dealers who available within our Council. sand quarry is obtained at Lukirilwe area, there are two rivers (Mwiruzi and Nyovozi river) which contractor can obtain water for construction after possessing water extraction permit from authorized board. 8. The council will arrange reallocation of all graves affected by project in collaboration with their families. 9. Awareness campaign regarding GBV, VAC, STDs	Noted, local leaders will be consulted throughout the implementation of the project. Noted, project's contractor(s) will be guided accordingly. All observations and recommendations have been noted for consideration.

Table 2.0
Meetings held with stakeholders
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Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
				<p>and HIV/AIDS during implementation of the proposed TL project is highly recommended.</p> <p>10. Ensure the public engagement involves local leaders in order to get positive response and cooperation. It is good to use community development officers are experts in this exercise</p> <p>11. In case of any problem consult us.</p>	
		Tanzania Forest Service (TFS)		<p>1. During implementation of the proposed TL project, TANESCO together with project's contractor should involve TFS when clearing way leave.</p> <p>2. Indigenous trees need special ways of removing it once encountered, hence TFS should be informed.</p> <p>3. There are two reserved forests namely Nyankatara and Biharamulo-Kahama in Biharamulo council.</p> <p>4. Fair and prompt compensation must be attained prior implementation of the proposed TL project.</p> <p>5. During construction of the proposed project, only project workers will be allowed to pass through reserved forest.</p> <p>6. All demolished trees will be utilized accordingly, TFS – Biharamulo are willing to work together with project's contractor(s) all time needed.</p> <p>7. The contractor should ensure that way leave be the only place all construction activities take place to avoid further destruction of forest reserved</p> <p>8. The proposed TL project will faster development to people who are in need of sustainable electricity for their daily activities</p> <p>9. In case of any problem consult us, TFS is here to help anytime.</p>	<p>Noted, contractor will be guided accordingly</p> <p>All observations and recommendations have been noted for consideration.</p>

Table 2.0
Meetings held with stakeholders
Site Reconnaissance Inspection - TRIP 2 (May – July 2024)

Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
Other stakeholders	Lordgad R. Bishanga	OSHA - Lake Zone Office	Lake zone Manager	<ol style="list-style-type: none"> 1. Contractor to ensure review of OSHA Act No.5 of 2003 and its Regulations have outlined the responsibilities of the contractor and the project Proponent 2. The Contractor shall ensure Safety and Health Management Plan place 3. Contractor is required to register the workplan at OSHA and ensure certificate of registration of workplace is in place 4. Safety and Health training to the construction crew at site shall be conducted 5. At the construction site, the Contractor shall ensure there is Safety and Health personally to oversee all issues concerning safety and health of the workers onsite. It is important formulate HSE committee 6. The preparation of risk assessment and should be communicated to all workers onsite 7. The contractor should ensure availability of adequate toilets and safe clean drinking water at all sites. 8. There should be adequately well trained first Aiders by OSHA 9. All recorded incidences and accidents need to be recorded onsite and reported at OSHA 10. The contractor shall undertake medical examination of the workers as per the requirement of OSHA Act, 2003 11. All the cranes and scaffold should be inspected by inspector from OSHA office. 	<p>TANESCO will ensure compliance with the requirements of OSHA Act no.5 of 2003.</p> <p>All observations and recommendations have been noted for consideration.</p>
	Shaban Mussa	Fire and Rescue	AG. RFO	1. TANESCO/Contractor should submit the	

Table 2.0**Meetings held with stakeholders****Site Reconnaissance Inspection - TRIP 2 (May – July 2024)**

Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
	Philbert Kanoni	Force -Kagera		<ul style="list-style-type: none"> substations and construction camps design drawings for review, recommendations and approval 2. TANESCO to prohibit any human activities under the transmission line 3. If the Transmission Line will cross the road, safety clearance should be considered 4. The submission of the drawings will require payment of the fees as stated in Fire and Rescue Act of 2007 and Building inspection regulations of 2015 5. Inspection of the substation will be conducted before operations in order to check the compliances 6. Construction campsites should have all infrastructure for fire control and accident when occur. 7. Adequately firefighting equipment such as water reserve, fire extinguishers etc. should be in place and fire warden/safety officer should be installed at the sites. 8. Way leave of TL should be clearly demarcated and clean to avoid fire incident to happen. 9. Fire rescue drill should be performed during implementation of the proposed TL project. 10. TANESCO should work together with Fire and rescue force during implementation of the proposed TL project. Fire and rescue force Kagera is willing to support the project all time. 	

Table 2.0
Meetings held with stakeholders
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Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
		Kagera Sugar Industry and sugar cane plantation estate		<ol style="list-style-type: none"> 1. Currently they are using 8 MW from Kyaka substation. 2. They have plan to expand their industry next year which will increase their electricity demand up to 15MW. 3. Currently, their area experience three projects namely (1) Kyaka – Benako (220KV) (2) Kakono – Kyaka (220KV) and this proposed project of UTIP of 400KV all these are crossing their sugar estate land. 4. All the project requires separate land which might affect their irrigation scheme designed but Kagera sugar is willing to accommodate all these projects for the sake of the country due to the fact that these projects will bring development to people and nation at large. 5. Contractor workers should obey and follow all by laws of Kagera sugar during the implementation of the proposed project while working inside Kagera sugar estate. 6. Contractor workers should have ID and must register in their registration log book when entering Kagera sugar estate during implementation of the proposed project. 7. Contractor should work together with Kagera sugar management on issue of water for construction activities. 8. Kagera sugar is willing to support the implementation of the proposed project anytime needed. 	All observations and recommendations have been noted for consideration.

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Meetings held with stakeholders
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Region	Name	Institution	Position	Stakeholders' concerns	Remarks/ Response
	Awadh Sipati Alloys N.S. Maira Ramadhani Somari	Kitengule Prison Area	HEU DPPPEO DIA	<ol style="list-style-type: none"> 1. All project activities should be performed in collaboration with prisoner office 2. It will be allowed to any project workers to enter in the prison area without permission and supervised by management 3. Kitengule prison is in progress of starting irrigation scheme hence TANESCO should share designed route for the proposed UTIP project to allow them to plan according without making disturbance in future. 4. Kitengule Prison management is willing to support the implementation of the proposed UTIP project anytime needed. 	<p>Noted, TANESCO will share the designed route as requested.</p> <p>All observations and recommendations have been noted for consideration.</p>
	Dr. Siima Bakengesa Daniel C. Pancras	Ministry of Natural Resources and Tourism, Dodoma Headquarters	Director of Forestry Conservation Principle Forest Officer	<ol style="list-style-type: none"> 1. Appreciated the government initiatives. 2. They are willing to collaborate with TANESCO mainly on the issue of trees restoration and the whole issue of climate change and carbon project. 3. They propose the TANESCO to liaise with the respective TFS offices in each district for the trees plantation since they provide for free to the community who will be affected. 4. They requested the map which shows the route of the TL. 5. They were also given a questionnaire for them to fill for the study 	All observations and recommendations have been noted for consideration.

Table 3.0
Meetings held with authorities
Third Fieldtrip

Region	Name	Institution	Position	Concerns	Recommendations
Geita	Dr. Elfas Msenya	Regional Government Authority- Geita	Regional Administrative Secretary	Project impacts on mining, biodiversity; compensation concerns.	TANESCO will liaise with local leaders and affected communities; compensation will follow World Bank and national guidelines.
	Samwel Shoo	Geita Municipal	Resident Mining Officer	Mining operations challenges; GBV concerns; child labor issues.	Recommendations to address unsafe practices and ensure adherence to safety standards; licensing and fair distribution of mining revenue emphasized.
	Joseph Machibya	Bukombe district	Productive Social Safety Net Coordinator	GBV, VAC, polygamy, and challenges in vulnerable groups; lack of support centers for GBV survivors.	Collaboration with local institutions for project awareness; continued GBV/VAC education proposed.
	Mariana Genya		Community Development Officer		
	Diana B Njachala		Social Welfare Officer		
	Mercy Joseph	Mbogwe District	District Social Welfare Officer	Support mechanisms for vulnerable groups; GBV situation and reporting challenges.	Training for NPAVAWC committee; emphasis on timely reporting and resource allocation.
	Julius B. Sumari		TASAF		
	Yusuph S. Mcheri		CDO		
Geita	Jeremiah Hango	Mbogwe District	Resident Mining Officer	Impact of project on small-scale mining; cultural distortions; land ownership concerns.	Compensation for landowners only; suggestions to address cultural distortions and resource allocation.
	Joseph Nyaruko	Chato District	Community Development Officer	Challenges faced by vulnerable groups; healthcare and housing issues.	Recommendations for education on proper compensation use; collaboration with village leaders.
		Nyang'hwale,	Community	GBV prevention measures; impacts	Education on GBV prevention; support for

Table 3.0
Meetings held with authorities
Third Fieldtrip

Region	Name	Institution	Position	Concerns	Recommendations
		District	Development Officer	of project construction on women.	community businesses and healthcare.
	Paulo Malimi	Bukombe Legal Aid Organization	District Coordinator	Legal aid for GBV victims; compensation concerns for project-affected individuals.	Recommendations for including women in compensation processes; GBV awareness programs.
	Deus Pius Manyanda	Mbogwe Legal Aid Organization	Director	Challenges in GBV reporting; compensation-related family abandonment.	Suggestions to involve family members in compensation processes; improved education and legal aid.
	Alex Medard Sabina Photunatus Eva O. Nkwabi	NELICO (New Light Children Organization)	Deputy Director Project Officer Project Officer	Support for GBV victims; healthcare for vulnerable children.	Recommendations for continuous support through education and legal aid; collaborations with local health services.
	Augustino H. Simbeye	Bukombe District	District Land and Housing Development Officer	Land ownership challenges; transparency in valuation processes.	Involvement of landowners in valuation processes; adherence to national compensation laws.
	Magreth Werema Joseph Nyamko	Chato District	District Social Welfare Officer (DSWO) DCDO	Challenges in GBV case reporting; project impacts on families.	Focus on community education regarding GBV; provision of legal aid and psychological support.
	Simon N. Gambaresi	Chato District	District Valuer	Land ownership types; transparency in compensation processes.	Compensation involves market-based valuation; affected individuals educated on their rights and procedures.
	Stela Kataga	Chato District	Inspector Gender Desk	Prevalence of GBV in mining areas; challenges in addressing rural GBV cases.	Provision of education to communities; collaboration with Social Welfare Office for counselling; campaigns to address GBV risks during project implementation.

Table 3.0
Meetings held with authorities
Third Fieldtrip

Region	Name	Institution	Position	Concerns	Recommendations
	Essan F. Malifedha	Bukombe District	District Coordinator, SHDEPHA+	Challenges faced by vulnerable groups, including HIV-positive individuals, elderly, and unemployed youth.	Recommendations for community education and healthcare support; leveraging NGO networks for greater outreach.
		Kashelo Village	Village Leaders	Incidences of GBV and child labor; polygamy practices; lack of grazing land.	Education campaigns on child labor and GBV prevention; planning for economic and grazing land development.
Kagera	Abdallah	Regional Administrative Secretary	Kagera Region	Courtesy call to inform about the project and seek permission for field activities.	Introduction letter left as the meeting could not occur.
	Grace Matofali	Assistant Inspector	Gender Desk of Police – Missenyi District	High GBV cases; family abandonment; lack of local call center.	Collaboration with police, social welfare, and NGOs suggested; public education emphasized.
	Juliana Nghweleja	District Welfare (DSWO) Social Officer	Missenyi District	GBV impacts of the project; lack of privacy for GBV victims during reporting. Inadequate support structures for victims; potential impacts of the project on women and children.	Strengthened NPAVAWC committees; increased education on preventing GBV and economic empowerment of women recommended. Proactive measures to educate communities on project impacts and GBV risks.
	Gorge K Buberwa	Executive Director	MAPEC (Missenyi AIDS & Poverty Eradication Crusade)- NGO	GBV and VAC issues persist; lack of adequate collaboration with local NGOs in previous projects.	Use of local NGOs like MAPEC suggested; public education campaigns and integration with social welfare officers proposed.
	Avitus Kamala	District Land Officer	Missenyi District	Land ownership challenges; Transparency in land valuation and compensation delays; lack of planned landownership in most villages.	Transparency in valuation procedures; timely and fair compensation prioritized. Strict adherence to valuation procedures; fair and timely compensation for affected landowners.

Table 3.0
Meetings held with authorities
Third Fieldtrip

Region	Name	Institution	Position	Concerns	Recommendations
	Beatrice N. Sanga	District Community Development Officer	Missenyi District	<p>Vulnerable groups face poverty, lack of healthcare, and economic hardships.</p> <p>Lack of identity cards for vulnerable groups; risk of land loss and livelihood disruption.</p> <p>Education campaigns, economic empowerment programs, and effective consultation for compensation processes.</p>	<p>Economic empowerment, fair compensation, and stakeholder involvement for vulnerable groups recommended. Effective consultation for compensation processes</p> <p>Education campaigns</p>
	Vedasto Kato Deusdedith	Mutukula Church	Pastor	Relocation of church due to project alignment; compensation for church relocation.	Agreement on relocation with fair compensation requested.
	Asp. Ndaki Mayungwa	Gender Desk of Police-District Karagwe	AG-OCD	High GBV prevalence; lack of privacy in reporting cases; challenges with victim cooperation and resources.	Collaboration with NGOs and local leaders; education campaigns through community programs and radio channels.
	Festos Kanga		CPL		
	Upendo		CPL		
	Hilder		CPL		
	Kulwa		CPL Forensic Bureau		
	Peter John	Ngara District	Social welfare Officers	GBV, VAC, and risks during project phases; lack of resources for proper intervention.	Strengthening collaboration between local organizations and project stakeholders; providing education and capacity-building initiatives.
	Debora Kasomwa-				

Table 3.0
Meetings held with authorities
Third Fieldtrip

Region	Name	Institution	Position	Concerns	Recommendations
	Joyce Cherles				
	Niyosaba Baragondola				
	Anastazia Msilanga				
	Saigna Chamiti	TASAF district Ngara	Program social safety net coordinator	Lack of access to public services, challenges for vulnerable groups, loss of livelihood.	Fair compensation, construction of appropriate housing, and improvement of local infrastructure for affected communities recommended.
	Lobina Balilemwa	TASAF District Karagwe	Program social safety net coordinator	Poverty, lack of capital, and poor access to education and healthcare for vulnerable populations.	Economic empowerment programs, fair and transparent compensation mechanisms, and improved public service access.
	Dara Sila	Biharamulo District	CDO	Prevalence of GBV and VAC; inadequate resources for addressing challenges faced by vulnerable groups.	Education campaigns; provision of resources and services to affected individuals; collaboration with local NGOs and government initiatives.
	Ladslaus Laurent		SWO		
	Khadija Rajab	Ngara District Police Gender Desk		High GBV rates due to cultural practices; lack of privacy and resources for case handling; potential for increased GBV during project phases. Lack of cooperation from victims; potential project risks for women.	Collaboration with district officials and NGOs; education campaigns and establishment of grievance redress mechanisms during project implementation.
	Norbert John	Kagera Region	Resident Officer Mining	Lack of mining equipment, electricity, and infrastructure; impact of mining on nearby projects and land ownership.	Ensure consultation with license owners; consider alternate routes or technology to avoid project conflicts with mining activities.

Table 3.0
Meetings held with authorities
Third Fieldtrip

Region	Name	Institution	Position	Concerns	Recommendations
	Subira Kansheba	Tumaini Orphans Support Organization (TOSO)	Secretary	GBV, VAC, and resource challenges faced by orphans and widows; project impact on vulnerable populations.	In-kind compensation for children; community education campaigns; involve local NGOs in project awareness efforts.
Shinyanga	Salum Hamduni	Shinyanga Region	Regional Administrative Secretary	Compensation challenges for miners; lack of electricity and technical resources for small-scale mining.	Proposed thorough identification of all affected individuals and fair compensation; close involvement with community leaders.
	Daniel Mapunda	Shinyanga Municipal	Resident Mining Officer	Small-scale miners face poor technology, lack of capital, and unsafe practices; limited involvement of women in mining due to cultural beliefs.	Addressing technical gaps and promoting inclusivity in mining operations while maintaining cultural sensitivity. Suggested regular engagement with miners to improve safety, licensing processes, and technical training.
	Mrs. Octavina Kuwome	Shinyanga District	Regional Community Development Officer	High GBV/VAC prevalence; polygamy practices; lack of dedicated resources for victim support.	Advocacy for improving victim support systems, including dedicated resources like call centers and one-stop service centers.
	Elizabeth Mweyo		Regional Social Welfare Officer		
	Justa Mwaituka	KIWOHEDE-Kiota Women's Health and Development (NGO)	Executive Director	GBV, child labor, and lack of youth employment opportunities; school dropouts due to early marriages.	Implementation of education and empowerment programs targeting women and youth; enhancement of GBV awareness and support initiatives.
	Mr. Judica J Sumari.	Msalala District	District Community Development Officer	GBV and VAC concerns linked to mining activities; limited resources for gender desks and support programs.	Suggested integrating gender desks into project planning; improving resources and collaboration with local NGOs and community leaders.
	Veronica C. Mfuko		District Social Welfare Officer		

Table 4.0
Consultation with Villages
Third Fieldtrip

Region	Ward	Village	Participants			Concerns	Recommendations
			T	F	M		
Geita	Kafita	Igeka (Makulali Sacred Place)	6		6	Preservation of sacred sites; relocation concerns; project impacts on agriculture, mining, and GBV/VAC risks.	Sacred sites deemed non-relocatable due to cultural taboos; mitigation and community involvement stressed; educational campaigns on GBV/VAC recommended.
	Nundu	Igeka	28	23	5	GBV, early marriages, child labor, polygamy, and lack of grazing grounds; cultural norms challenging development interventions.	Involvement of local NGOs and consistent community engagement highlighted; prioritization of cultural respect while addressing community needs stressed.
	Lulembela	Kashelo	77	57	20	Child labor; polygamy; lack of grazing grounds; cultural impacts on livelihoods.	Education programs on GBV, child protection, and economic challenges suggested; construction-phase mitigation measures proposed.
	Busonzo	Kabagole (Kabagole Sacred Place)	5			Cultural and economic impacts of site relocation.	Compensation agreements and mutual relocation terms suggested; feasibility of relocation accepted with conditions.
	Busonzo	Kabagole	56	46	10	Child labor; cultural rituals; lack of grazing grounds; project impacts on agricultural and cultural practices.	Emphasis on cultural sensitivity during implementation; mitigation measures for agricultural and grazing access disruptions.
	Isamalasa	Songambebe	33	23	10	GBV concerns; lack of grazing land; impacts on vulnerable households.	Proposals for compensation in housing and infrastructure support; community awareness programs.
Kagera	Nsunga	Ngando	47	32	15	Lack of grazing lands; GBV concerns; child labor; inadequate public services.	Economic training for women; improved access to water, health, and education services suggested.
	Nyakahanga	Bisheshe	87	57	40	GBV concerns; child labor; inadequate grazing grounds; lack of health facilities.	Improved healthcare infrastructure; fair compensation and education campaigns recommended.
	Nyakahura	Busiri	20	8	12	Child labor in mining; lack of grazing lands and public services; polygamy	Support for vulnerable groups through economic initiatives; construction of public amenities

Table 4.0
Consultation with Villages
Third Fieldtrip

Region	Ward	Village	Participants			Concerns	Recommendations
			T	F	M		
						practices.	suggested.
	Kasulo	Rwakalemera	18	2	16	Child labor, lack of grazing grounds, polygamy, GBV, and access to social services.	Education campaigns on GBV; fair compensation; community involvement in grazing land management suggested.
Shinyanga	Ibadakuli	Uzogole	59	46	13	GBV and polygamy prevalence; child labor; lack of grazing lands and infrastructure.	Recommendations for education campaigns and infrastructure improvement; addressing GBV through existing programs and resources.
	Bugarama	Buyange	77	57	20	Polygamy practices; GBV prevalence; child labor; lack of grazing grounds and health infrastructure.	Encouraged expansion of local infrastructure and strengthening GBV education programs; mitigation strategies to address child labor and community conflicts.
	Mwenge	Mwongozo	49	39	10	Mining-related child labor; insufficient grazing lands; poor agricultural productivity; high GBV and polygamy rates.	Support for education, infrastructure improvement, and provision of technical assistance to farmers and miners.
	Mwenge	Mwongozo				Lack of permanent contracts for miners; unsafe working conditions; unfair remuneration practices.	Recommendations for fair distribution of mining benefits; better safety measures and worker agreements proposed.



Annex 15 – P.14 - Labour Management Procedures (LMP)

PROPOSED 400kV UGANDA-TANZANIA INTERCONNECTOR PROJECT (UTIP) FROM IBADAKULI SUBSTATION IN SHINYANGA REGION VIA GEITA REGION, NYAKANAZI AND KYAKA SUBSTATIONS IN KAGERA REGION TO MASAKA WEST IN UGANDA (548.91 km)



P.14 - LABOUR MANAGEMENT PROCEDURES (LMP)

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LIST OF EXPERTS


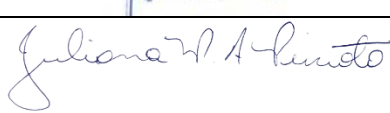

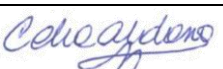
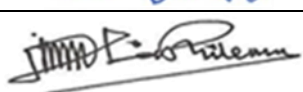



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LIST OF ACRONYMS AND ABBREVIATIONS

CEP	Construction Environmental Plan
CPE	Collective Protective Equipment
EBRD	European Bank for Reconstruction and Development
E&S	Environmental and Social
EHS	Environment, Health and Safety
EPR	Emergency Preparedness and Response
ESCP	Environmental and Social Commitment Plan
ESIRT	Environmental and Social Incident Response Toolkit
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standard
GBV	Gender-Based Violence
GRM	Grievance Redress Mechanism
HRP	Human Resources Policy
HR	Human Resources
IFC	International Finance Corporation
ILO	International Labour Organization
LMP	Labour Management Procedures
LPG	Liquefied Petroleum Gas
M&E	Monitoring & Evaluation
NC	Non-Conformities
OHS	Occupational Health and Safety
OHSP	Occupational Health and Safety Plan
PPE	Personal Protective Equipment
RCMU	Resettlement and Compensation Management Unit
SEA/SH	Sexual Exploitation and Abuse and Sexual Harassment
SEP	Stakeholder Engagement Plan
SS	Substation
TANESCO	Tanzania Electric Supply Company Limited
TL	Transmission Line
WB	World Bank

1. Justification

This Labour Management Procedures (LMP) has been developed to guide the management of all categories of workers involved in the Uganda-Tanzania Interconnection Project (UTIP), in accordance with national labour legislation and the World Bank’s Environmental and Social Framework (ESF), particularly Environmental and Social Standard 2 (ESS2) on Labor and Working Conditions.

The LMP defines key policies, procedures, and responsibilities to ensure fair treatment, non-discrimination, health and safety protections, and effective grievance mechanisms for all workers associated with the Project. It also addresses the obligations of TANESCO, contractors, and subcontractors to manage labour-related risks—including those associated with labour influx, occupational health and safety (OHS), child and forced labour, and gender-based violence (GBV)—throughout all phases of the project lifecycle.

In accordance with ESS1 (paragraph 26) and the provisions of ESS2, this document contributes to the comprehensive environmental and social risk management system of the Project, placing emphasis on worker rights, safety standards, and transparent channels for grievance redress.

This LMP applies to all categories of project workers as defined under ESS2, including direct workers employed by TANESCO, contracted workers hired by contractors and subcontractors, and primary supply workers involved in the provision of critical materials or equipment. Local workers will be recruited from towns and communities located along the transmission line corridor and near substation sites, in accordance with the provisions of the Local Hiring Programme. The Project aims to achieve a local employment target of 20–30% of the total workforce, with a particular focus on filling semi-skilled and unskilled positions with residents from the project’s area of influence.

Please note that this LMP is a living document. It will be updated and revised as needed throughout Project implementation to reflect evolving workforce requirements, legal changes, new risks or mitigation strategies, and lessons learned during monitoring and stakeholder engagement. All updates will be reviewed and approved by TANESCO, and where required, by the World Bank.

2. Description of Labor Needs

At this stage, detailed workforce projections—particularly for contractor mobilization schedules and supplier hiring—have not been provided by TANESCO or its contractors. Therefore, the information presented herein is based on reasonable assumptions and professional estimates developed by JGP, informed by: (i) Typical workforce profiles for transmission projects of similar scale and terrain; (ii) Preliminary schedules described in the ESIA (**Sections 5.6.1 and 5.6.2**); (iii) Organizational data obtained from TANESCO’s Resettlement and Compensation Management Unit (RCMU).

The implementation of the UTIP Project will require a diverse and phased labour force, involving workers from multiple categories and disciplines throughout the construction,

support, and operational stages. In line with ESS2 definitions, the Project will engage the following types of workers: direct workers, contracted workers, and primary supply workers. No community workers are expected to be employed under this Project.

2.1 Construction Workforce (Contracted Workers)

The majority of the labour demand under the UTIP Project will stem from the execution of civil works, including the construction of transmission lines, substations, access roads, and workers' camps. As outlined in **Section 5.6.2** of the ESIA, it is estimated that approximately 1,350 contracted workers will be engaged at the peak of construction. These workers will be progressively mobilized in line with the implementation schedule presented in **Section 5.6.1** and deployed across various work fronts along the transmission corridor.

Based on typical workforce distributions observed in similar large-scale transmission projects, the 1,350 contracted workers are expected to include approximately 25% skilled workers (around 340 individuals), such as engineers, site supervisors, electricians, welders, crane operators, and equipment specialists. Semi-skilled workers—including carpenters, masons, drivers, cooks, and security guards—are projected to represent around 35% of the workforce (approximately 470 individuals). The remaining 40% (about 540 workers) will be unskilled workers, responsible for tasks such as excavation, manual transport of materials, site cleaning, and other general support services.

In addition, an estimated 650 indirect workers will be engaged by service providers to support logistics, waste management, catering, and the operation of construction camps. A total of nine workers' camps will be established along the transmission line corridor (see **Section 5.3.1** of the ESIA), all of which will be designed and operated in accordance with national legislation and the IFC/EBRD Guidelines on Workers' Accommodation (2009), with due consideration to hygiene, health, safety, and environmental standards.

The Project's recruitment strategy gives strong priority to local employment, particularly in semi-skilled and unskilled roles. Workers will be hired from towns and communities along the transmission line and near substation sites. In line with the **Local Hiring Programme (P.13)**, the Project targets a 20–30% local employment rate, contributing to local economic development and reducing risks associated with labour influx.

2.2 Support and Oversight Workforce (Direct Workers)

In parallel with construction, TANESCO will maintain a team (i.e., TANESCO's Management Team) of direct workers responsible for management, technical oversight, and implementation of safeguard measures. Based on the currently available structure of the RCMU (Resettlement and Compensation Management Unit), and other internal project units, it is estimated that 50 to 70 TANESCO staff will be engaged during implementation. These staff will include:

- Project Manager and Deputy
- Environmental, Social, and OHS Specialists

- Monitoring & Evaluation (M&E) Officers
- Legal, Financial, Procurement, and Contract Management Officers
- Land Surveyors and RAP field teams
- Administrative and support personnel

These workers will ensure compliance with the LMP, ESMP, SEP, GBV Action Plan, and related instruments. In some cases, TANESCO may complement this team with external consultants or firms for supervision and audit functions.

2.3 Operation Phase Workforce

During the operation phase, TANESCO will employ a permanent team of approximately 25–30 direct workers for operation and maintenance of substations and transmission infrastructure. This team will include substation operators, electrical technicians, maintenance crews, and field supervisors.

3. Main Objectives

The main objective of the Labour Management Procedures (LMP) is to ensure that appropriate labour management policies and procedures are in place in the Project. To this end, it will have the following specific objectives:

- Prepare and implement a Human Resources Policy aligned with Tanzanian legislation, World Bank ESS2, ILO Conventions and other applicable international requirements, including procedures for hiring, training and retrenchment of the workforce;
- To consider gender equality and prevent discrimination in the development of the recruitment, training and retrenchment of the workforce procedures of the Human Resources Policy;
- Benefit the population in the area of influence, mainly in the villages crossed by the project, especially those where construction sites will be set up, through the use of local labour in construction activities (aspects outlined in the **P.13 - Local Hiring Programme**);
- Establish working and employment conditions;
- Implement a Grievance Mechanism for workers;
- Detail a Workers' Code of Conduct to standardise criteria for the conduct of workers in dealing with the communities and neighbourhoods surrounding the works and support areas, as well as standards of behaviour aimed at controlling pollution and preserving natural resources, including the protection of flora and fauna during the execution of the works. The Code will have a gender equity approach aimed at preventing practices of gender-based violence (GBV) and of sexual exploitation and abuse and sexual harassment (SEA/SH) and prevent unwanted pregnancies, with aspects outlined in the **P.15 - Gender Based Violence Action Plan (in Annex 16)**.
- To protect workers. This will include the Occupational Health and Safety Programme (OHSP) to be prepared and implemented by TANESCO and its Contractors in line with the standards detailed in **Chapter 10.0 (P.17 - Occupational Health and**

Safety Management Programme.

4. Applicable Legislation

This chapter outlines the national legal framework governing the project, detailing key legislative instruments and their requirements. The framework comprises laws and policies—including the Sexual Offences Special Provisions Act (1998), National Women and Gender Development Policy (2000), Penal Code (Cap 16, revised 2002), National Gender Policy (2002), National Employment Policy (2003), Employment and Labour Relations Act (2004), Labour Institutions Act (2004), National Health Policy (2007), Anti-Trafficking in Persons Act (2008), Child Act (2009), Criminal Procedure Act (2018), Legal Aid Act (2017), and the National Mechanism on Gender Based Violence/Sexual Exploitation and Abuse—that together provide comprehensive standards on worker protection, non-discrimination, grievance redress, and social justice.

Key requirements in these instruments include:

- Worker Protection and Non-Discrimination: Mandates for safe work environments, gender equality, and mechanisms for reporting and addressing sexual exploitation, abuse, and harassment.
- Child Labour and Vulnerable Groups: Strict prohibitions and age limits (e.g., a minimum age of 14 years) aimed at protecting minors and other vulnerable workers.
- Legal Recourse and Enforcement: Provisions for legal aid and structured grievance procedures to ensure that rights under these laws are effectively enforced.

Below in **Table 4.a**, is presented a list of the key legislation applicable to this LMP.

Table 4.a
Applicability of the Legal Framework

Legal Instrument	Comments on Applicability
Sexual Offences Special Provisions Act, 1998	Defines and sanctions sexual offences, underpinning measures to prevent sexual harassment and abuse, in line with ESS2 requirements.
National Women and Gender Development Policy, 2000	Promotes gender equality and empowerment, ensuring a gender-sensitive workplace; may need enhanced monitoring to fully meet ESS2 standards.
Penal Code (Cap 16) (revised 2002)	Provides general criminal sanctions for harassment and abuse, reinforcing worker protection; may require project-specific adaptations for comprehensive ESS2 compliance.
National Gender Policy, 2002	Establishes principles of non-discrimination and equal opportunity; supports equitable treatment but could benefit from additional enforcement mechanisms at the project level.
National Employment Policy, 2003	Sets guidelines for fair employment practices and labor relations; forms a basis for the LMP though it might lack detailed occupational safety elements required under ESS2.
Employment and Labour Relations Act (Act No. 6), 2004	Regulates labor relations and dispute resolution, supporting structured grievance mechanisms; additional measures may be needed to address informal labor sectors.

Table 4.a
Applicability of the Legal Framework

Legal Instrument	Comments on Applicability
Labour Institutions Act (Act No. 7), 2004	Enables the establishment of labor institutions to enforce labor standards; provides a framework for worker rights but may require further project-specific adaptation.
National Health Policy, 2007	Sets standards for occupational health and safety, ensuring worker well-being; integration with ESS2 risk assessments is essential for enhanced protection.
Anti-Trafficking in Persons Act, 2008	Addresses human trafficking and exploitation, protecting vulnerable groups; critical for preventing abuse, yet should be closely aligned with ESS2 monitoring and reporting.
Child Act, 2009	Enforces child labor protections and minimum age requirements; directly supports ESS2's focus on protecting minors, though enforcement mechanisms may need strengthening.
Criminal Procedure Act 7, 2018	Outlines procedures for prosecuting violations, ensuring accountability; may require adjustments to expedite cases related to labor issues under ESS2.
Legal Aid Act, 2017	Guarantees access to legal assistance for workers and vulnerable groups, supporting grievance redress; could be further enhanced to resolve project-specific disputes efficiently.
National Mechanism on Gender Based Violence/Sexual Exploitation and Abuse	Provides structured measures for preventing, reporting, and responding to GBV and SEA; essential for ESS2 compliance and requires robust integration within the LMP.

Notably, certain gaps may arise when comparing these national provisions with the World Bank's ESS2. For instance, while the national framework addresses gender and labour rights, it may lack explicit mechanisms for integrating modern occupational health and safety standards, detailed reporting systems, or comprehensive approaches to managing subcontracted and informal labour—areas that are critical under ESS2. To address these potential gaps, the project's Labor Management Plan (LMP) will incorporate targeted measures to ensure that all aspects of national legislation are effectively aligned with ESS2 requirements.

International requirements

This chapter outlines the international framework that complements the national legislation to ensure compliance with ESS2. Key international instruments include the World Bank Environmental and Social Standards (ESS1 and ESS2), World Bank EHS Guidelines, and the Guidance Note on Addressing Sexual Exploitation and Abuse and Sexual Harassment (2022). Additionally, the project aligns with the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and relevant ILO conventions ratified by Tanzania—covering areas such as workmen's compensation, forced labour, equal remuneration, and child labour—as well as the ILO Declaration on Fundamental Principles and Rights at Work. These international standards reinforce the project's commitment to providing a safe, respectful, and equitable working environment, thereby ensuring that the LMP fully integrates both national legal obligations and international best practices in labour and human rights management.

Below in **Table 4.b**, is presented a list of the International Requirements applicable to this LMP.

Table 4.b
Applicability of the International Requirements

International Requirements	Comments on Applicability
World Bank ESS 1 and 2	Define comprehensive environmental and social risk management; emphasize worker rights, grievance mechanisms, and safety standards.
World Bank ESS4 (Community Health and Safety)	It is applicable to the Project given the potential risks associated with labour influx, the establishment and operation of workers' camps, increased vehicular traffic, and potential community exposure to construction-related hazards. The Project will implement mitigation measures to manage these risks, including those related to communicable diseases, GBV/SEA/SH, road safety, and public health impacts in accordance with the ESMP, the Stakeholder Engagement Plan (SEP), and the GBV Action Plan (Annex 16).
World Bank EHS Guidelines	Provide technical standards that complement national measures and ensure robust risk assessments and safety procedures.
World Bank Guidance Note on Addressing SEA/SH, 2022	Offers specific guidance to prevent and address sexual exploitation and harassment, strengthening project safeguards.
CEDAW	Mandates gender equality and non-discrimination; requires integration of gender-sensitive practices within the project framework.
ILO Declaration on Fundamental Principles and Rights at Work	Establishes core labour rights, including freedom of association and prohibition of forced labour, child labour, and discrimination.
ILO Conventions ratified by Tanzania	Set minimum standards for worker protection and labour rights; additional measures may be needed to fully meet ESS2 requirements.
<i>C017 - Workmen's Compensation Convention, 1925 (No. 17)</i>	<i>Ensures compensation for workplace accidents; supports safety measures in high-risk areas.</i>
<i>C019 - Equality of Treatment (Accident Compensation) Convention, 1925 (No. 19)</i>	<i>Provides for equal accident compensation, reinforcing non-discrimination in worker benefits.</i>
<i>C029 - Forced Labour Convention, 1930 (No. 29)</i>	<i>Prohibits forced labour, reinforcing the commitment to voluntary work and human dignity.</i>
<i>C087 - Freedom of Association Convention, 1948 (No. 87)</i>	<i>Guarantees workers' rights to unionize and organize, supporting effective dispute resolution mechanisms.</i>
<i>C094 - Labour Clauses (Public Contracts) Convention, 1949 (No. 94)</i>	<i>Requires inclusion of labour clauses in public contracts to safeguard worker rights.</i>
<i>C095 - Protection of Wages Convention, 1949 (No. 95)</i>	<i>Mandates timely and full wage payments, ensuring economic security for workers.</i>
<i>C098 - Right to Organise and Collective Bargaining Convention, 1949 (No. 98)</i>	<i>Supports collective bargaining processes to promote fair labour practices.</i>
<i>C100 - Equal Remuneration Convention, 1951 (No. 100)</i>	<i>Ensures equal pay for equal work, addressing gender wage disparities.</i>
<i>C105 - Abolition of Forced Labour Convention, 1957 (No. 105)</i>	<i>Reinforces the prohibition of forced labour and exploitative practices.</i>
<i>C111 - Discrimination (Employment and Occupation) Convention, 1958 (No. 111)</i>	<i>Prohibits discrimination in employment, aligning with international non-discrimination standards.</i>

Table 4.b
Applicability of the International Requirements

International Requirements	Comments on Applicability
<i>C131 - Minimum Wage Fixing Convention, 1970 (No. 131)</i>	<i>Guides the establishment of minimum wage policies to protect worker rights.</i>
<i>C135 - Workers' Representatives Convention, 1971 (No. 135)</i>	<i>Supports the role of worker representatives, enhancing collective dialogue and participation.</i>
<i>C138 - Minimum Age Convention, 1973 (No. 138)</i>	<i>Sets a minimum employment age (14 years), protecting minors from exploitation.</i>
<i>C142 - Human Resources Development Convention, 1975 (No. 142)</i>	<i>Focuses on workforce development and vocational training to enhance worker capacity.</i>
<i>C148 - Working Environment Convention, 1977 (No. 148)</i>	<i>Addresses air pollution; its limited scope on noise and vibration may require additional project-specific assessments.</i>
<i>C154 - Collective Bargaining Convention, 1981 (No. 154)</i>	<i>Emphasizes collective bargaining to improve labour conditions and foster effective worker-employer dialogue.</i>
<i>C182 - Worst Forms of Child Labour Convention, 1999 (No. 182)</i>	<i>Targets the elimination of the worst forms of child labour, reinforcing measures to protect vulnerable minors.</i>
ILO Convention not ratified by Tanzania:	Serve as aspirational benchmarks for worker protection and rights.
<i>C190 - Violence and Harassment Convention, 2019 (No. 190)</i>	<i>Provides guidance on mitigating workplace violence and harassment, informing risk management despite non-ratification.</i>

5. Responsibilities

This section defines the respective responsibilities of TANESCO and contracted parties for the effective implementation of the Labour Management Procedures (LMP) throughout the project lifecycle, in alignment with Tanzanian labour law, International Labour Organization (ILO) conventions, and the World Bank Environmental and Social Standard 2 (ESS2).

5.1 Responsibilities of TANESCO

TANESCO is the overall implementing agency responsible for:

- Developing and implementing its own Human Resources Policy (as per minimum content in **Annex A – HR Policy Template**) for the management of direct workers, aligned with ESS2 and national labour legislation;
- Reviewing and approving the Human Resources Policies (HRPs) of all contractors and subcontractors before mobilization;
- Reviewing and approving each contractor's Occupational Health and Safety Plan (OHSP) and Emergency Preparedness and Response (EPR) Plan, as per the ESMP (**P.02**);
- Overseeing the full implementation of the LMP, including worker-related standards, OHS, grievance management, labour influx control, and SEA/SH prevention;
- Ensuring the preparation and World Bank clearance of Labour Influx Plans by all contractors, in accordance with the GBV Action Plan (**Annex 16**);
- Deploying a Supervision Team (internal or outsourced), tasked with:

- Monitoring contractor and subcontractor compliance with the LMP and related instruments (OHSP, ESHS Management Plan, GBV Action Plan, Workers' Code of Conduct);
- Conducting regular audits, site inspections, and documentation reviews;
- Issuing recommendations and non-compliance notices where required;
- Appointing a Compliance Officer to liaise with contractors and ensure continuous adherence to HR procedures and legal obligations.

For the operational phase, TANESCO will prepare a separate HR Policy applicable to the permanent workforce, including training and grievance systems under the same standards.

5.2 Responsibilities of Contractors and Subcontractors

Each contractor and subcontractor engaged in the Project shall:

- Submit a Human Resources Policy (HRP) for TANESCO's review and approval, prior to the commencement of any construction activities. The HRP must, at a minimum, follow the structure and contents outlined in Annex A – HR Policy Template, and be consistent with national labour laws, ESS2, and ILO conventions.
- Ensure that the HRP includes, at a minimum, the following elements:
 - Clear procedures for worker recruitment, onboarding, training, supervision, and retrenchment, including a commitment to non-discrimination and equal opportunity;
 - A detailed Occupational Health and Safety (OHS) Plan and Emergency Preparedness and Response (EPR) Plan, aligned with the ESMP (Annex P.02);
 - An accessible and confidential Grievance Redress Mechanism (GRM) for all workers, including protection from retaliation and regular reporting to TANESCO;
 - Clear policies and procedures to ensure full compliance with child labour and forced labour prohibitions, including age verification and supplier oversight;
 - A Workers' Code of Conduct, addressing behavioral expectations, community relations, SEA/SH prevention, and disciplinary procedures;
 - Provisions for labour influx management and, where applicable, workers' accommodation in line with the IFC/EBRD Guidelines.
- Prepare a Labour Influx Plan (as per Template included in Annex B), including SEA/SH risk mitigation and health and safety measures, for approval by the World Bank as required under the GBV Action Plan;
- Ensure all workers are inducted on:
 - The HRP and Code of Conduct;
 - Safety and compliance requirements;
 - Community interaction protocols;
- Designate key personnel with defined responsibilities:
 - HR Manager: oversees recruitment and legal compliance;
 - Training Coordinator: develops and delivers all worker training;
 - GRM Officer: manages and tracks resolution of grievances, and reports regularly to TANESCO.

All contractors are responsible for extending these obligations to all subcontractors and primary suppliers under their control. Failure to comply with the approved HRP, LMP, or other related instruments will trigger corrective action measures in accordance with contractual obligations and supervision protocols.

6. Methodology

6.1. Preparation of a Human Resources Policy

TANESCO shall prepare a Human Resources (HR) Policy (or equivalent instrument) to formalize the Project's commitment to Tanzanian labour legislation, WB ESS2, ILO Conventions and other applicable international requirements, and to establish procedures to ensure compliance. It shall apply to workers hired directly by TANESCO, and also by the Contractors, subcontractors, suppliers (workers in the supply chain) and consulting firms eventually hired to carry out Project activities.

The HR Policy shall detail procedures for at least the following processes and activities:

- (i) Recruitment and qualification of staff;
- (ii) Salaries and benefits practices;
- (iii) Disciplinary measures;
- (iv) Conflict prevention (consultation and grievance mechanisms);
- (v) Admission and dismissal process;
- (vi) Training
- (vii) Retrenchment.

The procedures for recruitment and other aspects of the employment relationship (remuneration, working conditions and terms of employment, access to training, job assignment, promotion, dismissal and disciplinary practices) must ensure that there is no discrimination, exclusion or preference based on grounds of: colour, race, gender, gender identity, sexual orientation, age, nationality, ethnicity, social origin, political opinion, trade union membership or religious belief, disability status - dysfunctionality, pregnancy, parental leave, teenage mothers, marital status or other factor, assuring that equal opportunity is provided to all internal Project stakeholders, including workers of Contractors and subcontractors. It must also ensure the prohibition of sexual harassment, sexual and gender-based violence, violence against children, child labour, forced labour or conditions equivalent to forced labour, trafficking for sexual and labour exploitation, and respect for people in vulnerable conditions.

The HR Policy procedures must ensure that a healthy worker – management relationship is established, maintained and continuously improved over time according to the National Labour Laws and its regulations together with the Occupational Safety and Health Authority Act at the workplace.

A career plan and promotion practices based exclusively on merit and performance should also be foreseen as part of the HR Policy.

The policy must comply with all Tanzanian legislation regarding labour and employment terms and be aligned with international standards. The policy should make clear the prohibition of work by minors under 14 years of age, as established in the Tanzanian Employment and Labour Relations Act (revised edition 2019). It should also guarantee respect for the right to form labour organisations, for the rights to collective bargaining.

The HR Policy procedures must ensure safe and healthy working conditions and the health of workers, observing the World Bank EHS Guidelines.

6.1.1. Procedure for Strengthening Child Labour Prevention in Contractor and Supplier Selection

Presentation

As part of the implementation of the HR Policy, the main contractor will implement a procedure for strengthening child labour prevention in contractor and supplier selection. This procedure aims to enhance the child labour prevention measures within the contractor and supplier selection process, ensuring full compliance with the Tanzanian labour laws, World Bank ESS2 standards, and ILO conventions. It introduces additional screening, monitoring, and enforcement mechanisms to mitigate the risk of child labour in the supply chain during the construction phase.

This procedure applies to all contractors, subcontractors, and suppliers involved in the Uganda-Tanzania Interconnector Power Project during the construction phase. It covers pre-selection, contract negotiation, and ongoing monitoring to ensure compliance with child labour regulations.

Roles and Responsibilities

- TANESCO Supervision Team: Responsible for overseeing the selection, screening, and auditing of contractors and suppliers.
- Contractors/Subcontractors: Required to adhere to the LMP, report on compliance with child labour regulations, and cooperate with audits.
- Independent Auditors: Conduct child labour compliance audits as part of the due diligence process.

Pre-Selection Screening

All contractors and primary suppliers must confirm in writing their full compliance with Tanzanian labour laws and the requirements of the World Bank's Environmental and Social Standard 2 (ESS2), particularly paragraphs 18 and 19, which prohibit the use of forced labour and restrict the employment of children below the minimum legal working age. This confirmation must include adherence to the national minimum working age of 14 years, and relevant ILO conventions on child labour and forced labour.

As part of the pre-selection process, contractors and suppliers shall submit documentation describing their labour management systems, including recruitment procedures, worker

verification processes, and grievance mechanisms. They must also provide verifiable age documentation for all current workers and a signed Child Labour and Forced Labour Compliance Certification, attesting that their labour practices conform with applicable national laws and ESS2.

TANESCO's Supervision Team will carry out background checks on all prequalified firms, with a focus on past performance related to labour compliance—particularly child labour and OHS issues. This review may include the evaluation of previous project records, internal labour policies, and public incident records where applicable.

Failure to submit the required compliance certification or to meet the labour standards referenced above will result in disqualification from the procurement process.

Contractual Obligations

Contracts with all contractors and suppliers will include clear clauses prohibiting child labour. These clauses must specify the penalties for non-compliance, including termination of contracts and legal action.

Commitment to Audits

Contractors and suppliers must agree to regular unannounced audits by TANESCO or independent third-party auditors. The results of these audits will be documented and reviewed to ensure ongoing compliance.

Monitoring and Enforcement

TANESCO's supervision team, in collaboration with independent auditors, will conduct regular audits of all contractors and suppliers to verify compliance. These audits will include:

- Age verification of all employees.
- Interviews with workers to confirm their recruitment process.
- Documentation reviews of recruitment and employment records.

The project's grievance mechanism, outlined in the LMP, will be accessible to all workers. This mechanism will include anonymous reporting channels to allow workers to report child labour or related abuses without fear of retaliation.

Contractors and suppliers must submit monthly labour compliance reports to TANESCO, detailing their adherence to labour laws, including child labour provisions. These reports must include age verification data and any incidents of non-compliance, along with corrective actions taken.

Non-Compliance and Penalties

In the event that child labour violations are identified through audits, inspections, or grievances, TANESCO will initiate a formal investigation. The contractor or supplier in question must provide a response and take immediate corrective action.

Contractors or suppliers found in violation of child labour laws will face penalties, including contract termination, financial penalties, and reporting to relevant authorities for legal action. TANESCO will replace non-compliant entities with contractors or suppliers who meet labour standards.

Continuous Improvement

Contractors and suppliers will undergo mandatory training on child labour prevention as part of their onboarding process. This training will focus on labour laws, recruitment practices, and the importance of maintaining a child labour-free supply chain.

TANESCO will review this procedure annually and after any reported incident of child labour to identify areas for improvement. Updates to the procedure will be made based on audit findings and changes to international labour standards.

6.2. Recruitment

As specified in the **P.13 - Local Hiring Programme**, the Project will make every effort to recruit local skilled and unskilled labour from within its area of influence, where necessary and where the requirements for the type of work offered are met. Local communities will be informed about the profiles required for skilled and unskilled labour, according to project needs.

Recruitment requirements will be publicised by the Project, explaining the qualifications and documents to be submitted, and certifying that the persons to be recruited live within the local communities. The forms of communication about vacancies, profiles and requirements to be used, the receipt of CVs and training are described in the Sections 5.1 to 5.4 of the P.13 - Local Hiring Programme.

Workforce composition targets in terms of gender must be established and continuously monitored.

Worker rights and obligations will be clearly explained during recruitment.

To promote workforce diversity, gender-based and social inclusion targets will be established and monitored by both TANESCO and its contractors. All recruitment practices will adhere strictly to non-discrimination principles based on gender, ethnicity, age, disability, or sexual orientation.

6.3. Management of Working Conditions

Minimum working conditions in construction sites, workers' rest areas and work fronts as set out in Tanzanian Employment and Labour Relations Act (2004) and international requirements such as IFC's Workers Accommodation: Process and Standards will be met.

The conditions shall be met in construction sites, including facilities such as cafeterias, bathrooms, changing rooms, toilets, and accommodation; in workers' rest areas on the work fronts along the route; and in the accommodation of workers from outside the region in houses to be rented (if the Contractors decide on this form of accommodation).

For detailed technical specifications on working and accommodation conditions, see also **Section 10.1.3 of the ESIA** and the standards provided in P.01 – Construction Environmental Plan (CEP).

The requirements to be met relate to minimum space; water supply; adequate sanitation and waste disposal; adequate number and distance of toilets, separating men's and women's toilets and accommodation; adequate protection from heat, cold, humidity, noise, fire and disease vector animals; adequate sanitary and washing facilities; ventilation; lighting; cleanliness; and basic medical services.

The minimum standards and conditions shall also apply to third party workers during the construction phase.

The TANESCO Supervision Team (see P.02) will inspect the other companies, ensuring compliance with the standards in construction sites, workers' accommodation facilities, subcontractors' support facilities, as appropriate.

6.3.1. Personnel Welfare Facilities Standards

Adequate personnel welfare facilities should be provided and be available at all times to workers at or near the area in which they work. All facilities should be clean, dry and smoke free. Toilet facilities, washing facilities, lunchrooms, canteens, hiring halls, waiting rooms and any other personnel welfare facilities should be:

- Suitably located and of an appropriate size and construction
- Fully enclosed, if on shore
- Provided with floors, walls and ceilings that are easy to clean
- Well-ventilated and lighted, and, if necessary, heated, or air-conditioned
- Equipped appropriately for their purpose
- In the charge of a responsible person
- Maintained in a clean, sanitary, and orderly condition
- Protected against rats and other vermin
- Away from noisy operations, dust pollution and other sources of contamination, where practicable

Toilet Facilities Standard

The places where toilet facilities are located must undergo a permanent process of sanitization and should be kept clean and free of any odours, throughout the working day. Toilet facilities must have toilets, urinals, washbasins and showers. They should be

constructed of materials that are easily washable, in addition to ensuring privacy. The main requirements for these facilities are presented below:

- Suitable and sufficient toilet facilities should be provided and made accessible for the use of all workers.
- All toilet facilities should comply with national health and hygiene requirements.
- Toilet facilities should be located at regular intervals to cover all the work fronts.
- At least one toilet should be available for workers near the work site, where practicable.
- Toilets and urinals should be of the water-flush type, wherever possible.
- The number of toilets provided should be based on the maximum number of persons expected to work in an area.
- Each set of toilet facilities should comprise a toilet for every 25 or 30 workers. Separate toilet facilities for each sex should be provided unless the toilet facilities can only be occupied by one person at a time.
- All toilet facilities should be properly enclosed and easy to clean. A floor drain with a water seal should be provided in each toilet to facilitate flushing the floor.
- Each toilet on shore should be under cover and occupy a separate compartment installed in a special toilet facility. Each compartment should be provided with a separate door fitted with a latch on the inside.
- Urinals should be of suitable width and preferably consist of a row of stalls. If the urinals are of a smaller type (cuvettes) they should be adequately separated by side partitions.
- For personal cleansing, an adequate supply of toilet paper or, where local custom requires, water should be provided.
- Adequate washing facilities, including soap and means of drying hands, should be provided in or adjacent to each toilet area.
- Consideration should be given to the need to provide toilets equipped for use by disabled persons.

Washing/Showering facilities

- Suitable and sufficient washing facilities should be provided for all workers.
- There should be at least one washing facility for every ten workers who are likely to use them at the same time.
- There should be at least one washing facility for every ten workers who are likely to use them at the same time.
- If workers of both sexes are employed, separate washing facilities should be provided for each sex.
- Where workers are exposed to skin contamination by toxic, infectious or irritating substances, oil, grease or dust, showers should be available with a supply of hot or cold water.
- Showers should be enclosed in individual compartments, with the entrance suitably screened.
- Hooks or other facilities for clothing and towels should be provided for persons taking showers.

- An effective disinfectant should be used to destroy fungi. Regular monitoring for conditions such as legionnaires' disease should be undertaken whenever hot water is supplied.
- Washing facilities should not be used for any other purpose.

Kitchen Standards

These are requirements to be observed in these facilities:

- Have natural and/or artificial ventilation that allows good exhaustion;
- Have walls made of masonry, concrete, wood or equivalent material;
- Have concrete, cemented or other material flooring that is easy to clean;
- Have coverage of fire-resistant material;
- Have natural and/or artificial lighting;
- Have a sink for washing food and utensils;
- Have toilet facilities that do not communicate with the kitchen, for the exclusive use of those in charge of handling food, meals and utensils, and not connected to the grease box;
- Have a container, with a lid, for garbage disposal;
- Have refrigeration equipment for food preservation;
- Be adjacent to the place for meals;
- Have electrical installations adequately protected;
- If LPG is used, the cylinders should be installed outside the environment of use, in an area permanently ventilated and covered;
- Be kept clean in good hygienic condition;
- Food preparation rooms should be designed to allow good hygiene practices, including protection against contamination between and during food preparation;
- There should be a sufficient number of hand wash basins with clean, running water and materials for hygienic drying;
- Food preparation tables must have a smooth surface and be of washable material.
- The use of aprons and hats should be mandatory for kitchen workers. Appropriate procedures for cleaning, disinfecting and storing kitchen utensils and equipment must be adopted; and
- Food and other waste shall be properly disposed of in closed collectors. Collection must be frequent, to avoid the accumulation of garbage.

Hygiene and Comfort Conditions during Meals

Employees must be offered comfort and hygiene conditions that ensure adequate meals during working day breaks. The place for meals must be:

- Possess operating authorization issued by the competent authority, where applicable;
- Have walls that allow isolation during meals;
- Have concrete, cemented or other washable material floors;
- Have a covering protecting it from the weather;
- Have the capacity to sit all workers during mealtimes;

- Have ventilation and natural and/or artificial lighting;
- Have a washbasin installed nearby or inside;
- Have tables with smooth and washable tops;
- Have enough seats to attend the number of users;
- Have a deposit, with a lid, for debris;
- Not be located in basements of buildings;
- Not have direct communication with toilet facilities;
- Dining rooms must have adequate space per worker. Standards vary from 1 square meter to 1.5 square meters;
- There must be sinks and washbasins installed nearby or on site;
- There must be a supply of drinking water to the employees.

TANESCO and its Contractors should guide workers on the importance of adequate meals and healthy eating habits.

Availability of Drinking Water

Workers must be provided with drinking water under hygienic conditions in all workplaces, and the use of collective containers is prohibited. The main requirements for drinking water supply are:

- A supply of drinking and fresh water in an adequate quantity (over 1/4 (a quarter) of liter (250ml) per hour of work/man) must be guaranteed in the workplaces;
- Easily accessible drinking fountains should be available in all workplaces;
- Where running drinking water cannot be obtained, it should be supplied in hermetically sealed portable containers of suitable material and constructed so as to allow easy cleaning;
- Non-potable water for use in the workplace should be separated and a warning sign of its non-potability should be posted.

6.4. Grievance Redress Mechanism

As described in **Section 5.4.2** of the **Stakeholder Engagement Plan (SEP) (P.12)**, presented in **Annex 14**, all Contractors must implement a Grievance Redress Mechanism (GRM) for their workers, including third-party and subcontracted workers, consistent with Section C – Grievance Mechanism (paragraphs 21–23) of the World Bank ESS2. In parallel, TANESCO will establish its own contact channel to receive grievances and requests from consultants and external service providers implementing ESMP Plans and Programmes.

The GRM for workers must comply with key principles defined in the SEP and ESS2, including: accessibility, confidentiality and protection against retaliation, transparency, impartiality, timeliness, dialogue-based resolution, continuous improvement, and alignment with national legislation and human rights standards.

The mechanism must allow workers to raise complaints or concerns related to workplace issues such as labour conditions, disputes, safety risks, discrimination, harassment, violence against children, human trafficking, and SEA/SH, in a confidential and non-retaliatory manner.

SEA/SH-Specific Reporting Channel

In accordance with the World Bank Good Practice Note on SEA/SH, the workers' GRM must include a dedicated, confidential, and survivor-centred channel for reporting Sexual Exploitation, Abuse, and Harassment (SEA/SH). This channel must operate independently of standard grievance mechanisms and be accessible to all categories of workers.

SEA/SH grievances shall be:

- Handled by trained focal points using a survivor-centred approach, ensuring confidentiality, informed consent, dignity, and protection from re-traumatization;
- Referred—upon the survivor's consent—to qualified GBV Service Providers identified in the **GBV Action Plan (Annex 16)** for psychosocial support, legal assistance, medical attention, or shelter;
- Excluded from standard resolution timeframes, following instead the sensitive protocols outlined in the GBV Action Plan.

No written or signed complaint will be required for survivors to access support services. SEA/SH cases will be registered and tracked anonymously, strictly limiting access to confidential information. The effectiveness and integrity of the SEA/SH grievance channel will be monitored by TANESCO's Supervision Team and the designated GBV focal point.

GRM Procedures and Communication

Grievance channels (e.g., suggestion boxes, team leader reporting, HR meetings, hotline, WhatsApp) will be clearly communicated to all workers during induction and through ongoing E&S training. The use of the GRM must be encouraged at all times, with assurance that no worker will suffer retaliation for submitting a grievance.

TANESCO and the Contractors shall maintain an open-door policy and promote a culture of fair treatment and accountability. The GRM should include a defined response period (suggested: 10 working days), with the possibility of extension if justified—such extensions must be communicated to the complainant.

Importantly, as noted in paragraph 23 of ESS2, the existence of the GRM does not restrict the worker's access to judicial, administrative, or arbitration mechanisms or to grievance channels established through collective bargaining agreements.

The GRM must also extend to:

- Workers employed by subcontractors and primary suppliers, ensuring full inclusion across the project supply chain;
- Consultants engaged in implementing ESMP Plans and Programmes.

Workers will also be informed that they may submit complaints directly to TANESCO through a dedicated contact to be established under TANESCO's SEP. While this direct channel does not imply that TANESCO assumes contractual responsibilities, it enables oversight and the capacity to require corrective actions from Contractors or Subcontractors where labour practices present risks to workers or the Project.

6.5. Workers' Code of Conduct

The Contractors shall develop a Code of Conduct, with behavioural restrictions to be observed by all workers involved in the works of the Project. This Code of Conduct aims to contribute to the preservation of the environment and the health and hygiene conditions of the workers, ensure the quality of relations with the population near the works, as well as respect for the environment and environmental, social and OHS legislation, discipline, respect for the rights of workers and community regardless of gender, gender identity, sexual orientation, race, ethnic, migrant origin, disability and age. It also prohibits the consumption of alcoholic beverages and drugs, and other relevant aspects. This Code of Conduct has as a frame of reference the "World Bank Guidance Note on Addressing Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) in Investment Project Financing involving Major Civil Works", October 2022. This aspect of the Workers' Code is addressed in the **P.15 - Gender Based Violence Action Plan (Annex 16)** and further supported by **Section 10.2.3** of the ESIA, which outlines mitigation strategies and community protection measures related to GBV risks during construction.

To ensure adequate dissemination of the Code of Conduct, the Contractors shall include it in the content of induction training and environmental and social training for workers foreseen in this Plan (see next Section), and it shall be posted in strategic locations in the construction sites and other support areas.

The Code of Conduct must be adopted by all workers, including those of the main Contractors, subcontractors and suppliers.

The minimum requirements contained in the Code of Conduct are:

General aspects

- The conduct of employees before, during and after working hours shall be exemplary and in strict accordance with the law. In particular, a polite and respectful relationship with the rights of all persons shall be maintained; hostile behaviour towards the local community shall not be accepted, but respect for local values, customs and culture shall be shown at all times.
- Discrimination on the basis of: age, gender, gender identity and sexual orientation, race, ethnicity, nationality, disability-dysfunctional status, teenage mothers, and religious beliefs is strictly prohibited.

- All workers must wear credentials that allow easy identification of their names, position and the company they work for.
- It is strictly forbidden to carry weapons, consume alcoholic beverages or drugs, as well as possess pornographic materials (images, videos, magazines, etc.), make transactions with adults for sexual services, or with children and adolescents in all areas of the Project.
- The sale of goods within or near the boundaries of the construction site will be controlled. For this purpose, a register of traders will be kept and the number of persons allowed to perform this service will be limited.
- Any damage to construction site facilities and/or third-party property will be reported in a timely manner to the direct supervisor.
- Graffiti on the construction site facilities is prohibited, as well as any other form of vandalism that affects the property of the Contractors, TANESCO or third parties.
- No person employed by the Contractors may make statements related to the Project to the press or any other media, as these are only permitted to TANESCO or the SEP team.
- All employees must report to their supervisor immediately any conduct that violates the Code of Conduct in general.

Gender-based violence (GBV) and of sexual exploitation and abuse and sexual harassment (SEA/SH)

The Workers' Code of Conduct (CoC) must incorporate explicit and binding provisions on the prevention and response to Gender-Based Violence (GBV), including Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH), as outlined in the **P.15 - GBV Action Plan (Annex 16)**. Key aspects include: (i) strict prohibition of all forms of GBV/SEA/SH by project workers, whether towards community members or fellow workers; (ii) the obligation to treat all persons with dignity and respect, regardless of gender, age, or status; (iii) mandatory participation in GBV/SEA/SH awareness and prevention training; (iv) requirement to report observed or suspected SEA/SH behavior through designated and confidential channels; and (v) immediate disciplinary measures, including dismissal and legal action, for any breach of the CoC related to SEA/SH. The CoC must clearly inform workers that acts of SEA/SH constitute gross misconduct and are grounds for contract termination. Furthermore, workers must acknowledge in writing that they understand the SEA/SH standards, reporting obligations, and available survivor-centered response mechanisms. These provisions shall be reinforced through induction and refresher training, in line with the survivor-centered protocols and referral pathways detailed in the GBV Action Plan.

Occupational Health and Safety (OHS)

- All persons employed must comply strictly with occupational safety standards¹. Any failure to comply with these standards will be considered a serious offence by the Contractors' Occupational Safety Coordinator.
- All persons employed must comply with the Covid-19 prevention rules.

¹ As per detailed in P.17 - Occupational Health and Safety Management Programme.

- Any person employed shall report to the immediate Safety Supervisor the existence of any conduct that is unsafe or does not conform to health and safety standards.
- Medical examinations shall be carried out for admission, dismissal and for any change of job function.
- Any employee showing symptoms of illness should report them immediately.
- All employees must agree to take vaccinations if necessary.
- All employees must have good personal hygiene habits. The disposal of waste outside the designated waste containers is not permitted. Toilets must be used on the facilities.
- Heavy machinery drivers and equipment operators working outside the construction site facilities shall strictly follow road signs and traffic regulations. And they must respect the prohibition of littering on the roads during the journey.
- Transporting third parties in work vehicles during construction related activities is strictly prohibited. Third party transport is only permitted with the express authorisation and under the direct responsibility of the Contractors' Contract Manager and/or Resident Engineer.
- The use of construction service roads, speed limits and any instructions contained in signage must be complied with at all times.
- As part of the health prevention education campaigns that will be implemented with project workers during construction, special emphasis will be placed on the risks of sexually transmitted diseases. TANESCO's contractors will distribute condoms free of charge to their workers during the execution of these educational campaigns.

Environmental and cultural heritage

- Fishing and hunting of wildlife, as well as unauthorised cutting of vegetation is strictly prohibited. Any worker found to be carrying out such actions will be dismissed immediately.
- Any visual contact with local terrestrial wildlife within the Project areas must be reported without delay to the immediate supervisor for appropriate action to be taken by the environmental monitoring team.
- Feeding of local wildlife is prohibited.
- Keeping any type of domestic animal in the Project areas is prohibited.
- Walking in sensitive environmental areas outside the Project areas is prohibited.
- Lighting small fires or initiating open burning is strictly prohibited.
- Any archaeological, paleontological or historical remains or relics found during construction must be preserved and reported to the immediate supervisor without delay. This situation shall trigger the Chance Findings Procedure that is part of the Construction Environmental Plan (CEP) (P.01).

General safeguards

- Some situations or aspects not foreseen above may arise during the process of execution of the works. In all these situations, diligent conduct is expected from workers, following the same ethical standards that guided the preliminary elaboration of this Code of Conduct.



6.6. Environmental and Social Education for Workers

All topics covered in this section, including environmental, social, and occupational health and safety aspects, shall be addressed during workers' induction process, which is mandatory for all personnel prior to engaging in project activities. The induction will also include a thorough explanation of the Workers' Code of Conduct, which outlines behavioral standards, expectations regarding community relations, and a zero-tolerance policy toward discrimination, harassment, and SEA/SH. The purpose of the induction is to ensure that all workers—regardless of employment modality—clearly understand their rights, obligations, and the Project's commitments to safe, fair, and respectful working conditions, as defined under ESS2.

The E&S education for workers' induction will cover the following content:

- Summary of relevant E&S legislation, with emphasis on prohibitions on unauthorised vegetation cutting, fishing, hunting of wild animals, plant collection, damage to historical, cultural, archaeological and palaeontological heritage, noise emission;
- Mitigation measures for negative impacts and risks and environmental control instructions contained in the ESMP, explained in simple and direct language, to inform about good practices to be used and supervised in the works;
- Fire prevention;
- Importance of preventing and controlling environmental pollution;
- Solid waste management;
- Recognition of poisonous animals and procedures in case of bites;
- Archaeological, historical, cultural and paleontological heritage - awareness of the need for preservation, notions for identification and actions to be taken in case of chance findings;
- Explanation of how to act in case of emergencies such as accidents at work, accidental fire, among others;
- Possession and use of weapons in general - firearms and bladed weapons, except when required by the function performed;
- Speed limits on access roads and paths;
- Presentation of the Workers' Code of Conduct and rules on relations with the community in the area of influence;
- Sex education and communicable diseases;
- Risks of sexual and gender-based violence related to the Project, local customs, appropriate interaction with communities;
- Prohibition of sexual and gender-based violence/harassment;
- Channels available for reporting breaches of the Code of Conduct, especially related to: harassment, sexual, gender-based, gender identity and sexual orientation violence, sexual exploitation, and how they will be handled;
- Description of the procedures for environmental supervision of the works, focusing on the system for managing non-conformities;
- Use of personal and collective protective equipment (PPE and CPE);
- Among other topics.

In addition to initial worker's induction, E&S education and awareness sessions covering all key topics of this Labour Management Procedures (LMP)—including OHS, workers' rights, SEA/SH prevention, code of conduct, grievance procedures, environmental safeguards, and community relations—shall be conducted every four (4) months during the construction phase, in the form of standard one-hour modules. These refresher trainings are mandatory for all workers, including those employed by subcontractors and service providers, and must be documented through attendance records and brief post-training evaluations.

7. Performance Indicators

The LMP indicators should manage/monitor the following key issues:

Measure	Indicators
Human Resources Policy	<ul style="list-style-type: none"> Existence of an approved HR Policy aligned with ESS2 and national legislation. % of contractors and subcontractors with HRPs reviewed and approved by TANESCO before mobilization.
Recruitment and Local Employment	<ul style="list-style-type: none"> % of workers recruited locally (from project-affected communities). % of women and members of sexual/gender minorities among total workforce. % of unskilled and semi-skilled roles filled by local workers.
Management of Working Conditions	<ul style="list-style-type: none"> Number of non-conformities (NCs) recorded through the P.02 (<i>Working Conditions Monitoring Tool</i>).
Grievance Mechanism	<ul style="list-style-type: none"> Number of complaints/suggestions received through suggestion boxes installed in construction sites (total and SEA/SH-specific) Number of complaints/suggestions responded to/resolved Number of complaints/suggestions responded to within the time frame Number of documented community complaints related to labour influx or worker behavior.
Workers' Code of Conduct	<ul style="list-style-type: none"> Evidence of inclusion of the Code of Conduct as an annex to contracts signed with each Contractor Evidence of dissemination of the Code of Conduct in the construction sites Number of workers trained in the content of the Code of Conduct in relation to the total number of workers hired Number of incidents reported involving misconduct towards community members
E&S Education for Workers	<ul style="list-style-type: none"> Number of workers participating in E&S Education events, including induction, in relation to total number of workers % of workers trained on GBV/SEA/SH prevention and response Number of refresher trainings delivered in the reporting period % of workers receiving training on STIs/HIV prevention and personal hygiene Number of awareness sessions held on communicable diseases Number of informational materials distributed (e.g. leaflets, posters) % of workers trained on community behavior protocols and cultural sensitivity

Measure	Indicators
	<ul style="list-style-type: none"> Number of workers trained on protocols for community interaction Number of OHS training sessions conducted by contractor

8. Reports and Documentation

Contractors shall detail the procedures of their Human Resources Policies, which must be submitted to TANESCO for review and approval for further action.

The Contractors' compliance with the procedures shall be evidenced by their monthly reports to be prepared during construction, which shall include:

- Data relating to local labour recruitment, indicating:
 - Number of workers recruited, specifying the percentage of local and non-local recruitment and demobilisation;
 - Number of female and other sexual minority workers recruited, in relation to total recruitment.
- Data related to the training of workers:
 - Records and evidence of training provided to hired workers (attendance list, photographic record, among others);
 - Number of workers trained for prevention and action in situations of leaks and spills of hazardous products;
 - Number of workers trained in the Chance Findings Procedure;
 - Number of workers trained in environmental training modules in relation to the total number of workers hired;
 - Number of workers trained on the content of the Code of Conduct.
- Records of complaints/suggestions received through the Workers' Grievance Mechanism and responses to them;
- Records of complaints/suggestions received through the Workers' Grievance Mechanism and responses to them.
- Records of participation in E&S education for workers' events.

Compliance will also be evidenced through periodic inspections and verification of labour documentation by the TANESCO Supervision Team.

Serious Incident Report

In case of any serious incident or accident—including but not limited to fatalities, life-threatening injuries, cases of SEA/SH, major labour unrest, or significant environmental and social impacts—TANESCO shall notify the World Bank within 48 hours of becoming aware of the event. Notification shall include initial details on the nature of the incident, location, parties involved, and immediate response actions. Within 10 business days, TANESCO shall submit a detailed incident report, including a root cause analysis, corrective and preventive actions, and timelines for implementation. This protocol will align with the Environmental and Social Incident Response Toolkit (ESIRT) and the

provisions of the Environmental and Social Commitment Plan (ESCP) once it is finalized and disclosed.

9. Schedule

The Human Resources Policy procedures should be developed and approved by TANESCO and World Bank prior to the start of construction, as should the detailed Code of Conduct. The implementation of the measures will last throughout the construction phase.

E&S education for workers shall be implemented after the formation of the Contractors' teams, prior to the commencement of construction and every four months during construction, in a standard module of one (1) hour duration.

The labour recruitment measures shall commence at the planning stage and may be extended to much of the construction phase while the civil works are still in progress.

TANESCO should also develop its Human Resources Policy for application throughout the operational phase of the Project.

10. Budget

The estimated costs related to the implementation of this Labour Management Procedures (LMP)—including the Human Resources Policy, Workers' Code of Conduct, training, grievance mechanisms, working condition standards, and environmental and social education for workers—are detailed in **Chapter 12** of the ESIA (Resource Evaluation or Cost Benefit Analysis). These costs are part of the overall environmental and social programs planned for the construction phase and are considered within TANESCO's project implementation budget. The total cost of reviewing and monitoring the implementation of the LMP is estimated at **USD 80,000**.

ANNEX A – Template (i.e., minimum content) for Human Resources Policy (HRP)

This template outlines the minimum contents required for a Human Resources Policy (HRP) to be developed by all Contractors and Subcontractors engaged in the UTIP Project. The document must align with Tanzanian labour laws, the IFC Performance Standards, and the World Bank Environmental and Social Standard 2 (ESS2). The HRP shall be submitted to TANESCO for review and approval prior to workforce mobilization.

1. Introduction and Objectives

- Purpose of the HR Policy
- Commitment to national legislation and international labour standards (ESS2, ILO conventions)

2. Scope of Application

- Applicability to all employees, including subcontracted and supply chain workers
- Statement on inclusion of all genders and vulnerable groups

3. Employment Practices

- Recruitment procedures (including prevention of discrimination)
- Job classification, wages, and benefits
- Working hours, rest periods, and leave entitlements

4. Non-Discrimination and Equal Opportunity

- Statement prohibiting discrimination based on gender, ethnicity, age, religion, disability, sexual orientation, or other status
- Equal pay for equal work policy
- Promotion of female participation

5. Occupational Health and Safety (OHS)

- Commitment to implementing an OHS Management System
- Training and supervision of workers
- Accident and incident reporting procedures

6. Emergency Preparedness and Response (EPR)

- Basic emergency procedures
- Worker training and drills
- Coordination with site management and medical teams

7. Grievance Mechanism for Workers

- Procedures for confidential reporting
- Protection against retaliation
- Timeline for resolution

8. Workers' Code of Conduct

- Expected behavior in the workplace and communities
- Prohibition of sexual harassment, violence, exploitation, and intimidation
- Disciplinary measures for violations

9. Prevention of Child and Forced Labour

- Minimum age requirements
- Age verification procedures
- Zero-tolerance for forced or trafficked labour

10. Training and Capacity Building

- Induction training for all workers
- Periodic refresher training
- Specialized modules (e.g., SEA/SH prevention, cultural awareness)

11. Labour Influx and Workers' Camps

- Mitigation measures for social and environmental risks
- Compliance with Workers' Accommodation Guidelines (IFC/EBRD)

12. Monitoring and Reporting

- Internal monitoring systems
- Periodic reporting to TANESCO
- Recordkeeping requirements

13. Sign-off and Acknowledgement

- Declaration of understanding and compliance
- Signatures from employer and worker

Note: This HR Policy Template must be adapted to the specific context of the contractor's operations and workforce. TANESCO reserves the right to request revisions to ensure full alignment with project-level requirements and safeguard policies.

ANNEX B – Template for Labour Influx Management Plan (LIMP)

This template is intended to guide the preparation of Labour Influx Management Plans (LIMPs) by contractors and subcontractors engaged in the UTIP Project. The plan must be aligned with World Bank ESS2 and ESS4, the GBV Action Plan (**Annex 16**), the Stakeholder Engagement Plan (SEP – **Annex 14**), and the Environmental and Social Management Plan (ESMP – **ESIA Chapter 10**). It must be submitted to TANESCO for approval and to the World Bank for clearance prior to mobilization.

1. Introduction

- Objective of the Labour Influx Plan
- Reference to project scope and location
- Description of the contractor's scope of work and expected workforce size

2. Estimated Workforce and Influx Profile

- Total number of workers to be mobilized
- Classification by skill level (skilled, semi-skilled, unskilled)
- Geographic origin (local, national, international)
- Expected timing and duration of mobilization

3. Local Context Assessment

- Overview of host communities and demographic characteristics
- Sensitivity analysis (e.g., presence of vulnerable groups, cultural practices)
- Potential social tensions or risks from workforce influx

4. Risk Identification and Mitigation Measures

- Identification of key risks (e.g., SEA/SH, communicable diseases, resource competition)
- Proposed mitigation measures:
- Worker Code of Conduct
- Awareness campaigns in communities
- Workers' accommodation policies and rules
- Monitoring of worker behavior

5. Workers' Accommodation and Services

- Number and location of workers' camps
- Site layout and facilities (water, sanitation, waste management, lighting, etc.)
- Security arrangements
- Provisions for health care, food, and recreational activities

6. Community Engagement and Grievance Redress

- Coordination with community leaders and local authorities
- Procedures for information disclosure and community consultations
- Grievance mechanism for community members related to labour influx

7. Roles and Responsibilities

- Contractor responsibilities
- Subcontractor responsibilities
- Oversight by TANESCO and the Supervision Team

8. Monitoring and Reporting

- Indicators to track implementation of influx mitigation measures
- Frequency and format of reporting
- Procedures for non-compliance and corrective actions

9. Annexes

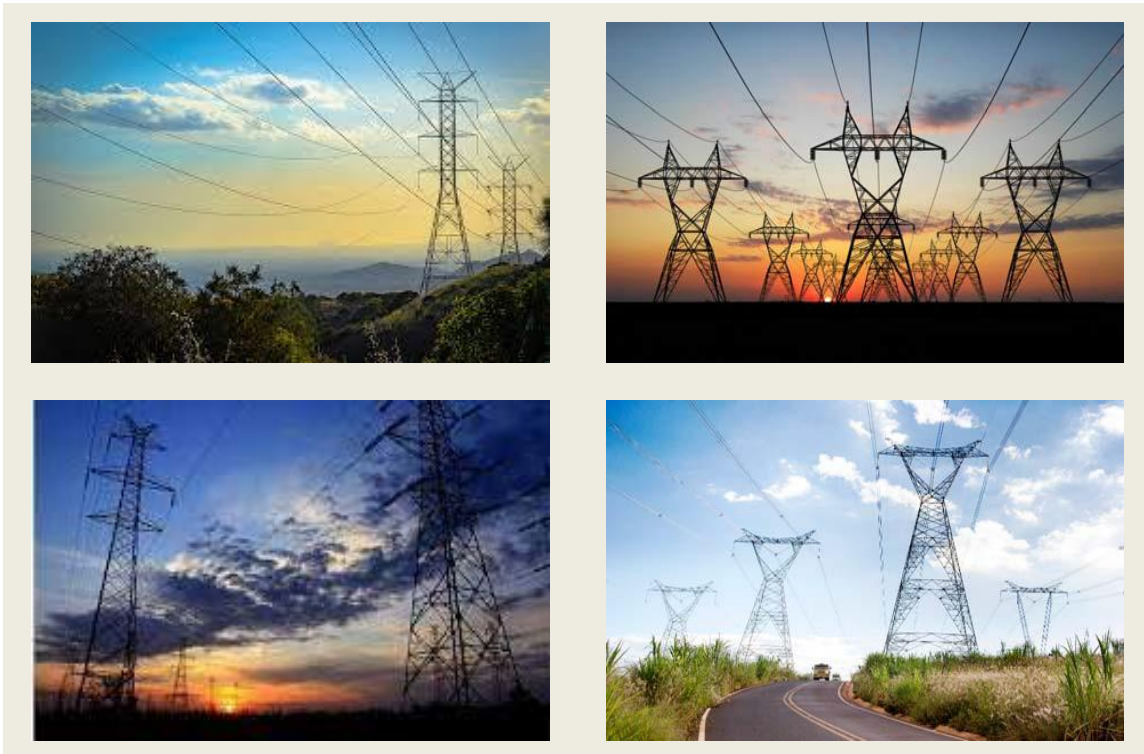
- Maps of camp locations
- Sample Worker Code of Conduct
- Community consultation log
- Risk matrix

Note: Contractors are required to adapt this template to the specific context of their worksite. TANESCO and the World Bank reserve the right to request revisions before final approval.



Annex 16 – P.15 - Gender Based Violence (GBV) Action Plan

PROPOSED 400kV UGANDA-TANZANIA INTERCONNECTOR PROJECT (UTIP) FROM IBADAKULI SUBSTATION IN SHINYANGA REGION VIA GEITA REGION, NYAKANAZI AND KYAKA SUBSTATIONS IN KAGERA REGION TO MASAKA WEST IN UGANDA (548.91km)



P.15 -SEXUAL EXPLOITATION AND ABUSE-SEXUAL HARASSMENT(SEA-SH) PREVENTION AND RESPONSE ACTION PLAN

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LIST OF EXPERTS


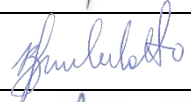

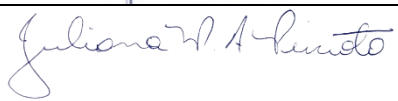


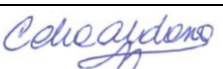



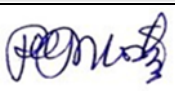
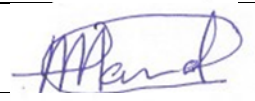
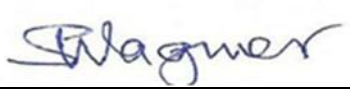

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Acknowledgment

The successful completion of the Sexual Exploitation and Abuse-Sexual Harassment (SEA-SH) Prevention and Response Action Plan for the UTIP project was made possible by the dedicated participation, commitment, and hard work of a multidisciplinary team of specialists in ESIA studies from various countries. Over the course of more than a year, international consultants from JGP Consultoria e Participações collaborated closely with experts from BENE Consult Limited (T) in Dar es Salaam. TANESCO's continued support and involvement in all field activities was crucial to the success of this endeavour.

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A special thanks to the Ward Executive Officers and Village Executive Officers, as well as to the local leaders and all the villagers where the T-line will pass through, who organized and participated in the public meetings where the project was presented, and for the information and opinions provided. The support, availability and participation of the Regional and District administrative secretaries and local government authorities was crucial for the implementation of the consultation.

Last but not least, we would like to express our sincere gratitude to the Vice President's Office, particularly the National Environment Management Council (NEMC), for their technical inputs, cooperation and guidance during the whole period of undertaking this EIA.

LIST OF ACRONYMS AND ABBREVIATIONS

BULAO	Bukombe Legal Aid Organization
CAE	Child Abuse/Exploitation
FGD	Focus group discussion
GBV	Gender-Based Violence
GRM	Grievance Redress Mechanism
IVP	Intimate Partner Violence
kV	Kilovolt
KIWOHEDE	Kiota Women Healthy and Development Organization
LHRC	Legal and Human Rights Centre
MoHCDGEC	Ministry of Health, Community Development, Gender, Elderly and Children
MAPEC	Missenyi AIDS Poverty Eradication Crusade
PAP	Project Affected Person
PIU	Project Implementation Unit
SEA	Sexual Exploitation and Abuse
SEA-SH	Sexual Exploitation and Abuse-Sexual Harassment Prevention and Response Action Plan
SH	Sexual Harassment
SHDEPHA+	Service health and development for People living positively with HIV/AIDS
SOSPA	Sexual Offences Special Provisions Act
TANESCO	Tanzania Electric Supply Company Limited
TGNP	Tanzania Gender Networking Program
TL	Transmission Line
TAMWA	Tanzania Media Women Association
TAWLA	Tanzania Women Lawyers Association
TAZA	Tanzania – Zambia
TOSO	Tumaini Orphan Support Organization
VAC	Violence Against Children
WB	World Bank
WHO	World Health Organization
WiLDAF	Women in Law and Development in Africa
WLAC	Women's Legal Aid Centre

EXECUTIVE SUMMARY

- The Sexual Exploitation and Abuse-Sexual Harassment (SEA-SH) Prevention and Response Action Plan details the operational measures that will be put in place to assess and mitigate risks of gender-based violence, including sexual exploitation and abuse (SEA) as well as sexual harassment (SH) that are project related. This includes procedures for preventing and responding to GBV, managing GBV related grievances and supporting survivors.
- Gender-based violence (GBV) affects a great number of women, girls, and disabled individuals in Tanzania. Based on that, Tanzania has adopted and implemented policies, laws and standards to address GBV. such as the National Integrated Case Management. Additionally, several NGOs advocate for the rights of women, children, people with disabilities and gender equality. Services are provided along the project sites, such as MTAKUWWA programs and the Gender and Children Police Desks at all district offices, along with other providers of and psychosocial services. Despite these efforts, there are still gaps.
- The social baseline identified that traditional gender roles are prevalent in the communities crossed by the project, with a clear division of roles and rights, which include a clear burden on women related to domestic roles and a limited access of women to land ownership. Gender based violence is a significant problem in the area of influence of the project.
- Women expressed specific concerns regarding the potential impacts of the Project on their wellbeing. These include a higher economic dependency of women on men, as they may have more access to the project benefits (including jobs and compensations), increasing existing inequalities and women's vulnerability; risks of increase of physical violence due to disputes between men and women related to access to compensations; higher risk of sexual violence and unwanted pregnancies linked to the influx of workers, and the loss of social support in the case of resettlement, increasing vulnerability for women, among others.
- The Project may also increase child labour, as opportunities open for children's work, who may drop school. In the case of girls, they may be forced into early marriage with project workers in exchange for financial support. The influx of money could also lead to issues such as drug addiction and unwanted pregnancies.
- The risks of increasing GBV and the impact on children derive from two sources: the access to the Project benefits, and the conflicts and inequalities it may foster, and the relationship between Project workers and members of the community, particularly women and children. To manage these risks, TANESCO will implement a SEA-SH Action Plan.
- The SEA-SH Action Plan will aim to prevent GBV and violence against children and to respond to any harm or problem caused by the project. To do so, TANESCO will work with its workers, its contractors, the community and with

the public and private institutions specialized on these issues. The following are the main actions that will be implemented:

- TANESCO will train and orientate its workers and those of the contractor and subcontractors.
- A Code of Conduct will be developed that will specifically address GBV/SEA/SH issues. TANESCO, the contractor and subcontractors will include this in the trainings given to their workers.
- TANESCO will implement actions to build awareness directed to the community and workers about GBV risks, GBV prevention, GBV reporting and response mechanisms.
- Information will be provided to the communities about the grievance redress mechanisms and the type of situations, related to GBV and VAC, where it can be used.
- Establish close collaboration between GBV service providers such as Police GBV desk, GBV District Committees and local NGOs in attaining an appropriate and safe responses for survivors
- Facility designs, such as worker camps and offices, must include gender-friendly features to ensure safety and equitable project benefits.

DEFINITIONS

Affirmative action: Any measure designed to overcome an inequity or the systematic denial or infringement of a right or fundamental freedom.

Empowerment: Increasing the personal, political, social, or economic strength of individuals and communities. It involves awareness-raising, building self-confidence, expansion of choices, increased access to and control over resources and actions to transform the structures and institutions that reinforce and perpetuate gender discrimination and inequality.

Gender: Social definition of women and men among different communities and cultures, classes, ages and during different periods of history.

Gender Analysis: A systematic methodology for examining the differences in roles and norms for women and men, girls, and boys; the different levels of power they hold; their differing needs, constraints, and opportunities; and the impact of these differences in their lives.

Gender Division of Labour: Refers to the classification and allocation of tasks for women and men in managing domestic, economic and community activities. Gender division of labour impacts differently on men's and women's access to opportunities and inflicts gender stereotyping.

Gender Equality: is achieved when women and men enjoy the same rights and opportunities across all sectors of society, including the domestic realm, economic participation and decision-making, and when the different behaviours, aspirations and needs of women and men are equally valued and favoured.

Gender Equity: the provision of fairness and justice in the distribution of benefits and responsibilities between women and men.

Gender Mainstreaming: A process that ensures concerns of men and women form an integral dimension of the design of all policies, laws and administrative procedures including budgeting, and budget implementation, and the monitoring and evaluation of programs implementing such policies, laws and administrative procedures in all political, economic and societal spheres so as to ensure that both women and men benefit equally and that inequality is not perpetuated.

Gender Based Violence (GBV): - GBV is an umbrella term for any harmful act that is perpetrated against a person's will and that is based on socially ascribed (i.e., gender) differences between males and females. GBV broadly encompasses physical, sexual, economic, psychological/emotional abuse/violence including threats and coercion, and harmful practices occurring between individuals, within families and in the community, at large. These include sexual violence, domestic or intimate partner violence (IPV), trafficking, forced and/or early marriage, and other traditional practices that cause harm.

GBV has a greater impact on women and girls, as they are most of often the survivors and suffer of great physical damage than men when victimized (WHO 2005).

Gender Oppression: gender oppression is a result of imbalance of power between women and men. Gender oppression occurs when one sex is treated in cruel, harsh manner or made to feel inferior, uncomfortable or unhappy in socio-economic and political life.

Gender Violence: gender violence refers to any act, omission or conduct by means of which physical, sexual or mental suffering is inflicted directly or indirectly, through threat, coercion, or any other means on any person with the purpose of intimidating, punishing, humiliating, maintaining sex stereotyped roles, undermining the security of a person, self-respect or diminishing physical or mental capacities.

Older members of society: a person who has attained the age of sixty years and whose specific rights are provided in the National Water Policy 2002.

People with Disabilities: any person with any physical, sensory, mental, psychological or other impairment, condition or illness that has, or is perceived by significant sectors of the community to have a substantial or long-term effect on an individual's ability to carry out ordinary day-to-day activities.

Sexual Harassment: Defined as any unwelcome sexual advance, request for sexual favour, verbal or physical conduct or gesture of a sexual nature, or any other behaviour of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation to another, when such conduct interferes with work, is made a condition of employment, or creates an intimidating, hostile or offensive work environment. It occurs between personnel/staff and involves any unwelcome sexual advance or unwanted verbal or physical conduct of a sexual nature.

Sexual Exploitation: Any actual or attempted abuse of a position of vulnerability, differential power, or trust, for sexual purposes, including, but not limited to, threatening or profiting monetarily, socially or politically from the sexual exploitation of another.

Sexual Abuse: The actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions. SEA is therefore a form of GBV and generally refers to acts perpetrated against beneficiaries of a project by staff, contractors, consultants, workers and partners.

Violence Against Children (VAC): Violence against children takes many forms, including physical, sexual, and emotional abuse, and may involve neglect or deprivation. Violence occurs in many settings, including the home, school, community and over the Internet. Similarly, a wide range of perpetrators commit violence against children, such as family members, intimate partners, teachers, neighbours, strangers and other children. Such violence not only inflicts harm, pain and humiliation on children; it also kills. All children have the right to protection from violence, regardless of the nature or severity of the act and all forms of violence can cause harm to children, reduce their sense of self-worth, affront their dignity and hinder their development

Violence Against Women (VAW): Any act of “gender-based violence that results in or is likely to result in physical, sexual or psychological harm or suffering to women, including threats of acts such as coercion or arbitrary deprivation of liberty, whether occurring in public or in private life” (United Nations General Assembly, 1993, Declaration on the Elimination of Violence against Women). In all societies, to varying degrees, women and girls are subjected to physical, sexual, and psychological abuse that cuts across lines of income, class and culture. Such violence is recognized as a violation of human rights and a form of discrimination against women, reflecting the pervasive imbalance of power between women and men.

1.0 Introduction

1.1 Brief Description of the Project

The Government of Tanzania and Uganda through their Power Utility Companies, Tanzania Electricity Supply Company Limited (TANESCO) and Uganda Electricity Transmission Company Limited (UETCL) respectively, are in the preparation of implementing a 400kV for Uganda Tanzania Interconnector Power (UTIP) transmission line. In Tanzania the proposed project will traverse through Shinyanga, Geita and Kagera Regions.

The Project comprises:

- Construction of a new 548.91 km long transmission line premised on 400 kV.
- Clearing of the wayleave (52 m for 400 kV TL as per TANESCO standards).
- Construction of access roads, that in some cases will need to be implemented along alignments that extrapolate the limits of the t-line wayleave.
- Construction of workers camps and materials storage facilities, as necessary.
- Other construction support infrastructure (conductor launching sites, surplus soil deposits, borrow areas for fill material, quarries, other).

The wayleave will be 52 meters wide, totalling around 2,854.33 ha along the entire length of the project route. Considering an average distance between towers of around 400 meters and a footprint per tower of around 100 square meters, this gives an approximate area of 13.62 ha to be permanently occupied by the base of the towers.

Expansion works will be needed for the existing substations (SS), the SS Kyaka, SS Nyakanazi, and SS Ibadakuli, providing space for the TL and transformer bays and for future expansion.

In principle, before starting the construction activities, the project proponent is required to undertake the Environmental and Social Impact Assessment (ESIA) for the proposed project to comply with the Environmental Impact Assessment and Audit Regulations, 2005 and its amendment of 2018.

The proposed transmission line will traverse about 105 villages of Shinyanga District, Shinyanga Municipality, Msalala, Geita, Nyangw'hale, Bukombe, Mbogwe, Bukombe, Biharamulo, Ngara, Karagwe and Missinyi Districts. Furthermore the proposed line will traverse different biophysical environments such as swamps (flood plain) water catchment area crossing river Kagera, Burigi Chato National Park, Biharamulo forest reserve under TFS, mountains with various biodiversity of interest, traverses various existing infrastructures such as transmission line, roads both under TARURA and TANROADS and indigenous farms and lands which includes vulnerable people, sacred places and other settlements including small scale miners.

East Africa Community Member States agreed to interconnect their power systems by constructing a high voltage transmission line system. The main objectives of the project

are to: (i) enhance electricity trade; (ii) improve security and reliability of electricity supply; (iii) foster economic development and regional integration. Previously, a number of technical feasibility studies, environmental and social studies were undertaken on the national, regional and sub-regional level and the voltage levels considered and recommended included 220 kV, 330 kV and 400 kV. Most recently, the bulk-transmission line Interconnectors, such as ZTK-interconnector are being considered at 400kV double circuit.

1.2 Purpose of the SEA-SH Action Plan

This Sexual Exploitation and Abuse-Sexual Harassment (SEA-SH) Prevention and Response Action Plan details the operational measures that will be put in place to assess and mitigate risks of gender-based violence, including violence against children (VAC), sexual exploitation and abuse (SEA) as well as sexual harassment (SH), that are project related. This includes procedures for preventing and responding to GBV, managing GBV related grievances and supporting survivors. In all societies, to varying degrees, women and girls are subjected to physical, sexual and psychological abuse that cuts across lines of income, class and culture. Such violence is recognized as a violation of human rights and a form of discrimination against women, reflecting the pervasive imbalance of power between women and men.

The plan that is presented here includes both actions to be implemented with the communities and with the workers of the project.

This document is divided in two sections. In the first one presents an analysis of the context of the project, of the risks faced in this aspect by the project; the information gathered during the consultation process, where the social baseline was also elaborated. In the second one introduces the measures proposed to be implemented.

2.0 Legal and Institutional Context

2.1 National Level

Gender-based violence (GBV) affects a great number of women, girls, and disabled individuals in Tanzania. It is the outcome of social and economic injustices that favour men over women as well as gender norms. In Tanzania, the importance of gender equity and discrimination in several areas of life is becoming more widely acknowledged. This awakening includes a rising recognition of the prevalence of gender-based violence, its effects on men, boys, and women alike, as well as how it affects the nation's burgeoning health and social welfare institutions and economy.

Based on that, Tanzania has adopted and implemented a number of policies, laws and standards to address GBV. Some of the policies, laws and initiatives include:

- The Constitution of the United Republic of Tanzania of 1977 Part III provides the foundation for upholding the basic constitutional rights and duties of the people. The Constitution of the United Republic of Tanzania explicitly prohibits

discrimination based on gender and has enshrined the principle of gender equality inserting the Bill of Rights and Duties. For instance, sections 12 and 13 of the Constitution state that all human beings are born free, and equal and are equally entitled to the recognition and respect of their rights.

- The legal and policy framework that responds to GBV is found in several specific laws including the Law of the Child, Law of Marriage, Anti-Trafficking in Persons Act, Criminal Procedure Act, Employment and Labour Relations Act, Education Act, Customary Laws Declaration Order of 1963, HIV and AIDS (Prevention and Control) Act, Land Act, Indian Succession Act, Probate and Administration of Estates Act, Rights of Persons with Disabilities Act and Village Land Act.
- Sexual Offences Special Provisions Act, 1998: An Act to amend several written laws, making special provisions in those laws about sexual and other offences to further safeguard the personal integrity, dignity, liberty and security of women and children.
- National Gender Policy, 2002 aims to promote gender equality and empower women and vulnerable groups in the country's development process. The NGP's objectives include:
 - Eliminating gender-based discrimination
 - Ensuring women and men have equal access to resources
 - Creating gender-responsive structures and processes
 - Improving national capacity for gender mainstreaming
- National Women and Gender Development Policy, 2000 aims to promote gender equality and eliminate discrimination against women and girls. The policy emphasizes integrating gender equality into all levels of the development process, including policies, plans, and strategies.
- Penal Code (Cap 16) (revised 2002): It is an offence for a male person to rape a girl or a woman.
- National Health Policy, 2007: promoted by the Federal Ministry of Health and inspired by the constitutional principle according to which health must be public and all citizens must be guaranteed equal access and free primary health care, is a sectoral document that outlines the key directions for the development.
- The Public Health Act, 2009 as amended in 2010 provides for the promotion, preservation and maintenance of public health with a view to ensuring the provisions of comprehensive, functional and sustainable public health services to the general public and to provide for other related matters.
- Anti-Trafficking in Persons Act, 2008 criminalizes sex trafficking and labor trafficking and prescribed punishments of two to 10 years' imprisonment, a fine

between 5 million and 100 million Tanzania shilling (TZS) (\$2,170 to \$43,440), or both for offenses involving adult victims, and 10 to 20 years' imprisonment.

- 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.
- Criminal Procedure Act 7, 2018 Duty to give information on crimes and sudden deaths. 8. Inquiries into deaths. Criminal procedure law entails a framework of laws and rules that govern the administration of justice in cases involving individuals accused of committing crimes.
- Legal Aid Act, 2017: An Act to regulate and coordinate the provision of legal aid services to indigent persons, to recognise paralegals, to repeal the Legal Aid.
- National Mechanism on Gender Based Violence/Sexual Exploitation and Abuse. A national mechanism for gender-based violence (GBV) and sexual exploitation and abuse (SEA) can include a variety of initiatives, such as:
 - Service access: Ensuring that services are accessible, and that institutions and service providers are able to respond to GBV
 - Reporting: Establishing safe spaces for survivors to report GBV, such as gender desks in police stations
 - Legal aid: Providing legal aid services for GBV victims
 - Awareness: Raising awareness of existing services, and how to support survivors
 - Referral mechanism: Developing a multi-sectoral and multi-stakeholder referral mechanism
 - Social norms: Changing social norms that contribute to under-reporting of GBV
 - Police training: Training police on GBV and providing guidance for Police and Gender Desks
 - Legal literacy: Building legal literacy among the population through translation of laws and policies
 - Collaboration: Collaborating with relevant stakeholders, such as media, traditional authorities, and faith-based organizations
 - Monitoring: Monitoring the quality and sustainability of service provision
 - Assessment: Undertaking assessments of the effectiveness of the plan GBV can have high social and economic costs. When working to prevent and respond to GBV, it's important to consider intersectionality, which is the idea that people face different kinds of discrimination and risks due to a combination of their identities.

- The Law of Child Act (CAP. 13 R.E. 2019) An act to provide 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.
- Vocational Education and Training Act 1994 (No. 1) provides a legal framework for the implementation of a flexible vocational education and training system that responds to the labour market.

Generally, Tanzanian law has shown some progress in preventing and punishing GBV crimes. For example, the Sexual Offence Special Provisions Act of 1998 poses harsh penalties for perpetrators of sexual violence. However, gaps remain in the legal system. Domestic violence is only minimally and vaguely addressed.

Apart from the legal framework, the Government through various Ministries has come out with policies that guard against gender-based violence such as the National Integrated Case Management which seeks to have a harmonized, standardized, and systematic framework for the care and protection of the most vulnerable children and linking them to social welfare, health/HIV, protection and education services from the community to the national level. One other such policy is the Women's Gender and Development Policy of 2000 which aims at ensuring that gender equality is embraced in all plans, strategies, and development undertaking in every sector and institution; the National Development Vision 2005 which envisages poverty reduction and improving the country's income to middle level, MKUKUTA strategy which also aims at eradicating poverty, hunger, disease, ignorance, environment destruction and discrimination against women by 2025.

Recent institutional reforms in government also point to promising paths toward responding to and preventing GBV. For example, each ministry has a gender focal point, and the Ministry of Community Development, Gender, and Children initiated efforts to train the focal points on ways to mainstream gender in their ministry work plans and budgets. Also noteworthy, the Police Force, under its institutional reforms makes the police more accessible to the community and more responsive to the community's needs. Out of this initiative, the Tanzania Police Female Network (TPF Net) was created, and with it came the creation of gender desks to respond to cases of GBV at police stations. The Ministry of Community Development, Gender, and Children (MoCDGC) has demonstrated leadership in this area, despite its limited resources. First, the ministry worked to ensure that the National Strategy for Growth and Poverty Reduction has strong gender components, including, of particular significance, a goal and corresponding activities on the elimination of sexual abuse and sexual violence. More specifically, under governance and accountability—one of three cluster areas of the strategy—one goal is “improved personal and material security, reduced crime, eliminate sexual abuse and domestic violence.” The strategy also links GBV in schools with girls' limited access to education (Tanzanian Vice President's Office, 2005, p. 35).

Several NGOs also advocate the rights of women, children, people with disabilities and gender equality. Organizations such as the Legal and Human Rights Centre (LHRC), the Tanzania Media Women Association (TAMWA), Tanzania Women Lawyers Association (TAWLA), Women Wake Up (WoWAP), Kiota Women's Health and Development Organization (KIWOHEDE), Family Planning Association be among others. These

organizations receive complaints, offer legal advice and in some cases represent women and girls in court and accompany them through the legal proceedings. However, most of these institutions are Dar es Salaam and town based which make difficult for people and disabilities in particular in the villages to access and report the matter.

Notwithstanding the efforts of numerous institutions and groups, survivors of gender-based violence have relatively few options when it comes to the quantity and calibre of services and resources offered. There are not any guidelines in place right now for dealing with survivors. Similarly, service providers have limited access to training on appropriate protocols. There is a significant lack of health, counselling, and social welfare services for survivors of gender-based violence, despite the fact that tiny nongovernmental organizations (NGOs) with tight budgets provide legal aid services in the project areas.

Also, according to WB Group (2017)¹, the legal and policy infrastructure that responds to GBV is found in a number of specific laws including Law of the Child, Law of Marriage, Anti-Trafficking in Persons Act, Criminal Procedure Act, Employment and Labour Relations Act, Education Act, Customary Laws Declaration Order of 1963, HIV and AIDS (Prevention and Control) Act, Land Act, Indian Succession Act, Probate and Administration of Estates Act, Rights of Persons with Disabilities Act, and Village Land Act.

The national response to GBV in Tanzania is anchored on key legal, policy, and development frameworks, which illustrate improved commitments to the rights and protections of women and girls. However, enforcing laws continues to be a challenge. This is due to, among other factors, weak investigations, insufficient evidence, social norms against reporting, and delays within the court system.

Existing local GBV/VAC NGOs in the project areas

Although there are a number of NGOs that have interventions in the project areas, the consultations were conducted with the few who were reachable. The NGOs within the project area to mention the few in different regions are Geita- (NELICO, TOSO, BULAO, Mbogwe legal Aids organization, SHDEPHA+), Shinyanga (-KIWOHEDE, NELICO) Kagera – MAPEC, TOSO, KKKT). During the preparation of the environmental and social assessments, and throughout project implementation, they are very important as they help to understand and address the project risks to women and girls. These NGOs can also play a part in sensitizing the community about project risks and increasing their ability to withstand them.

The National Plans of Action to End Violence Against Women and Children in Tanzania 2017/18 – 2021/22 have established Women and Child Protection Committees (MTAKUWWA committees), comprised of duty bearers, NGOs, CBO, and community members who convene quarterly and share protection concerns across the protection spectrum. These committees operate from the National level to Village/mtaa levels. They operate as the referral pathways for survivors through a collaborative approach with

¹ Tanzania Gender Based Violence Assessment Scope, Programming, Gaps and Entry Points. Report No: AUS0002786. 2017.

service providers within the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC), the law enforcement agents, local governments (District/Municipal level for the Council Health Management Team (CHMT), ward health committees as well as ward social welfare officers.

Through the Ministry of Health, Community Development, Gender, Elderly and Children MoHCDGEC, healthcare providers in Songwe and Rukwa have been trained on the National Management Guidelines on GBV for the health sector which provides an opportunity for strengthening referrals and linkages with the community as well as assuring standardized medical management of GBV.

Various NGOs such as Women in Law and Development in Africa (WiLDAF), Tanzania Media Women Association (TAMWA), Tanzania Women Lawyers Association (TAWLA), Legal and Human Rights Centre (LHRC), Women's Legal Aid Centre (WLAC), Kilimanjaro Women Information Exchange and Consultancy Organization (KWIECO), Tanzania Gender Networking Program (TGNP), Kivulini Women Organization, Anti-Female Genital Mutilation Network (AFNET), ABC Foundation, Kiota Women Health Development Organization (KIWOHEDE), have undertaken tremendous sensitization campaigns to prevent and respond to gender-based violence through media campaign education and training, legal aid services, publication and dissemination of GBV materials and coordination. There is an opportunity for the project to link with existing NGOs, CBOs, and existing structures (e.g. MTAKUWWA committees)

GBV/VAC program in the project area

Along the project sites, and in line with the national government approach, there are MTAKUWWA program, the Gender and Children Police Desks at all district offices in the project areas. Other service providers on paralegal and psychosocial services in the project areas are; (NELICO, TOSO, BULAO, Mbogwe legal Aids organization, SHDEPHA+), Shinyanga (-KIWOHEDE, NELICO) Kagera – MAPEC, TOSO, KKKT) during the preparation of the environmental and social assessments and throughout project implementation are very important as they help to understand and address the project risks to women and girls. These NGOs can also play a part in sensitizing the community about project risks and increasing their ability to withstand them. Implementation of MTAKUWWA / NPAVAWC (National Plan of Action to End Violence Against Women and Children) in the project areas:

- The Five-year National Plan of Action to End Violence Against Women and Children (NPAVAWC 2017/18 – 2021/22), has been developed by consolidating eight different action plans addressing violence against women and children to create a single comprehensive, National Plan of Action to eradicate violence against women and children in the country.
- Violence against women and children is a daily reality for a large number of women and children. In Tanzania its prevalence is high hence addressing it, is a central development goal in its own right and key to achieving other development outcomes for women, their families, communities, and the nation.

- The NPA-VAWC emphasizes the actions needed for both preventing and responding to violence and recognizes that investing in violence prevention initiatives has a positive.
- MTAKUWWA at Regional and District is implemented by having a gender desk, which is managed by the Municipal/District Community Development Officers and Municipal Social Welfare Officers.
- MTAKUWWA is implemented by the district officials with the support of service providers such as NGO and the Police Gender Desk.
- The district implements the MTAKUWWA through an awareness campaign on GBV/VAC in village meetings, schools (primary and Secondary), in public gatherings such as marketplaces, and health centers.
- The awareness campaign is conducted once they know there is a meeting in the villages and there are no regular programs for disseminating the knowledge to the communities.
- At the village level, they have formed community committees that include youths and children in schools where they have trained them on how to report the cases once they happen in the suggestions boxes that are installed in the schools. These boxes are opened by the Community Development Officer at the village level once a week. Village leaders also are trained on how to handle the GBV once the cases appear.
- MTAKUWWA at the region is implemented in four ways
 - I. Through providing education, to increase awareness for gender-based violence.
 - II. Through improvement of the economy to the community.
 - III. Through the implementation of various committees from village level, ward, and Municipal, level. In the poor household community, each village has a gender focal person appointed in the gender-based violence committee male and female.
 - IV. Provision of awareness about education and relationships by bringing together parents to be close to their children through various groups and use meetings in a quarter every year through district community development officers and District Social Welfare Officers

Table 2.1.a presents a description of the NGOs and services providers identified and contacted during the consultation.

Table 2.1.a
NGOs and service providers consulted

S/N	Name of NGO/Service provider	Area of Service	What they provide
Shinyanga Region			
1.	KIWOHODE	Msalala District	Realizing Gender Equality through Empowering Women and Adolescent Girls
Geita Region			
2.	New Light Children Centre Organization (NELICO)	Geita, Shinyanga Kagera Regions	Provides services to vulnerable children in all lake zone regions in Tanzania (Geita, Mara, Shinyanga, Kagera, Kigoma, and Mwanza). NELICO has different projects aimed at helping vulnerable children. Examples of such projects

Table 2.1.a
NGOs and service providers consulted

S/N	Name of NGO/Service provider	Area of Service	What they provide
			include ACHIEVE which aims to help children with HIV/AIDS. Through this project, the organization ensures that the children get access to health care and that they do not get any GBV related problems. The project also provides legal aid to children who are victims of GBV through mobile clinics. This project also helps children who are not in formal education to get access to formal education. Most of these children face challenges of child labour due to poverty.
3.	Mbogwe Legal Aid Organization	Mbogwe district	This organization was established in 11/09/2015 with an objective providing legal aid to women. The organization provides education to women in all matters related to their rights. This organization is funded by the Legal Service Facility of the Ministry of Constitutional and Legal Affairs.
4.	SHDEPHA+	Bukombe District	Mainly the organization deals with those who are HIV/AIDS positive, the elderly, and children. SHDEPHA+ is an acronym for Service, Health, and Development for People living positively with HIV/AIDS. It is a national non-governmental organization, registered on 21 November 1994. Although the organization was initially established to cater for the positive HIV/AIDS infected people, it is now also dealing with the elderly group, particularly those who are living in difficulties and are not able to support themselves. The organization has different projects including research in areas of capacity to youths starting from 13 to 17 years old. The project aims to study life skills among the youth in that category of age group. This project is financed by MILELE Zanzibar Foundation in collaboration with UWEZO Tanzania. The other project called HelpAge deals with elderly people and is particularly focusing on their rights on different aspects of their lives. These include the right to live, get access to health care, preventing deaths associated with traditional beliefs such as witchcrafts, and other rights.
Kagera Region			
5.	MAPEC	Missenyi District	Core Ares of Intervention i) Promotes Early Childhood Development ii) Improve quality life of Orphans and most vulnerable children iii) Combat HIV/AIDS iv) Climate change Program Focus Areas

Table 2.1.a
NGOs and service providers consulted

S/N	Name of NGO/Service provider	Area of Service	What they provide
			i) HIV/AIDS Interventions ii) Disaster preparedness and relief services iii) Health, nutrition and sanitation iv) Entrepreneurship and vocational skills development v) Sustainable agriculture and food security i) Early childhood development vi) Orphan and vulnerable children vii) Climate change and Environmental protection
6.	TOSO	The Organisation is currently operating within KAGERA, GEITA and KIGOMA Regions.	<p>TOSO receives fund different donors. The organization receives fund from Susan Wilson (UK) Founder and Scotland Board. The fund received is used to pay salaries for the organization's workers. The fund is also used for the construction of houses, particularly to the families living in poor conditions and providing them with water harvesting tanks of 2000 litres. The organization is operating in all districts of Kagera, Chato in Geita, and Kakonko in Kigoma. About 4565 students have been supported from primary to university level in Biharamulo district. Similarly, 506 widows and 324 widowers have also been supported by the organization in Biharamulo.</p> <p>TOSO has also worked with Empowerment Through Skills Programme (ESP) to empower girls who have been denied chances to attend school after being pregnant. The organization also provides education related to gender equality and human rights. Skills such as carpentry and tailoring are also provided to children who do not have access to formal education.</p>

Elaboration: JGP/BENE. Source: Fieldtrips 2023 – 2024.

2.2 International Requirements

A set of international standards will apply in the project regarding GBV in the project, which include:

- **World Bank Environmental and Social Standards (ESS)**, notably:
 - ESS 1: Assessment and Management of Environmental and Social Risks and Impacts
 - ESS 2: Labor and Working Conditions promotes equitable standards for and good human resources management and relationships that support respect for project workers including those who are disadvantaged or vulnerable.

- ESS 4: Community Health and Safety which recognises that projects may result in risks to communities including those related to GBV.
- **World Bank Guidance Note on Addressing Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) in Investment Project Financing involving Major Civil Works, 2022².** Designed to identify and tackle sexual exploitation, abuse, and harassment (SEAH) in WB financed projects with civil works.
- **Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), adopted by the United Nations General Assembly on 18 December 1979.** The CEDAW is the only human rights treaty which affirms the reproductive rights of women and targets culture and tradition as influential forces shaping gender roles and family relations.
- **ILO Declaration on Fundamental Principles and Rights at Work.** Adopted in 1998 and amended in 2022, is an expression of commitment by governments, employers' and workers' organizations to uphold basic human values - values that are vital to our social and economic lives.
- **C190 - Violence and Harassment Convention, 2019 (No. 190) not ratified by Tanzania.** Each Member which ratifies this Convention shall respect, promote and realize the right of everyone to a world of work free from violence and harassment.

3.0 Gender Based Violence and Violence Against Children

Both men and women are facing gender-based violence. However, women are disproportionately affected and face violence through being beaten and injured, sexual assault, harassment, and deprived of doing work that will uplift them economically. Women in Tanzania may also face cruelty from their partners as pregnant women are being beaten for being pregnant as their husband claims that they don't want more children and so they are forced to abort.

Violence also affects children and teenagers. Among girls, there is early marriage that young girls, under 18 years and still studying, face. This results in early pregnancies that lead to an increase in death while giving birth and diseases such as fistula. However, early marriage has impacted their education as they are deprived of completing their education. The cause of early marriage in the village is due to parents who require dowry or bride price.

Regional Police keeps records of the crimes in their area, which include GBV issues, that are presented in **Tables 3.0.a, 3.0.b and 3.0.c.**

Table 3.0.a

Incidence of crime on GBV information in Shinyanga Region from 2021 to 2023

S/N	Type of offence	Year 2021	Year 2022	Year 2023
1	Rape	214	235	222
2	Sodomization	38	31	35
3	To impregnate a school pupil	58	65	63
4	Dumping a baby	02	-	06

Source: Shinyanga Regional Police Officer 2024.

² World Bank Guidance Note on Addressing Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) in Investment Project Financing involving Major Civil Works, October 2022.

The above GBV issues which were reported together with other crimes records for the Shinyanga Region from 2021 to 2023, show that raping cases were 214 in 2021, increased to 235 in 2022, but decreased in 2023 to 222. Sodomization in 2021 were 38 cases, in 2022 were 31 and in 2023 were 35.

The report by police on impregnate a school pupil in 2021 indicates that there were 58 cases in 2022 there were 65, and in 2023 there were 63 cases. Regarding dumping a baby in 2021 there were two cases and in 2023 increased to six cases.

Table 3.0.b

Incidence of crime on GBV information in Geita Region from 2021 to 2023

S/N	Type of offence	Jan-Dec 2021	Jan- Dec 2022	Jan- Dec 2023
1	Rape	99	107	97
32	Child desertion/ abandonment	4	7	2
43	Child stealing	7	5	3

Source: Geita Regional Police Officer 2024.

The above GBV issues, which were reported together with other crimes records for the Geita Region from 2021 to 2023, show that raping cases were 99 in 2021, increased to 107 in 2022, but decreased in 2023 to 97.

The report by police on child abandonment in 2021 there were 4 cases, in 2022 there were 7 and in 2023 they decreased to 2 cases. Child stealing, in 2021 there were 7 cases, decreased to 5 cases in 2022 and in 2023 were 3 cases.

Table 3.0.c

Incidence of crime on GBV information in Kagera Region from 2021 to 2023

S/N	Type of offence	2021	2022	2023
1	Rape	231	181	224
2	Child stealing	07	05	02
3	Child desertion	12	09	15

Source: Geita Regional Police Officer 2024.

The above GBV issues show that raping cases were 231 in 2021, 181 in 2022 but increased to 224 in 2023.

The police report on child abandonment indicates that in 2021 there were 7 cases, in 2022 there were 5 and in 2023 they decreased to 2 cases. There were 12 cases of child stealing in 2021, it decreased to 9 cases in 2022 and in 2023 increased to 15 cases.

Supplemental Key Informant Interviews Findings with Police Gender Desks

In November 2024, interviews were made with Police Officers who are dealing with GBV desk cases. These interviews were held in Chato on 10/11/2024; Bukombe 4/11/2024; Ngara 8/11/2024; Biharamulo 9/11/2024,; Missenyi 7/11/2024; Biharamulo 9/11/2024 and Karagwe on 8/11/2024, to gather information concerning GBV/SEA/SH

issues and on how they resolve these issues in their offices.

During interviews, police officers reported that most of the cases received were associated with marriage conflicts among spouses. Low income and poor economy of men were mentioned as the main causes of GBV issues as this has caused most men to engage in alcoholism and others are running from their families as they have failed to provide for their families' basic needs. Other cases received include children drop out of school or run away from home, killings based on superstition, suicides by men, beatings and spouse conflicts, father/mother abandoning the family or husband/wife, and rape of girls. These cases are caused by superstitious beliefs, alcoholism, absence of communication between husband and wife, economic hardship at home, parents' failures to pay school fees or buy school requirements, school distance from home, and failure of parents to provide means to go to school (fare or bicycles).

Other cases received in the police office gender desk are young men and children sodomization, underage marriages, public humiliation and criticism of their men or husbands, and men defiling their children or stepchildren.

There are also challenges in addressing GBV related to incidence in the Police Gender Desks. These are:

- Inadequate office facilities necessary for executing daily office activities related to GBV.
- Lack of office dedicated to solely Gender Desk activities, something which denies privacy in dealing with GBV-related cases.
- Lack of transport required to make follow-up of different GBV cases that are reported to the desk. Sometimes personal transport is used for the same.
- Lack of cooperation from some of the victims. Some do not want to provide evidence, hence their cases remain unsolved.
- Cultural taboo is one of the failures to report GBV cases as such that women cannot speak out on the physical violence they are facing. Family members cannot speak out leading to increased GBV cases.
- Many men who are victims of GBV are not ready to report to the authorities about such incidents for the reasons that they might be discriminated against and face a state of shame by community.
- Due to the patriarchal system that is mainly practiced in the project area, man is supposed to be strong and brave and the leader of the family.

During project implementation, TANESCO in collaboration with the existing MTAKUWWA, police gender desk and other service providers, such as NGOs, in the project area will provide more awareness training to the community and inform them of the meaning, causes, effects, and how GBV/SEA/SH issues are handled and familiarize them with the referral pathway services available and procedures for handling GBV/SEA/SH grievances. This will be done before and during the construction phase.

4.0 Community Participation

4.1 Issues Raised During the Focus Groups Discussions

Focus groups were carried out in the villages on Gender Equality, discussing it from different angles such as Roles, Resources, Family planning, Female genital mutilation, Political matters, Decision making, Gender-based Violence, Early marriage, Right to Education, and Right to work. The following is the summary of what the participants from all the project areas expressed regarding gender roles and responsibilities.

4.1.1 Gender Daily Division of Labour

In Tanzania, the traditional image of women as a mother, and homemaker underlies a clear-cut division of labour between men and women. Women perform the bulk of household work. Their domestic responsibilities including food production, processing preparation and storage, as well as the provision of fuel and water, sanitation and hygiene, cleaning the house, laundry etc.

The analysis in the table below confirms this view. It shows that a woman must allocate her time to family chores as well as to productive and reproductive activities. Women spend more hours in household work consecutively with income generating activities. During the same period, their male counterparts spend their time on business and leisure.

In the focus group discussions participants were asked to name the tasks that customarily were the sole responsibilities of men and of women. In all the cases tasks like preparation of food, laundry, childcare, taking children to the clinic or health centre, fetching water etc. were mentioned as female responsibilities. These findings show that household responsibilities are mostly left to women. The workload for the women is further aggravated by the large family that most households have, this including extended families. The household responsibilities together with reproductive responsibilities take a considerable time and energy of the female farmers and entrepreneur leaving them with little time to attend to other activities like business, public and social meetings. Women's participation in meetings and public forums is still small. This was evident in the meetings held as part of the consultation process of the project and the focus groups. The consultation meetings had a higher participation of men. There were meetings where no women attended. This is due to the women's heavy workload, to their perception that their voices will neither be listened nor taken into consideration, or their concern that their husbands may not agree with them speaking out in public. Because of this, women will weigh the opportunity costs of participating and, unless they perceive a real value in the added responsibilities (e.g. attending a meeting) and time required, they will hesitate to participate.

Table 4.1.a presents the information provided in the focus groups regarding the daily division of labour between men and women. The responses were homogenous in the different villages.

Table 4.1.a
Women and Men daily division of labour – focus groups

Male group		Female Group	
Time of Day	Activity	Time of Day	Activity
5.00am	Wake up wash face and pray (Muslim only)	5:00 am	Wake up and pray and make the bed Prepare fire Poultry farming
6:00 am	Wake up and listen morning news from the radio Talk to family Take shower	6:00 am	Fetch water Wake up children Prepare breakfast Clean the house, Sweep the compound Prepare food for sale (in the public areas) laundry
7:00 am	Take Breakfast Boys take the cattle for grazing	7:00 am	Take Breakfast with family Wash dishes Prepare children for school Send children to school
8:00 am	Go to work (business, offices)	8:00 am	Go to work (business, farms offices)
9:00 am		9:00 am	Take shower Go to the market to buy food
10:00 am		10:00 am	
11:00 am		11:00 am	Look for firewood Look for vegetables Prepare lunch
12:00 pm		12:00 pm	Give lunch to children and father Take lunch Clean up after lunch
1:00 pm	Take lunch and read newspaper And socialise with fellow men and play table	1:00 pm	Go back to work at the business
2:00 pm	Back to work	2:00 pm	
3:00 pm		3:00 pm	
4:00 pm	Return home and take shower Supervise other businesses or go direct to socialize with other men (bar, club, <i>Kijiweni</i>) meeting spot. Watch football matches, play pool table games	4:00 pm	
5:00 pm		5:00 pm	
6:00 pm		6:00 pm	Prepare supper
7:00 pm	Watch TV...take supper	7:00 pm	Take Supper
8:00 pm		8:00 pm	
9:00 pm		9:00pm	Clean up after supper, prepare children to go to bed
10:00 pm	sleep/talk to wife	10:00 pm	Pray and go to bed
11:00 pm		11.00pm	
REPRODUCTIVE ROLES 5 hours	Prayers, morning news, taking showers, taking breakfast, taking lunch, Rest,	REPRODUCTIVE ROLES 9 hours	Childcare, breast feeding, taking the children to clinics welcoming visitors, mourning,

Table 4.1.a
Women and Men daily division of labour – focus groups

Male group		Female Group	
Time of Day	Activity	Time of Day	Activity
	watch football, read newspaper, drinking at bar, gossiping at <i>kijiweni</i> *, watch TV take super and rest		giving birth, looking after children, taking care the in-laws and husband
PRODUCTIVE ROLES 7 hours	Going for work, digging using ox-plough, building for people (construction) Supervision business	PRODUCTIVE ROLES 8 hours	Going for work at the street, selling fruits, food staff, eggs from chickens,
COMMUNITY ROLES 1 hours	Visiting friends, talk politics, group prayers, helping or going for burials,	COMMUNITY ROLES 3 hours	Cleaning the church, cooking for weddings, and burials, Go to Servings groups

Source: Summary of all the meetings held in the villages in all the regions 2024

**Kijiweni*: This is a place on the street where most of men meet, usually at the centre of the village, and socialize.

4.2 Participation of Women and Men During the Focus Group Discussions Meetings

This is a summary from all the meetings held in all the regions in the project areas. The percentage of women involved in consultative meetings on the UTIP Project was lower than that of men. Despite their representation, most did not speak out, especially if there was a large presence of male village leaders. The speakers were mostly men and household heads. Most women did not contribute their opinions during the consultation process. In general, attending meetings is an important job of men. Therefore, women are not confident to speak out on such platforms that are supposed to be for men. When the invitation was sent to the representative of the household, men generally responded. Women who did participate were those who were political leaders within the village, those whose husbands were busy, or when the invitation addressed her directly. The dominance of men in consultations was observed.

4.3 Constraints to Participation

Women's participation in the meeting was weak due in large part to prevailing and persistent gender-related factors. These gendered factors are social norms, biases and stereotypes, knowledge of the project and education levels, emotions, identity issues, and communication barriers.

It was noted that patriarchal social norms on family headship govern representation and participation in EIA consultations. Men are heads of households, and thus they are the first ones summoned to join a community consultation. It was found that either women who attended the meeting were single or they came because their husbands were away for economic activities. On the other hand, women who arrived at the meeting mostly failed to talk freely in observing the norms that the rule that men are called upon to speak on behalf of families and the community.

4.4 Issues Raised During ESIA Consultations and GBV Risk Assessment

Consultation with the communities showed that women had specific concerns about the potential negative impacts of the project on livelihoods, the environment, , access to drinking water, the potential loss of their homes and fields, air pollution, unplanned pregnancies to schoolgirls, abandonment of their families and their health impacts due to spread of sexually transmitted diseases. At the same time, they expected that the project could have a positive impact on their access to electricity and their involvement in project. These issues directly affect the performance of their reproductive and caring roles. While men had different concerns, i.e., compensation and housing, related to their socially assigned roles. Subsequently, the participation of men in meetings on land and compensation was higher.

Supplemental GBV Risk Assessment

The Consultant team conducted the GBV risk assessment aiming at identifying and understanding better the GBV/SEA/SH risks within the project area. Data collection for the risk assessment was conducted using meetings through Focus Group Discussion (FGD) and Key informant interviews. These meetings were conducted from October to November 2024. with groups of women, men and boys (youths). Several of the groups had between 20 - 40 participants and the discussions were participatory. Key Informants Interviews were conducted with the officers in the GBV at Municipal/District levels, Police Gender desk who are working directly with people facing GBV risks and with service providers (NGOs) in the project areas. The findings of the assessment indicated that there are widespread GBV/SEA/SH risks among women, girls, boys and men. Risks identified in these meetings are as indicated below.

Physical violence

Women reported that among the contributing factors of physical violence such as spouse beating/domestic violence are poverty and alcoholism. Some men are reported to be lazy and do not perform any economic activities to earn income which will enable them to take care of their families, and they do not provide basic needs to their families. This has caused a burden to their wives as they have been forced to work hard and ensure that their families are getting their basic needs such as school fees, health, food, etc. It was also reported that other men have enough income, but they use their income for buying alcohol and having relationships with other women and all the money is used outside their families. Too much alcoholic drink has caused the beating of spouses and a lot of conflicts within the family. When they are asked by their wives, wives end up getting physically abused and some of them have been forced to leave their homes and abandon their children and family. Men who engage in small-scale mining activities receive money and this leads them to abandon their families, when they run out of money they come back home with empty hands.

Traditional practices (early marriage)

It was reported that due to traditional practices and lack of income in the family which cause poverty, some of the young girls have been forced to enter into early marriages. These young girls, mostly those who have been forced to get married face emotional abuse, sexual harassment, sexual abuse, and mental abuse. In areas where community and family support systems are missing, there is a high risk of early marriage among young girls. Awareness should be provided to the community to reduce the risk as it was noted that among the contributing factors of early marriages are poverty and lack of education.

Empowerment of women financially

Men who were interviewed reported that nowadays most men are also suffering from GBV/SEA/SH cases, mostly psychological and emotional abuse. The main reason is the empowerment of women financially. They consider that being empowered has caused most women to ignore their husbands, have a voice over their husbands, and despise them. Husbands are denied their right to have matrimonial rights from their wives and sometimes they are denied the rights of food or washing their clothes, etc. Men reported that nowadays there is a loss of men's power/role in the family and community. The aforementioned does not necessarily constitute gender-based violence, although it is a relevant change in traditional gender roles in families that has troubled them, which is why men may perceive it as gender-based violence against them.

When asked if they are reporting this form of GBV Desk they said most of men cases are not reported because of the perception that it is shameful to report the incidents of GBV and the community has a perception that the GBV desk was established to listen to and resolve women and girls' cases only. Awareness should be provided in the community to make men aware that the Gender Desk is there to resolve all cases faced by men and women, and that not fulfilling traditional roles does not necessarily constitute gender-based violence. It is necessary that some entity (governmental or not) takes the initiative to train men and women on how to change these traditional gender roles and help them to perceive the positive changes that this brings for them (such as a shared burden with their partners regarding economic responsibilities).

4.5 Perceived Potential Impacts of Infrastructure Projects on Gender based Violence

4.5.1 Economic Impacts

- Compensation, rehabilitation, and resettlement benefits accrue to men due to family headship, denying women access to and control over economic benefits. This increases women's economic dependence on men, disempowering them, increasing the existent inequalities and women's vulnerability to violence.
- Access to compensation may create conflicts between the husband and wife, or wives, potentially leading to an increase of violence in the domestic realm.
- Displacement caused by loss of land leads to loss of livelihoods. Establishing new sources of income and shifting from a traditional to a cash-based economy can lead

to the loss of traditional values and changes on the way of life, which may lead to situations of violence. This may also increase the work burden on women.

- Women face food insecurity when there is a movement of men out of the villages for construction activities. Women can experience discrimination in the workplace. Employment and training opportunities are provided to men, and women are only left to work in the most menial, low-paid positions.
- Women returning from childbirth or childcare may struggle to regain employment.
- Lack of availability of a proper crèche or childcare facilities deters new mothers from taking up jobs, increasing their dependence on men.
- Women can be marginalized due to lack of adequate training regarding new technologies, which may come from and reinforce gender stereotyping.

4.5.2 Social and Health Impacts

- Due to the sudden influx of a transient workforce during a project's construction and operation, social and health problems, including those associated with law and order, are common. These problems can include increased alcohol consumption, domestic and sexual violence, sexually transmitted infections such as HIV and AIDS, and prostitution.
- Unsuitable resettlement sites can lead to security threats for social, economic, and health, such as lack of employment opportunities, natural resources, and familiarity with the area.
- Early and unwanted pregnancies as a result of the influx of people especially men in the project area.
- Marriage breakups for both men and women.
- Increased child labour and school dropouts.

4.5.3 Environmental Impact

Environmental damage and degradation can affect women's capacity to provide food to their families, of which women and girls are often primarily responsible, increasing their vulnerability.

During the meetings with the communities the participants were asked what they do when they face GBV issues or where they go to report once there is any kind of GBV/SEA/SH risks. In all the meetings it was reported that they normally start with a level of 10 cell leaders, then go to Village offices (baraza) if the issue is not resolved, and if the village office fails to resolve they go to the Auxiliary police, then moving forward to GBV Police Gender desk. They also reported that not all women report their GBV cases to the police desk but instead, they resolve it between the family amicably

4.6 Gender Roles

In all three regions and their villages, there is no equality in gender roles between men and women. As already mentioned, women engage themselves more in reproductive care activities, productive activities, and community activities compared to men, such as caring for children and elderly or sick family members, subsistence farming, household

food collection, preparation and cooking, water collection, fuel wood collection, fodder collection and care of livestock, washing clothes, cleaning and repair, selling goods at the market or from home, informal income generating activities such as paid labour and services. Men involve themselves more in productive and political activities such as fishing, cash crops (producing food) other than for household use, formal paid employment, political organizing, and maintenance of community infrastructure. Men do not normally engage in reproductive activities. Men have time to spend on refreshments and resting. Women have more burden of ensuring all activities at home are conducted and sometimes women are the breadwinners of the family.

4.6.1 Access to and Control of Resources

Women have no equal ownership of resources such as land ownership as compared to men. Due to customs, men still inherit the land and usually have full ownership of the land title. In subsistence farming, men own the cash crops (producing food other than for household use) and women have rights to cultivate only non-production food for the households.

- **Price determination.** Men are the ones who determine the actual price of the crops, and they are the ones responsible for selling. This has had negative impacts on the families because most men do not provide for the family. Instead, they use the money for personal refreshments. This impacts children and mothers in general because they fail to attain basic needs; as a result, the mother becomes a breadwinner for the family.
- **Education.** Government efforts to provide free education have reduced gender inequality to some extent. Few families still do not let girls pursue their careers so that they may have a dowry. Others do not give girls priority to pursue high school in the belief that women are going to get married.
- **Employment.** Normally during the development of the project, men are given more priority compared to women.
- **Family planning.** Men are the decision makers on family planning. Most women are prohibited on the use of family planning methods, fearing that if they use them, they will be in prostitution or will deprive men of the possibility of having many children. The result is that women face big challenges because they give birth consecutively without resting which affects their health and work capacity. As a result, they continue depending on men, while others, due to having multiple children, are abandoned.

4.6.2 In Decision-making

In Political leadership, both men and women are engaged, and there is a slightly higher number of male leaders compared to women leadership in village leadership.

4.6.3 Reproductive Activities

Most of the burden of childcare falls upon women and although many women desire to have fewer children such wishes are rarely shared by men, who usually want as many children as possible and who are particularly keen to have sons.

During the focus group and in-depth discussions, women mentioned that although a husband and wife sometimes discuss the preferred size of the family, the final decision usually rests with the husband. One Muslim man mentioned that the Koran says that men are the heads of the family and are responsible for making all the final decisions in the household. He further said that if a woman insists on family planning (that is, having a small number of children), the husband simply takes another wife who will be prepared to bear more children. Some women mentioned that precaution such as contraceptive is taken secretly at risk of a marriage crisis when the man discovers it. In Sukuma tradition contraceptives for women are taboo.

In the same discussions it was revealed that women are the ones who are responsible for taking the children to the clinic and hospital when they fall sick. It means that a woman with more children has a bigger burden compared to her counterpart. Women who are pregnant, lactating or with children must struggle harder to accomplish their domestic rounds as well as being commercially productive for her livelihood. They have little time for effectively engaging in mining activities or farming. Most of the time is spent on taking care of the children. This responsibility has got to be done alongside with housekeeping responsibilities as we saw in the above table.

When it comes to socialization, men have more time to socialize than women. The only time when women socialize it is when they go to the weddings, funeral ceremonies and markets.

5.0 Project GBV/SEA/SH Risks

The construction phase of the transmission line will entail major civil works as well as resettlement. These types of work will require a large labour force that may not be fully sourced locally, some of the construction workers may be brought from outside the project areas within Tanzania or outside Tanzania. Often, the construction workers are male requiring projects to set up construction camps/on-site accommodation for workers. Risks of SEA relating to women and children coming into close contact with workers (whether from within or outside the community) increases. The influx of labour requires a strategy for their management, particularly with engagement with the community especially women and children.

The presence of an influx of workers can expose the community to risks of sexual exploitation and abuse. The influx of predominantly male workers into a community area can expose women and vulnerable groups living in the community and providing services (such as traders); for example, females engaged in near-site petty businesses may suffer abuse from their benefactors/guardians in instances where they do not meet projected sales for the day. Experience shows that most women are hesitant to engage in civil works type of jobs that leads to a minimum number of female workers being employed. Sexual harassment and other forms of abusive behaviour is exacerbated by traditionally male working environments which might potentially compromise the wellbeing and safety of vulnerable groups of workers and the local communities while adversely affecting project performance. On the other hand, there is the potential of SEA risks for female members of the community who are seeking employment and/or services provided by the project and are given by project employers in exchange for sex. A common concern in the villages' consultation was the increase of unwanted pregnancies and of sexually transmitted diseases due to the influx of workers.

Increasing the number of female workers in the project might interfere with the community gender norms, thus increase the risks of violence at the household level and even at the workplace where they can be exposed to incidents of GBV and SH. For example, when female workers have less time available for traditional gender role-related household duties, such as childcare, this can also be a risk of increased intimate partner violence (IPV) as household members push back. Husband may be bitter with his wife being employed and this may cause conflict and end up with beating her wife.

Large and more remote construction contracts may include women who travel to live in or around the camps, who are potentially highly vulnerable and will be a target for abuse, harassment, and violence because of their lack of a local support network. Also, access roads created by the project (e.g., for transportation of materials) may cross through established routes used by the community, such as schools/health/market routes, water sources routes, and firewood source routes, crossing such paths could put children and vulnerable groups at risk of exploitation and abuse, especially at night in remote areas.

There might be the emergence of survival sex/transactional sex practiced by vulnerable women, and girls looking for money to cover their needs and those of their families. They become vulnerable and easily abused and might suffer from contracting communicable

diseases such as AIDS, STDs, and STIs due to labour influx. There may also be the likelihood of them suffering sexual exploitation and abuse.

The resettlement process (mainly associated with the 400kV line with 548.91 km) presents risks for women being excluded in consultations and ultimate compensation. As it was revealed in the Community consultation meetings, the participants mentioned that in the previous project within their areas they witnessed some biasness of gender violation during Resettlement Action Plan (RAP). Male partners may refuse to share information about compensation rates and compensation plans. More specifically, there may be risks of intimate partner violence as a result of increased household tensions related to distribution and control of compensation benefits; sexual violence for women who are relocated to places where traditional social protections no longer exist and they must cover long distances to access markets and water sources, and child marriage where males receiving compensation use it as bride price where these practices are prevalent. Also, there may be risks with regards to women's lack of awareness of their rights or how to access support regarding these issues. It is suggested that when receiving monetary compensations couples should open joint bank accounts in which compensation money shall be disbursed.

There are potential risks associated with child labour (children dropping out of school to work with contractors) as well as the risks of underage/school-going girls eloping with project workers or be married off to project workers or PAPs in exchange for resources to the girl's family and a result of having compensation monies. Drug addiction is also a risk, in case children access money. As previously mentioned, unwanted and early pregnancies are also a risk girls face. Children also face another risk emanating from the practices of child labour and incidences of child defilements.

TANESCO will mitigate all risks associated with GBV in this project. This SEA-SH Action Plan will directly address management of the risk of GBV in relation to the project workforce and project affected local communities.

6.0 GBV/SEA/SH Mitigation Measure

6.1 Objectives

The SEA-SH Action Plan identifies potential risks associated with GBV and introduces mitigation measures to address these risks in the pursue of the following objectives:

- Prevent sexual and gender-based violence in dealings among workers and between workers and community members.
- Prevent violence against children during the project's execution.
- Consider gender equality and prevent discrimination in the compensation process proposed as part of resettlement.

6.2 Lines of action

TANESCO will use the following measures to prevent and respond to GBV/SEA/SH:

Prevention:

- Develop a Code of Conduct that specifically addresses GBV/SEA/SH issues and include a module with specific content in the workers' training.
- Building awareness to the community and amongst workers on GBV/SEA/SH risk, GBV/SEA/SH prevention, GBV/SEA/SH reporting and response mechanisms in all project areas
- Engagement in all wards in the project areas to inform the community about the GBV/SEA/SH risk and grievance redress mechanisms as per the Stakeholder Engagement Plan (SEP).

Response:

- Put in place grievance redress mechanisms (GRM) that are sensitive to GBV issues related to resettlement, worker-community interactions and within the workforce (as part of the Labor Management Procedures).
- Establish close collaboration between GBV/SEA/SH service providers, such as Police GBV desk, GBV District Committees and local NGOs in attaining an appropriate and safe responses for survivors.
- Identify GBV/SEA/SH service providers and establish a referral pathway to manage cases (beyond the standard grievance redress mechanism) that is survivor-centred, abiding by principles of confidentiality, safety and informed consent and train staff for capacity building on GBV/SEA/SH issues.

6.3 Gender Considerations

The project shall include in its design mitigation measures to address the likely negative impacts on gender. Examples, of negative impacts include increased poverty among female-headed households because of land expropriation and loss of structures that might cause severe affect them. While the policies encourage women to work at construction sites, very often, are victims of Gender Based Violence (GBV) and Sexual Exploitation (SE). In this regard, contractors shall be required to provide a code of conduct that restrict

any forms of GBV and sexual harassment at the workplace as well as provision of adequate facilities for both men and women at the camp sites. Gender sensitization including deliberate efforts to enhance inclusion of the women in the Project will be undertaken. During UTIP implementation, the team will identify drivers and prevalence of GBV/SEA, SGBV, and subsequently will revise and implement the plan.

HIV/AIDS, Gender Sensitization, and Monitoring shall be designed to empower the target groups with skills to prevent and respond to HIV/AIDS and to enhance women's inclusion in the construction works. This is as an effort towards enhancing positive socio-economic impacts of the local population who were living in the areas as well the communities near the project site. The implementer of this subcomponent will be required to establish drivers for HIV/AIDS and sexually transmitted diseases with the project area along with available measures to address them.

7.0 Action Plan

This section details the specific measures for mitigating GBV, SEA/SH risks under the UTIP project in the lifetime of the project. These include the mitigation measures already in place as well as steps to be undertaken to further mitigate and respond to risks and allegations of GBV/SEA/SH in the project sites. This Action Plan is designed to inform the integration of Gender Based Violence (GBV) prevention and response within the TANESCO and UTIP project implementation.

The interventions are largely on awareness raising and advocacy to promote knowledge of rights, resources, and available services. The activities include the development of GBV knowledge and competencies, production of training awareness materials for PIU, project workers, community outreach, a GBV responsive GRM as well as signing of Codes of Conduct by construction workers. In terms of design for facilities such as worker's camps and/or offices at construction sites, there is need for gender friendly facilities to ensure safety for all as well as fair sharing of project benefits amongst women and men. It is anticipated that these broad interventions will infuse a gender responsive culture in the project as well as ensure protection from GBV for women, men, girls and boys. This plan will be reviewed and updated during implementation as needed, to respond to detailed design and adjustments that monitoring and evaluation may indicate are necessary.

Table 7.0.a
Activity to address GBV/SEA/SH

Activity to address GBV/SEA/SH	Step to be taken	Timelines	Responsible	Monitoring (who will monitor)	Quarterly Output Indicators	Estimated Budget (USD)
1. Awareness training of GBV/SEA/SH issues to the TANESCO PIU and Contractors on how to address GBV/SEA/SH issues						
<ul style="list-style-type: none"> - Building and strengthening capacity of TANESCO Management, staff and other key actors on GBV/SEA and SH issues. - Conducting awareness training to IU members on GBV/SEA/SH issues. 	<ul style="list-style-type: none"> - Hire and GBV Specialist. - Prepare training materials to be used during training. - Conducting training to TANESCO Management, PIU members and other staff. - Conducting training of trainers amongst contractors/subcontractors/workers <ul style="list-style-type: none"> - Include SEA/SH as an agenda item during weekly/quarterly meetings within TANESCO PIU and contractors/subcontractors. 	<ul style="list-style-type: none"> - Soon after contract signing and before starting construction works. - Throughout the implementation of the project 	<ul style="list-style-type: none"> - TANESCO Gender/GBV Specialists, Contractor and Supervising Engineer Gender Based Violence Specialist/ Focal Persons, and GBV Service Provider throughout the project implementation 	TANESCO& UTIP Project Consultant	<ul style="list-style-type: none"> - Number of trainings conducted - Number of trained PIU members, contractors - Knowledge and skills acquired by Management, PIU members, staff, contractors, and project workers on GBV/SEA/SH issues and being aware of it 	20,000,00
2. Stakeholder Consultation						
<ul style="list-style-type: none"> - Conduct consultations with a variety of stakeholders such as religious leaders, political and cultural leaders, health workers, police officers, local leaders, social workers, students at schools, women's groups etc. and inform them of GBV/SEA/SH risks, identify preferred channels for reporting and get their feedback. Data should not be collected as part of risk assessment (confidentiality must be observed and maintained) - Consultation during resettlement to minimize risks of intimate partner violence due to compensation or men adapting practices of child marriage because of having compensation monies 	<ul style="list-style-type: none"> - Prepare checklist to be used during community consultation. - Discuss GBV related issues during consultation meetings. - Conduct face to face interviews and FGD with vulnerable groups. - Discuss GBV prevention and response with local leaders and other influential persons. 	Before starting construction and throughout the implementation of the project.	<ul style="list-style-type: none"> - GBV Specialist (Safeguard Implementation Support Firm) and TANESCO Gender Focal Persons & Safeguard Experts. 	TANESCO & Project Consultant	<ul style="list-style-type: none"> - Number of stakeholders met. - Number of meetings, FGD conducted. 	15,000.00
3. Map out GBV prevention and response actors in communities adjoining the project						
<ul style="list-style-type: none"> - Delivery GBV/SEA/SH interventions by a qualified service provider 	<ul style="list-style-type: none"> - Identify and map service providers within the project area who can provide quality survivor-centred services and manage GBV cases. - Engage them in doing the risk assessment, developing referral pathway, training at community and project/workers levels. - Follow up after reporting. 	First quarter after signing contract	TANESCO Gender/GBV Specialist and PIU Coordinator	TANESCO & Project Consultant GBV Service Provider	Qualified service provider in place i.e. a specialized NGO or specialized consultants.	15,000.00
<ul style="list-style-type: none"> - Establish working relationship with the Women and Child Protection Committees (MTAKUWWA committees) at District and Ward levels (for referrals, monitoring and training) and also with other institutions dealing with GBV in line with the VAWC Preparing reporting Mechanism of GBV/SEA and SH incidences as well as process and procedures. 	<ul style="list-style-type: none"> - Develop a tool kit and brochure on referral mechanisms – what constitutes GBV/SEA/SH; how to report; where GBV/SEA/SH incidents are to be reported; steps of assuring a survivor centred approach including the rights of a survivor – confidentiality and ensuring their safety. - Train the Protection Committees (MTAKUWWA committees) on how to receive and manage information on GBV related grievances through a survivor centred approach as well as referral to appropriate service providers based on their needs. - Develop a directory of GBV service providers (health, police/security, psychological services, legal, shelter). 	Throughout the implementation of the project	TANESCO GBV Specialist, Gender Focal Person and GBV Service Provider.	TANESCO & Project Consultant	<ul style="list-style-type: none"> - Strong Referral pathways are established for locations where transmission line construction and substation will happen -Strengthened Partnerships for consultations, referrals and capacity building support with GBV service providers - Enhanced support service and quick response to GBV through an established GBV reporting, response and referral mechanism 	15,000.00

Table 7.0.a
Activity to address GBV/SEA/SH

Activity to address GBV/SEA/SH	Step to be taken	Timelines	Responsible	Monitoring (who will monitor)	Quarterly Output Indicators	Estimated Budget (USD)
	<ul style="list-style-type: none"> - Verify if a referral pathway has been identified among services' providers. If not, promote/help organize meetings where the referral pathway can be agreed. - Disseminate and popularize the referral pathway list to all project stakeholders. 					
4. Inform project affected communities about identified GBV/SEA/SH risks and GRM						
To empower the community on issues of gender-based violence and its effects on individual and how to address GBV related issues	<ul style="list-style-type: none"> - Sensitize community on GBV risks and impact, referral pathways and GBV GRM. - Develop a school outreach plan in consultation with school heads; conduct sensitization targeting teachers, parents and students; and develop relevant IEC materials in local languages. - Display visible signs around the project site as the signal to workers and the community that the project site is an area where GBV is prohibited. 	Before starting construction and throughout the implementation of the project	TANESCO Gender Specialist, Gender Focal Persons and GBV Service Provider - Contractor	TANESCO & Project Consultant	<ul style="list-style-type: none"> - Number of people reached with GBV related information - Availability of display signs 	15,000.00
Implement appropriate project related civil works for labour to reduce GBV risks	<ul style="list-style-type: none"> - Ensure availability of female construction workers including women workers from nearby communities and female service providers like food providers so that the project does not perpetuate negative gender stereotypes. - Implement appropriate project related civil works for labour to reduce GBV risks - Ensure contracts include clauses on GBV (for example all workers and staff sign codes of conduct). - Provide safe, secure, and separate living spaces for male and female construction workers. - Prepare latrines, showers and changing room which separate men and women. - Latrines and changing rooms should be located in separate areas, well-lit and include the ability to be locked from the inside. - Develop a GBV/SEA communication strategy - Multimedia campaign - Enhanced gender campaigns i.e. women's engagement in project activities and during resettlement processes for communities along the transmission routes - Outreach to schools on risks of GBV/SEA - Sensitization on children labour and their protection laws - Sensitizing all contractors and employees on the Codes of Conduct including in the worker camps as well as strengthened monitoring. - Integrating GBV/SEA/SH risk management in Contractor's ESMPs. - Ensuring that all procurement processes and contract define and reinforce GBV/SEA/SH requirements. - Incorporate GBV/SEA requirements and expectations in the contractors and consultant's contracts. - Allocation of funds for GBV/SEA/SH related costs in procurement documents. 	Throughout project implementation	Contractor	TANESCO & Project consultant	<ul style="list-style-type: none"> - Number of female workers employed - Use of gender-neutral language during meetings and on documents and signs - Signed code of conduct - Availability of latrines, showers toilets, separating men and women - Display signs on the facilities. - GBV/SEA/SH awareness enhanced along transmission lines and substation areas - Reduced incidences of GBV/SEA/SH 	To be covered by the contractor

Table 7.0.a
Activity to address GBV/SEA/SH

Activity to address GBV/SEA/SH	Step to be taken	Timelines	Responsible	Monitoring (who will monitor)	Quarterly Output Indicators	Estimated Budget (USD)
5. Monitoring and Evaluation						
Monitoring and evaluation of GBV issues	<ul style="list-style-type: none"> - Conduct M&E field visits. - Review quarterly the GBV action plan and progress against indicators listed - Provide quarterly report throughout project implementation 	Throughout the implementation of the project	GBV Specialist (Consultant), TANESCO Gender Specialist and Focal Person	TANESCO & Project Consultant	<ul style="list-style-type: none"> - Information obtained from the Quarterly report - Performance analysis lessons learnt and challenges to inform 2023 and long term GBV/SEA/SH plans 	15,000.00
6. Integration of GBV/SEA risks management in Contractors Environment and Social Implementation Plan (ESIP)						
<ul style="list-style-type: none"> - Incorporate GBV/SEA risk management in ESIP/ESMP - Develop and establish/review SEA/GBV response and accountability framework 	<ul style="list-style-type: none"> - Put in place procedures to report SEA/GBV incidents which should clearly lay out confidentiality requirements for dealing with these cases. - Ensure that GBV/SEA issues are incorporated in all contracts signed by contractors and consultants. - Clearly define SEA/SH requirements and expectations in the bid documents. - Informing employees and communities on how to report cases of SEA/SH, CoC breaches to the GRM committee and inform them how such cases are handled. - Develop mechanisms to hold accountable alleged perpetrators; disciplinary actions for violation of CoC by workers - Sign and enforce of worker CoCs 	Soon after engaging Supervision Consultant and Contractors and before construction start	<ul style="list-style-type: none"> - Supervision Consultant - Contractors 	TANESCO (GBV Specialist)	<ul style="list-style-type: none"> - Availability of ESIP/ESMP incorporating GBV/SEA risk management such as (procurement or the contract documents) - Number of communities reached/informed. - Availability of developed mechanisms - GBV/SEA standards in procurement/contract document 	15,000.00
Estimated Budget in US\$						110,000.00

8.0 Code of Conduct: Gender Based Violence and Child Abuse/Exploitation

The Contractor will elaborate a Code of Conduct for the workers, that will include a section on gender-based violence and violence against children. This Code of Conduct will be approved by TANESCO before the initiation of construction.

The Code of Conduct will be shared with all workers, including the contractor and subcontractors through the trainings the workers receive, initiating with the induction. The Code of Conduct will include clear guidelines regarding the behaviour that is expected and what is unacceptable. Also, clear sanctions will be established and communicated. The workers will receive a print Code of Conduct and will sign it. Monitoring will verify that workers have received the Code of Conduct, understand it and use it, have clarity regarding the situations in which they could be sanctioned and why.

The Code of Conduct will include the following content, regarding GBV and CAE:

Contractors' employees are obliged to create and maintain an environment which prevents gender-based violence (GBV) and child abuse/exploitation (CAE) issues, and where the unacceptability of GBV and actions against children are clearly communicated to all those engaged on the project. In order to prevent GBV and CAE, the following core principles and minimum standards of behaviour will apply to all employees without exception:

1. GBV or CAE constitutes acts of gross misconduct and are therefore grounds for sanctions, penalties and/or termination of employment. All forms of GBV and CAE including grooming are unacceptable be it on the work site, the work site surroundings, or at worker's camps. Prosecution of those who commit GBV, or CAE will be pursued.
2. Treat women and children (persons under the age of 18) with respect regardless of race, colour, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status.
3. Do not use language or behaviour towards women or children that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.
4. Sexual activity with children under 18—including through digital media—is prohibited. Mistaken belief regarding the age of a child and consent from the child is not a defence.
5. Exchange of money, employment, goods, or services for sex, including sexual favours or other forms of humiliating, degrading or exploitative behaviour is prohibited.
6. Sexual interactions between contractor's and consultant's employees at any level and member of the communities surrounding the workplaces that are not agreed to with full consent by all parties involved in the sexual act are prohibited. This includes relationships involving the withholding, promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex – such sexual activity is considered “non-consensual” within the scope of this Code.

7. Where an employee develops concerns or suspicions regarding acts of GBV or CAE by a fellow worker, whether in the same contracting firm or not, he or she must report such concerns in accordance with Standard Reporting Procedures.
8. All employees are required to attend an induction training course prior to commencing work on site to ensure they are familiar with the GBV and CAE Code of Conduct.
9. All employees must attend a mandatory training course once a month for the duration of the contract starting from the first induction training prior to commencement of work to reinforce the understanding of the institutional GBV and CAE Code of Conduct.
10. All employees will be required to sign an individual Code of Conduct confirming their agreement to support GBV and CAE activities.

A model of Code of Conduct for Workers is included in the Labour Management Plan.

9.0 Worker Trainings

Worker training on Gender-Based Violence (GBV), including Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH), is an integral part of the project's risk mitigation strategy during both the construction and operation phases. During construction, these trainings will be conducted by the Contractors as part of the Construction Environmental Plan (CEP – P.01), and will be mandatory for all workers upon recruitment and periodically reinforced throughout the project. The content will cover the identification of GBV/SEA/SH risks, prohibited behaviors, consequences of misconduct, mechanisms for reporting incidents, and procedures for grievance redressal. Trainings will also emphasize the importance of respecting local cultural norms and appropriate interactions with host communities. In the operation phase, TANESCO will be responsible for continuing the training efforts under its operational management programs, ensuring that all personnel, including permanent staff and subcontractors, are sensitized to GBV/SEA/SH risks and adhere to the Workers' Code of Conduct. The training approach is aligned with international good practice, including the World Bank's Good Practice Note on GBV, and is part of a broader framework of preventive and corrective measures adopted by the project to safeguard community members and promote a safe working environment.

During these training events, workers will be informed of the channels available for reporting Code of Conduct violations, especially related to GBV, SEA/SH, and how they will be handled.

Employees will also be informed of the sanctions in case of violation of the Code of Conduct, as mentioned above.

- The trainings will be implemented under the following criteria: Workers will be sensitised and familiarised with the actions that constitute GBV in its different expressions, including SEA/SH, so that they can identify when it manifests itself.
- Awareness-raising for workers will include knowledge about the different risk practices of sexual exploitation and trafficking of children, adolescents and women from any type of offer that links the manipulation and transaction with the body of these populations, even when they come from family members or close persons. These activities are penalised severely by the law (see Section 3).
- Workers will be informed about the prohibition of any action that may constitute control and/or physical, emotional, sexual and/or power (financial) use against: workers, girls, adolescents (mothers and non-mothers), women, people with any condition of disability
- Each worker will be informed of the penalties for any action that constitutes sexual harassment, rape or any form of physical or verbal aggression against workers, women, adolescents and children
- Workers will be informed about the risks of contracting or transmitting sexually transmitted diseases in contact with the population of the communities surrounding the construction site.

- When hiring local workers, it will be prohibited to deny opportunities to women, to prevent them from competing for jobs recognised as male, to prevent them from participating in job training, among other opportunities. It is forbidden to pay and/or request informal services from children and adolescents, which is against the Tanzanian Employment and Labour Relations Act (revised edition 2019).
- All actions related to discrimination, GBV and SEA/SH will be dealt with in an appropriate manner, through mechanisms to ensure the safety of the victims and will be subject to the strictest sanctions (such as dismissal for serious reasons, among others), and to the penal consequences that such acts may generate.

10.0 Grievance Redress Mechanism

There are Grievance Redress Mechanisms (GRM) prepared for UTIP project. The Project may result in incidences of Gender Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) affecting workers and the community. GBV cases are different from other complaints that are typically handled through the grievance redress mechanisms.

GBV mapping for service providers will be conducted to provide necessary support to victims and will be modified accordingly. At the ward level, Community Social Welfare Officer (the one dealing with Women, Children and GBV issues) will be trained on how to receive GBV related grievances through a survivor centred approach including matters of confidentiality, treating survivors with empathy and what non-identifiable data should be collected and how to refer the case to service providers. In addition, members of the Ward Development Committee (WDC) will also be trained in how to receive and manage this information. However, the ward committee will not be involved in resolving GBV related cases as this will be determined by the survivor with support from the appropriate service providers based on their needs.

Among the objectives of the GRMs is to prevent and address all forms of Gender Based Violence (GBV) including Sexual Harassment (SH) incidents that potentially happen at the workplace and Sexual Exploitation and Abuse (SEA) incidents that potentially happen at community. The GBV GRMs involves a formal separate process for receiving project-related grievances from affected communities and from workers and making swift referrals. The GBV Specialist that will be recruited under the Safeguard Implementation Support Firm shall manage this. During sensitization of the GRMs system, communities and other stakeholders shall be informed of the multiple channels to facilitate confidential logging of GBV/SEA/SH complaints, procedures for handling GBV and the confidentiality of the process in supporting survivors and resolving the issues. A complaint and/or suggestion box will be placed in strategic locations that are accessible to communities and others will be placed at the workplace for project workers to submit complaints.

The GRMs will also be responsive to issues and risks faced by the project including GBV/SEA, resettlement and compensation. Stakeholders have been informed about the existence of the GRMs, its procedures, communication channels, entry points and response times. The project will maintain records detailing all public consultation, disclosure of information and grievances collected and resolved in agreed timeframes.

The reporting of a GBV/SEAH incident does not typically follow a uniform pattern due to the importance of maintaining confidentiality as well as the urgency for survivor to seek care and the preservation of evidence. As such, the complainant can use any avenue to report including text message, email, phone call, written note, in person to trusted colleague, member of the GRM committee, GBV Specialist, local NGO etc. Reported GBV incidents shall be referred to the GBV Specialist for accountability purposes according to the wishes of the survivor. The only information to be collected from the person reporting will be on:

- demographic data, such as age and gender.
- the nature of the complaint (what the complainant says in her/his own words);
- whether the complainant believes the perpetrator was related to the project; and whether they received or were offered referral to services

In assuring the *Respect of the survivor* efforts to ensure that: A survivor is informed and contacted about the resolution of the case and any decision made. This should be done with care, so as not to put them in further harm. In the event that the survivor may have initially stated that they wanted to pursue a case in the courts, but she/he has now changed their mind. If they no longer want to pursue his/her case further, their decision should be respected and access to other services (health care and / or psychosocial support) should continue in line with their wishes. The survivor knows that they are welcome to reach out should they need assistance in the future.

Safety: The survivor's physical and psychological safety as well as that of their family should always be considered the first priority. As such, quick and decisive action; safety planning support from service providers; confidential referrals; ongoing and careful communication should be explored and particularly to prevent retaliation.

Confidentiality: Confidentiality should cover all information in a complaint that may lead to the identification of a specific incident or those affected by the allegation. Confidentiality is a key to protecting survivor and witnesses' safety. Confidentiality requires that information gathered about the allegation not be shared with persons or entities unless there is explicit permission granted by the complainant. Even in such cases, information sharing should take place on a strict need-to-know basis, limited to essential information, and based on pre-established information sharing protocols that are in line with best practices for the handling of SEA/SH cases. Reports of grievances to the Bank and PIU shall only include an anonymized summary of allegations based on pre-established information sharing protocols.

Some of the survivor centred measures that will be applied include: Ensuring that all data on GBV is kept anonymous and a high level of confidentiality is maintained; Ensuring that all records of GBV cases are filed in a secure location with limited access to ensure confidentiality. GBV cases are addressed as per the WB GBV good practice note expectations. Those in the GRM handling GBV incidents are trained on how to handle the related grievances and handle the complaint based on the principles of confidentiality and a survivor-based approach.

Procedures of handling Gender Based Violence (GBV), Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH) Grievances are as follows:

- Submitting grievances
- logging the grievance
- providing the initial response and referral to the GBV Service Provider
- accountability procedures

For project, workers to avoid the risks of stigmatization and rejection workers will be allowed to seek services directly from the Consultant or TANESCO Supervisor Engineer and they will have access to the Gender Focal Person/GBV Specialist. Consultant and Supervisor Engineer will be trained on how to handle data on GBV incidents in a confidential and empathetic manner.

Supervising Engineers and other PIU, members who will be on the project site full time will link the complainant with project Gender Specialist, Gender Focal Persons or GBV Specialist (from Consulting Firm). TANESCO members will be trained in making sure that all information related to GBV is managed confidentially and maintained by the overall project GRM. The Gender Focal Person shall refer the survivor to the GBV Specialist for emergency support and care. The Community Welfare at ward level shall inform the GBV Specialist/project Gender Specialist/Gender Focal Persons of any case that is reported to them to notify the Bank within 48 hours. In addition, subsequently follow criminal procedures of reporting to the gender and child desks at the nearest police stations for further legal actions.

11.0 Gender Equality in the Compensation / Indemnification of Physical and/or Economic Displacement

In the measures foreseen in the Resettlement Policy Framework (RPF), TANESCO must take into account the need for non-discrimination in the compensation / indemnification process, and that the measures and benefits are applied equitably, i.e. any measures implemented must be distributed equally between women and men.

The participation of women, people with disabilities, teenage mothers, youth, migrants of different nationalities, elderly people, in the consultations and in any communication activities to be carried out for the Project, foreseen as part of the Stakeholder Engagement Plan (P.12), must also be guaranteed.

12.0 Monitoring Mitigation Measures

During implementation of the project, mitigation measures will be monitored in order to avoid or substantially reduce the GBV/SEA/SH risks and make sure that GBV risk is not increasing. TANESCO and Supervision Consultant will make sure that all activities proposed by the contractors have been undertaken and/or are on track. There will be frequent monitoring and reporting on the effectiveness of the implementation of the contractor GBV/SEA/SH action plans. TANESCO will ensure that all incidents of GBV/SEA/SH are reported through the project meetings and shall inform the World Bank within 24 hours of a project related GBV incident when it occurs and actions will be taken if the Contractor will not adhere to the agreed mitigation measures by following the clauses that are indicated in the contract.

12.1 Accountability and Response Framework

Accountability and response mechanism describe how GBV/SEA complaints are handled, processes of reporting internally, the referral pathway to transfer survivors to suitable assistance providers and procedures for dealing with cases confidentially including the investigation processes. This will help TANESCO to address all possible cases of GBV, sexual exploitation and abuse respond to and prevent further sexual misconduct or other inappropriate activities.

There will be staff (GBV Specialist) who will be receiving complaints and monitoring the implementation of GBV response actions. Communities will be sensitized and made aware of where to report all GBV concerns starting from ward level and they will be working in close coordination with the TANESCO GBV Specialist. Community and Survivor feedback and grievance redress mechanisms shall be linked to the project's periodic reviews and monitoring processes. This should be a continuous process undertaken throughout the project cycle.

During the project implementation, the TANESCO GBV Specialist in coordination with other will handle all GBV cases PIU members. Once a complaint/report is received, arrangements for any required emergency support and care is arranged with the

designated GBV Service provider for effective and speedy referral. The report of a complaint is notified to the Bank within 48 hours. The GBV GRM principles will be applied. The complaint will be reviewed and collective agreement on the appropriate action to be taken and sanctions. Disciplinary action for all violation of the Code of Conduct will be taken. TANESCO has its disciplinary actions and all Supervision Consultant and Contractors will be required to have disciplinary action in place which should also be communicated to all workers and make sure that they have set good structure for handling workers complaints including GBV complaints. When handling all GBV/SEA/SH issues procedures that clearly lay out confidentiality requirements should be followed and be known to survivors. The referral pathway should be communicated to Survivor.

12.2 Performance Indicators

The indicators of the GBV Plan should manage/monitor the following key aspects, presented in **Table 12.2.a**.

Table 12.2.a
Gender Based Violence Plan - Indicators

Measure	Indicators
Workers' Code of Conduct	<ul style="list-style-type: none"> Evidence of inclusion of rules related to GBV, SEA/SH and violence against children in the Workers' Code of Conduct
Worker Training	<ul style="list-style-type: none"> Evidence of the inclusion of a specific module on GBV, SEA/SH and violence against children in the training of workers
Grievance Redress Mechanisms	<ul style="list-style-type: none"> Evidence of the creation of a specific channel for complaints related to GBV, SEA/SH and violence against children in the Grievance Redress Mechanisms Evidence of training for those responsible for managing the Grievance Redress Mechanisms on how to deal with these types of complaints Number of complaints related to GBV, SEA/SH and violence against children registered through the Grievance Redress Mechanisms Number of complaints addressed/resolved
Response and Victim Care Measures	<ul style="list-style-type: none"> Creation of a database with contact information for victim care and support services Number of victims referred to care and support services in relation to the total number of complaints
Labor-Related Procedures	<ul style="list-style-type: none"> Detailed and approved Human Resources Policy, including procedures for recruitment, training, retrenchment of the workforce and other labour-related procedures
Gender equality in the Compensation / Indemnisation of Physical and/or Economic Displacement	<ul style="list-style-type: none"> Evidence of compliance with non-discriminatory rules in the compensation / indemnisation process
Contractual Requirements	<ul style="list-style-type: none"> Evidence of inclusion of the obligation to comply with the measures in this Plan and the Workers' Code of Conduct in contracts

Source: United Nations Human Rights Office of the High Commissioner
<https://www.ohchr.org/EN/Issues/Women/WRGS/Pages/VAW.aspx> accessed December 2019.

13.0 Proposed Institutional Arrangements

The Contractors, under the supervision of TANESCO, are responsible for ensuring a work environment free of discrimination, harassment at work and sexual harassment, risks of trafficking and sexual exploitation, violence against children in the project area and also for ensuring respectful treatment of community members by workers, taking the necessary measures to prevent workers from committing acts of GBV, SEA/SH against members of the community and sanctioning them when they occur.

TANESCO is responsible for supervising the contractor and subcontractors and orientate them. As responsible for the RPF, TANESCO will also take measures to ensure that any compensation / indemnification measures implemented shall be distributed equally between women and men.

Contractors will be required to prepare a Labour Influx Plan as part of the ESMP that has to be cleared by the World Bank, to foster positive impact on employment generation in the communities and mitigate potential social risks. TANESCO will ensure that Contractors' ESMPs incorporate GBV/SEA/SH risk management. The supervision consultant will oversee the contractors' compliance with the ESHS Management Plan, SEA-SH Action Plan as well as the code of conduct.

TANESCO GBV Specialist will collaborate with existing NGOs and the Local Government Gender desk under the District Social Welfare – Gender Desk (MTAKUWWA) guideline dealing with GBV issues as GBV Service provider. District Gender Desks have been established in each District and they are reporting directly and supervised by the respective Social Welfare and Gender Desk. This will enable strengthened capacity of the gender desk in their prevention and response measures and particularly in dealing with issues raised concerning the project. It will be of particular interest to identify if a GBV Referral Pathway is functioning, if it needs adjustments and collaborate in this process.

TANESCO does not have a dedicated social team but adopts the Resettlement and Compensation Management Unit (RCMU), whose main function is the implementation of the Resettlement Action Plan and other plans, such as the Stakeholder Engagement Plan. The RCMU has a social specialist, who will be the GBV Specialist in the PIU. As this is insufficient, TANESCO will work with a Gender-based Violence service provider, which could be a NGO, or a team of specialists.

The Institution arrangement will include:

GBV Specialist in the PIU (TANESCO staff, member of the RCMU)

- Is in charge of ensuring the implementation of the SEA-SH Action Plan. To do so she will coordinate with the GBV service provider, overseeing its work; with the other members of the RCMU to verify that GBV is being incorporated; with the area in charge of overseeing the contractor's and subcontractors' human resources, to verify that GBV approach is being implemented; and with the specialists in charge of

monitoring and evaluation to identify any adjustments that the design and implementation of the SEA-SH Action Plan requires.

- In coordination with the GBV service provider, update the SEA-SH Action Plan.
- When necessary, she will represent the PIU vis-à-vis other stakeholders that deal with GBV and violence against children, especially with those who intervene on the GBV Referral Pathway, and will coordinate with the service provider to oversee this area of work.

GBV Service Provider (contractor):

It will be responsible for the implementation of the SEA-SH Action Plan in support of UTIP Project. This will include:

- Mapping service providers and stakeholders related to GBV and violence against children. Analyse the GBV Referral Pathway, propose how to strengthen it in the different areas of the project. Periodically update this information. Coordinate with the institutions that are part of the GBV Referral Pathway.
- Design and implementation of training awareness activities, for members of the communities, workers and TANESCO staff if deemed necessary.
- Provide support to survivors, in coordination with other institutions.
- Support the Grievance Redress Mechanism for the community, participating in the grievance resolution process.

Contractor GBV/SEA/SH specialist /focal point

The contractor shall designate a person as the focal point for the implementation of the plan. This person can be the social specialist of the contractor's team. This specialist will be in charge of:

- Ensuring the Code of Conduct for workers includes GBV/SEA/SH content.
- Prepare and implement trainings for workers on these issues, in coordination with human resources and health and safety teams.
- Participate, together with human resources, in the resolution of any grievance (internal or external) related to GBV and violence against children.
- Inform the community, particularly women, about the Code of Conduct that workers must follow and how they can file complaints if necessary.
- Support and coordinate with the service provider and with TANESCO's GBV/SEA/SH specialist.

14.0 Contractual Requirements

The contracts to be signed with Contractors and subcontractors and with suppliers must include clauses to inhibit and penalise acts of GBV, SEA/SH and violence against children. The obligation to comply with the measures in this Plan and the rules set out in the Project's Workers' Code of Conduct must be included, specifically reinforcing the block of rules relating to GBV, SEA/SH and violence against children.

The contract with the Contractors must require that they have a Human Resources Policy (see P.14) and that it is effective in preventing GBV, SEA/SH and violence against children. It must also establish that the Contractors undertake to implement and reinforce this Policy during the term of the contract, guaranteeing a safe and discrimination-free working environment for all the workers involved.

The contract must also include clauses relating to training and awareness-raising in relation to the themes of this Plan and the Workers' Code of Conduct; in relation to the Mechanism's channels and forms of reporting; and the sanctions to be applied in the event of a breach of contract, including those specific to cases of GBV, SEA/SH and violence against children described in **Sections 8 and 9** of this Plan.

15.0 Reports and Documentation

The Contractors shall submit data on the hiring of women and men. in the monthly reports to be produced, in addition to other evidence of gender-related measures, such as trainings of workers on the Code of Conduct, statistics of complaints related to discrimination, GBV, SEA/SH and violence against children received through the channels of the workers' Grievance Redress Mechanism, etc.

Measures implemented to prevent discrimination on the basis of basis of gender, gender identity, sexual orientation, disabilities, teenage mothers, elderly people, marital status or nationality in the process of compensation /indenisation for the impact on land, housing and improvements caused by the establishment of the wayleave easement should be included in the Quarterly Reports to be produced by TANESCO as part of the Resettlement Policy Framework (RPF).

If any serious incident occurs, either internal or external, this will be reported by the subcontractor to the contractor, which will report it to TANESCO. To do so, the instance that identifies the incident will fill a form (see **Annex 1**) and will update it as it evolves.

The incident will be reported within 48 hours of its occurrence, even if the information is incomplete. Serious incidents include rape, claims for unwanted pregnancies involving girls, verifiable cases of sexual and work harassment or others. In cases of harassment that cannot be verified, they will be included in the reports presented to theses instances (TANESCO and the World Bank). Updates will be provided on a monthly basis or sooner if feasible and necessary.

16.0 Schedule

The Plan shall be implemented even in the planning stage of the Project, with the activity of preparing the procedures of the Human Resources Policy, the Workers' Code of Conduct and with the activities of recruitment and hiring of workers. It will continue throughout the construction phase and also in the operation, for the entire life of the Project, as measures to avoid discrimination and GBV, SEA/SH and violence against children in the recruitment and work environment must also be reflected in TANESCO's Human Resources Policy.

Table 16.0.a
Proposed Schedule Activities

	Project Phase		
	Preparation	Construction	Implementation
Identify GBV service providers and establish a referral pathway to manage these cases (beyond the standard grievance mechanism) that is survivor-centred, abiding by principles of confidentiality, safety and informed consent and train staff for capacity building on GBV/SEA/SH issues			
Building awareness to the community on GBV risk, GBV prevention, GBV reporting and response mechanisms in all project areas			
Consultation will continue in all wards in the project areas to inform the community about the GBV risk and redress mechanisms as per the Stakeholder Engagement Plan (SEP)			
Establish close collaboration between GBV service providers such as Police GBV desk, GBV District Committees and local NGOs in attaining an appropriate and safe resolution to any disputes involving a survivor.			
Put in place a grievance reporting mechanism (GRM) that is sensitive to GBV issues before the start of the resettlement process with a plan to mediate resettlement disputes resulting in or exacerbating GBV.			
Develop a Code of Conduct that specifically addresses GBV/SEA/SH issues. Include a module with specific content in the workers' training			
Building and strengthening capacity of TANESCO Management, staff and other key actors on GBV/SEA and SH issues			
Conduct consultations with a variety of stakeholders such as religious leaders, political and cultural leaders, health workers, police officers, local leaders, social workers, students at schools, women's groups etc. and inform them of GBV/SEA/SH risks, identify preferred channels for reporting and get their feedback. Data should not be collected as part of risk assessment (confidentiality must be observed and maintained).			
Consultation during resettlement to minimize risks of intimate partner violence due to compensation or			

Table 16.0.a
Proposed Schedule Activities

	Project Phase		
	Preparation	Construction	Implementation
men adapting practices of child marriage because of having compensation monies			
Map out GBV prevention and response actors in communities adjoining the project			
HIV/AIDS, Gender Sensitization, and Monitoring shall be designed to empower the target groups with skills to prevent and respond to HIV/AIDS and as well, as enhance women's inclusion in the construction works for infrastructure development			
Empower the community on issues of gender based violence and its effects on individual and how to address GBV related issues			
Incorporate GBV/SEA risk management in ESIP/ESMP - Develop and establish/review SEA/GBV response and accountability framework			
Conducting awareness training to IU members on GBV/SEA/SH issues			
Establish working relationship with the Protection Committees at District and Ward levels (for referrals, monitoring and training) and also with other institutions dealing with GBV in line with the VAWC			
Preparing reporting Mechanism of GBV/SEA and SH incidences as well as process and procedures.			
Implement appropriate project related civil works for labour to reduce GBV risks			
Monitoring and evaluation of GBV issues			



Annex 1 – Gender-based Violence Incident Notification Form



Notification form– violence incidents

Date:

Location:

Project component:

Person who presents the incident:

Position and company of the person who presents the report:

1.- Please describe the incident (what happened, to whom, who is responsible and when).

2.- Please describe the current situation (consequences that the incident has carried out).

3.- Describe how this information was attained (if the affected person presented it, witnesses did so or otherwise)

4.- Describe the actions taken so far to provide support to the victim.

5.- Describe the actions taken so far to investigate and sanction the person(s) responsible.

5.- Describe the next steps that will be taken.