



ZESCO

ZAMBIA-TANZANIA INTERCONNECTOR PROJECT

RESETTLEMENT ACTION PLAN (RAP) UPDATE

NORTHERN, MUCHINGA AND CENTRAL PROVINCES, ZAMBIA

MARCH 2026
WSP REFERENCE: CA0027197.7329

FOR OFFICIAL USE ONLY

VOLUME 1: REPORT
FINAL VERSION





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ABBREVIATIONS AND ACRONYMS

ACSR	Aluminum Conductor Steel Reinforced
AIDS	Acquired Immunodeficiency Syndrome
AMC	African Mining Consultants
CARE	Cooperative for Assistance and Relief Everywhere
CIGZambia	Cities and Infrastructure for Growth Zambia
CLO	Community Liaison Officer
COMESA	Common Market for Eastern and Southern Africa
CSI	Corporate Social Investment
DACO	District Agriculture Coordinator
DAO	District Administrator Officers
DBH	Diameter at Breast Height
DC	District Commissioners
DOPE	Development Organization for People’s Empowerment
E&S	Environmental and Social
EAPP	Eastern Africa Power Pool
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
ERB	Energy Regulation Board
ESD	Environmental Sustainability Department
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standard
EU	European Union
FAQs	Frequently Asked Questions
FCDO	Foreign, Commonwealth and Development Office

GBV	Gender-Based Violence
GRM	Grievance Redress Mechanism
ha	Hectare
HIV	Human Immunodeficiency Virus
ICBC	Industrial and Commercial Bank of China
IRP	Integrated Resources Plan
km	kilometer
KP	Kilometer point
kV	Kilovolt
LFP	Local Focal Point
m	Meter
MoE	Ministry of Energy
n/a	Non available or not applicable
NBI/NELSAP	Nile Basin Initiative / Nile Equatorial Lakes Subsidiary Action Program
NGO	Non-Governmental Organization
NRC	National Registration Card
OP	Operational Policy
PAPs	Project Affected Persons
PIU	Project Implementation Unit
PWD	Persons with Disabilities
RAP	Resettlement Action Plan
RCAP	Resettlement and Compensation Action Plan
ROW	Right-of-Way
SADC	Southern African Development Community
SAPP	Southern African Power Pool
SEAH	Sexual Exploitation, Abuse and Harassment
SEP	Stakeholder Engagement Plan
SSF	Social Safeguard Framework

SSS	Social Safeguard Standards
TA	Traditional authority
TAZARA	Tanzania-Zambia Railway Authority
TB	Tuberculosis
ToRs	Terms of Reference
UK	United Kingdom
USD	US Dollars
VSU	Victim Support Unit
WSP	WSP Canada Inc.
YWCA	Young Women Christian Association
ZAFFICO	Zambia Forestry and Forest Industries Corporation
ZEMA	Zambia Environmental Management Agency
ZESCO	ZESCO Limited
ZMW	Zambian Kwacha
ZTIP	Zambia-Tanzania Interconnector Project
ZTK	Zambia-Tanzania-Kenya

GLOSSARY

Concept	Definition
Affected household	Affected households are the unit of analysis for the socioeconomic survey that was conducted (see Section 3.7) to establish project affected persons' (PAPs) baseline conditions. The survey was conducted at the household level as many questions pertain to the households' conditions. As households can contain more than one PAP, the survey was conducted at household level to avoid double counting.
Agricultural land	Land, titled or customary, used for agricultural purposes.
Cash compensation	This means compensation delivered in monetary form as opposed to "in-kind". It should be noted that all cash is paid into bank accounts and no direct physical cash transfer is made.
Compensation and assistance	Compensation designates an amount of money given to a PAP to replace what is lost and can be measured. Assistance is provided to PAPs to address indirect impacts from the Project which often cannot be measured.
Customary landowners	Customary landowners are persons that occupy land with the consent of their traditional authorities (village headmen and Chief). In the context of the Project, they represent most people. They do not have any formal documents to demonstrate their status, have no clear demarcation of their land, and do not pay taxes to the central government.
Consent form	Form used to ensure agreement that a right-of-way has been acquired from both customary and state landowners.
Cut-off date	Date of completion of the census and assets inventory of parties affected by the Project. Parties occupying or owning assets located within the wayleave prior to the cut-off date will be eligible to compensation and assistance, while any parties that settle in the wayleave after the cut-off date will not. World Bank Environmental and Social Standard (ESS) 5 requires the cut-off date to be documented and disseminated throughout the Project area. The cut-off date for this Project is defined in Section 4.2.
Disclaimer	ZESCO Limited (ZESCO) uses the term "disclaimer" to describe the stage where the PAP has signed the Disclaimer form after receiving compensation payment. It declares that the PAP has no more claims and that the case is closed.
Disclosure/Consent for compensation	ZESCO uses the term "disclosure" – or "consent for compensation" to describe the process of compensation sign-offs with PAPs. PAPs sign a Disclosure form, in which the PAP agrees on the amount of the compensation.
Disturbance allowance	As detailed in Section 8.2.2, the disturbance allowance is paid in cash (10% of compensation amount) to eligible PAPs to cover for clearing land before building, moving personal belongings, fees for opening a bank account, and time necessary for the resettlement process, including negotiations with the ZTIP PIU. Eligible PAPs are those receiving cash compensation for affected titled land or residential, secondary and commercial structures, as set out in the asset valuation reports (see Appendix 8-1).
Household	A household is the main unit for the assessment of impacts, the valuation of losses and the development of the compensation package. A household is a group of people, related or not, who usually live under the same roof, share a meal prepared over the same fire, manage all or part of their resources in common, and recognize the authority of a single person called the head of household.
Involuntary resettlement	Refers to resettlement of the affected parties that do not have the power to refuse resettlement. The current Project leads to involuntary resettlement because PAPs cannot refuse to move out of the wayleave.
Livelihood	Livelihood is a means of supporting one's existence especially financially or vocationally. It includes capabilities, assets (including both material and social resources) and activities required for a means of living.

Concept	Definition
Project affected persons (PAPs)	<p>Any individual, household or community that, as a result of the execution of a project, loses the right to own, use, or otherwise benefit from a built structure, land (residential, agricultural, or pasture), annual or perennial crops and trees, or any other fixed or moveable asset, either in full or in part, permanently or temporarily prior to the cut-off date (see definition above).</p> <p>In the context of the Project, a PAP is a person that is either physically, economically, or both physically and economically displaced, either by direct impact or land use restrictions. Eligibility for PAPs will vary depending on the type of loss or impact. In some cases, PAPs will be entitled to compensation as independently valued (for titled land, structures, fruit trees and exotic trees), whereas some PAPs will only be eligible to livelihood restoration and/or assistance. The definition of a project affected person is derived from the World Bank ESS5 and, specifically in the context of this project, includes those impacted by land use restrictions as per Guidance Note 4.4 to the ESS 5.</p>
PAPs eligible to cash compensation as per independent valuation	PAPs whose titled land (residential or agricultural), structures, fruit trees or exotic trees are affected are eligible to cash compensation. As such, an independent valuation process was conducted to establish the compensation amount.
PAPs eligible to other compensation as per entitlement matrix	PAPs who do not have affected titled land, structures or fruit/exotic trees but will be impacted by direct impact or land use restrictions on customary land, crops, or indigenous trees. These PAPs were not considered in the independent valuation process but are still eligible to assistance, livelihood restoration, compensation or Corporate Social Investment (CSI) as per the entitlement matrix.
Replacement cost	<p>The rate of compensation for lost assets calculated at full replacement value; market value of the asset plus transaction costs (taxes, registration fees, cost of transport of material to build the house). The replacement value must reflect the cost at the time when the item must be replaced.</p> <p>The ESS5 definition of "Replacement Cost" is the method of valuation of assets which helps determine the amount sufficient to replace lost assets and cover transaction costs. In applying this method of valuation, depreciation of structures and assets should not be considered. For losses that cannot easily be valued or compensated in monetary terms (e.g., access to public services, customers and suppliers; or to fishing and grazing, or forest areas), attempts are made to establish access to equivalent and culturally acceptable resources and earning opportunities.</p>
Resettlement assistance	Support provided to people who are physically displaced by a project. Assistance may include the provision of cash allowances (disturbance allowance and vulnerability allowance) to cover moving costs and the time invested by PAPs in the resettlement process and in adapting to their new circumstances. In addition, logistical assistance will be offered by the Project during resettlement, including for those who require assistance in opening a bank account or acquiring a National Registration Card (NRC).
Residential land	Land, titled or customary, used for residential purposes.
Titled landowners	Titled landowners have formal documents showing the demarcation of their land. Their land is registered and they pay taxes.
Vulnerability allowance	As detailed in Section 8.2.2, the vulnerability allowance is paid in cash (10% of compensation amount) to eligible vulnerable PAPs to cover for additional expenses or challenges that could be encountered by vulnerable PAPs throughout the resettlement process.
Vulnerable people	<p>According to ZESCO's definition, vulnerable people are those disadvantaged on account of gender, ethnicity, age, physical or mental disability, economic disadvantage, or social status, who may be more adversely affected by resettlement than others and who may be limited in their ability to claim or take advantage of resettlement assistance and related development benefits. Best international practices and this report also highlight that vulnerability should be project-induced and shall include persons who are dependent on others during the resettlement process, either because of their status, age or disabilities.</p> <p>This Resettlement Action Plan (RAP) considers a variety of vulnerability criteria, including age, sex and abilities of the head of household, as well as the economic status of the household. These criteria are detailed in Section 3.5.</p>

RAP SUMMARY SHEET

No.	Item	RAP data		
General information				
1	Country	Zambia		
2	Region	Northern, Muchinga, and Central		
3	Project name	Zambia-Tanzania Interconnector Project (ZTIP)		
4	Project components responsible for resettlement	380 km of 330kV transmission line: 186 km between Pensulo and Mpika Substations and 194 km between Mpika and Kasama Substations		
5	Proponent	ZESCO Limited		
6	Total RAP budget ¹	44,322,766 Kwacha (1,881,250 USD ²)		
7	Cut-off dates	September 9, 2024, for Kanchibiya District September 13, 2024, for Mpika District September 17, 2024, for Kasama and Lavushi Manda Districts September 19, 2024, for Chitambo and Serenje Districts		
Specific information				
8	Project affected persons	Total number	Number eligible to cash compensation as per independent asset valuation	Number eligible to other type of compensation as per entitlement matrix³
8.1	Total number of PAPs ⁴	990	326	664
8.1.1	Number of physically displaced PAPs	81	29	52
8.1.2	Number of economically displaced PAPs	442	76	366
8.1.3	Number of physically and economically displaced PAPs	467	221	246
8.2	Number of vulnerable PAPs	559	84 eligible to the vulnerability allowance ⁵	475
Affected assets				
9	Type of affected private assets	Number of assets		Number of PAPs⁶
9.1	Assets eligible to cash compensation as per independent asset valuation			
9.1.1	Affected titled residential land	22		22
9.1.2	Affected titled agricultural land	8		8
9.1.3	Affected residential structures	172 (including three rentals, i.e., three tenants and three landlords)		136
9.1.4	Affected secondary structures	409		139
9.1.5	Affected commercial structures	3		3
9.1.6	Affected fruit trees	5,045		237
9.1.7	Affected exotic trees	88		13

No.	Item	RAP data	
9.2	Assets eligible to other types of compensation as per entitlement matrix		
9.2.1	Affected customary residential land	524	518
9.2.2	Affected customary agricultural land	252	251
9.2.3	Affected businesses	5 (one with four employees)	5
9.2.4	Affected indigenous trees used for livelihoods on individualized land	28,930	443
10	Type of affected community assets	Number of assets	Number of affected communities
10.1	Number of affected community structures	8	5
10.2	Number of affected community lands (Institutions and Associations)	10	9
10.3	Number of affected community sacred assets	3	3
10.4	Number of areas used by communities for livelihood ⁷	27	26

Notes: ¹ This represents the total RAP budget, including independently valued compensation budget for titled land and structures (9,625,592.78 Kwacha as valued by Sandridge Associates and detailed in Appendix 8-1), fruit trees (8,288,840 Kwacha valued by District Agriculture Coordinators [DACO] and detailed in Appendix 8-2), and exotic trees (158,675 Kwacha valued by the Forestry Department and detailed in Appendix 8-3). However, it excludes the Corporate Social Investment (CSI) fund equivalent to 1% of project costs and estimated at 65,408,355 Kwacha (2,850,000 USD).

² The rate considered is 1 USD = 22.9503 ZMW, as of December 5, 2025 (Oanda).

³ As per the entitlement matrix, not all PAPs are eligible to cash compensation as independently valued by Sandridge Associates (for affected structures and titled lands), DACO (for affected fruit trees), or the Forestry Division (for affected exotic trees). Some PAPs are only eligible to assistance, livelihood restoration, compensation, or Corporate Social Investment (CSI) for loss of affected customary land, crops, or indigenous trees.

⁴ The total number of PAPs is based on the full census of PAPs and assets within the project wayleave. All 990 PAPs are affected by different types of impacts and will receive different types of compensation as defined by the eligibility criteria developed for this RAP and detailed in Section 4.5.

⁵ Only vulnerable PAPs eligible to receive cash compensation for the loss of titled land or residential, secondary or commercial structures are eligible to receive the vulnerability allowance.

⁶ It should be noted that some PAPs have more than one type of affected assets. As such, the sum of the number of PAPs per type of affected asset does not equal the total number of PAPs (990).

⁷ These refer to natural areas including rivers, wetlands, streams, fallow land, bush, grazing land and community forests.

1 SUMMARY

The non-technical summary is presented below in English (Section 1.1) and Bemba (Section 1.2).

1.1 NON-TECHNICAL SUMMARY

1.1.1 INTRODUCTION

This Resettlement Action Plan (RAP) concerns an electricity transmission line project called the **Zambia-Tanzania Interconnector Project (ZTIP)**.

The ZTIP is the last electrical line segment to be completed to enable the interconnection between the Southern African Power Pool (SAPP) and the Eastern Africa Power Pool (EAPP). The ZTIP has significantly evolved since its initiation in late 2013. For some portions of the ZTIP wayleave, project affected persons (PAPs) have already been compensated for their assets and resettlement was completed. These portions are:

- Kasama-Nakonde Section: a 212 km long portion of the 330kV transmission line;
- 15 km of a 400kV double circuit transmission line from Nakonde to the Zambia-Tanzania border;
- 12 km of a 132kV double circuit from Nakonde to Isoka (loop in and out of 66kV Isoka - Nakonde line);
- 6 km stretch while entering in the Kasama Substation from the South (from Mpika) (precisely from the Kasama Substation to MK-497);
- Nakonde Substation which will cover approximately 8 ha.

This RAP primarily covers the Pensulo-Kasama portion of the ZTIP. The ZTIP components responsible for additional displacement and considered under the present RAP are as follows:

- Pensulo-Mpika Section: a 186 km long portion of the 330kV transmission line with a 35 to 50 m easement.
- Mpika-Kasama Section: a 194 km long portion of the 330kV transmission line (as a 6 km portion entering the Kasama Substation has already been compensated) with a 35 to 50 m easement.
- Pylons siting for the entire wayleave of the ZTIP, including the Kasama-Nakonde stretch¹.
- Worker camp and access road surfaces and locations will likely remain unknown until lead Contractors are identified ahead of construction. Their locations are usually determined at a later stage of the Project, such as the contractor's final design or work plans. To the extent possible, the sites required for that infrastructure should be acquired under willing-buyer, willing-seller agreements to avoid involuntary resettlement.

Easement for wayleaves is also called right-of way (ROW) because ZESCO neither acquires land nor alienates land under transmission lines. As such there is limited permanent land acquisition and no changes in land tenure. Permanent land acquisition will however be required at pylons locations. The wayleave requirements for the Pensulo-Kasama section, where economic and physical resettlement is foreseen mainly in rural areas, varies between 35 and 50 m according to the proximity of the ZTIP with the existing 330kV Pensulo-Kasama transmission line.

¹ Though this portion of the ZTIP has already been compensated, as detailed in Section 2.1.3, the compensation associated with the pylon siting has not yet been paid since pylon location is not yet final. As such, this component is included in the current RAP report.

1.1.2 CENSUS, ELIGIBILITY AND COMPENSATION

A full census of the wayleave was completed between Pensulo and Kasama Substations to identify all affected assets, including land, structures and buildings, economic trees, crops that were in the field, and sacred assets. Private assets as well as communal assets were inventoried, categorised and then characterised during the census. Assets eligible to cash compensation (titled land, structures, fruit trees and exotic trees) were subjected to an independent valuation exercise. Socioeconomic surveys were conducted at the community and household levels to collect baseline socioeconomic data. Data collected is presented in Chapter 3 and reflected in the table below.

Chapter 4 presents the compensation framework established to ensure fair and equitable treatment of PAPs and affected communities, while guaranteeing their physical and economic resettlement. This includes the eligibility criteria for resettlement, the process associated with the cut-off date, the types of loss anticipated, and PAP categories. These elements (types of losses, categories of PAPs, and compensation measures) are presented in Table 1-1.

Considering the land use restrictions within the project wayleave, PAPs are exposed to three types of displacement:

- **Physical displacement:** PAPs facing land use restrictions on residential land or loss of dwelling shelter, i.e., whose housing structure will have to be moved, but whose income and livelihood will not be affected. This is the case for 81 PAPs (of which 29 are eligible to cash compensation as per the independent asset valuation²).
- **Economic displacement:** PAPs facing loss of land, assets or access to assets, leading to loss of income sources or increased pressure on livelihoods. This includes the loss of food and cash crops (where destroyed by construction activity) or economic trees. This is the case for 442 PAPs (of which 76 are eligible to cash compensation as per the independent asset valuation).
- **Physical and economic displacement:** PAPs that will lose at least one fruit tree or cultivated or agricultural plot, whether in whole or in part, or a commercial structure and for whom a housing structure will have to be relocated or who will experience land use restrictions on residential land. This is the case for 467 PAPs (of which 221 are eligible to cash compensation as per the independent asset valuation).

Compensations will be implemented to replace direct and irreversible impacts (such as losing a house or land) while assistance can be described as additional support to address impacts from the resettlement process. The following table presents the estimates of likely compensation and assistance values based on figures provided by the formal valuation exercises conducted by registered valuation surveyors on behalf of Sandridge Associates (for affected assets), by the District Agriculture Coordinator (DACO) (for fruit trees), and by the Forestry Department (for exotic trees), as detailed in Chapter 8. More information on the rationale and calculation methods for compensation, allowances and assistance is provided in Chapter 8.

It should be noted that most physically affected PAPs (384 of 548 physically or both physically and economically displaced) will only experience land use restrictions on residential land, with only 164 PAPs needing to relocate their dwelling and/or associated structures. This reduces the expected magnitude of physical impact associated with the Project.

² As per the entitlement matrix, not all PAPs are eligible to cash compensation as independently valued by Sandridge Associates (for affected structures and titled lands), DACO (for affected fruit trees), or the Forestry Division (for affected exotic trees). Numbers of PAPs eligible to cash compensation for either of these assets are highlighted to reflect compliance with the number of PAPs in independent valuation reports. Remaining PAPs are eligible to assistance, livelihood restoration, compensation, or CSI for affected customary land, crops, or indigenous trees only.

Table 1-1 Summary of Impacts and Compensation Costs

Type of Impact	Categories of PAPs	Number of Affected PAPs/Assets ³	Compensation and Assistance
Total land required for the wayleave		1,606.45 ha (from Pensulo to MK-497 ⁴)	For access restrictions and land repurposing in community land, it is recommended that a Corporate Social Investment (CSI) Fund equivalent to 1% of Project costs ⁵ be set up and expended throughout the Project duration.
Physical Displacement			
Permanent loss of residential land – either under easement or pylon base	Owner of titled land	22 PAPs will be affected by the loss of a titled residential land (totalling 95.94 ha of affected area).	Compensation at full replacement cost (inclusive of transaction costs), valued at 953,170 Kwacha. Disturbance and vulnerability (where eligible) allowances (see Section 8.2.2).
	Holder of communal land	518 PAPs will be affected by loss of customary residential land. Most PAPs have one affected customary residential parcel, but six PAPs have two for a total of 524 affected customary residential parcels (totalling 671.65 ha of affected area).	Where there is not sufficient space on the affected parcel to rebuild an affected structure, PAPs can choose between cash or in-kind compensation to acquire replacement residential land to build the replacement structure. When cash compensation is selected, full replacement cost will be established by an independent asset valuer for the entire residential customary land. When in-kind compensation is preferred, ZESCO, in consultation with the Traditional Authority (TA) will facilitate provision of replacement land. Security of tenure to be provided as per certificate of occupancy provided for by the TA and costs to be covered by the project. Based on census results, that is the case for 30 residential lands held by 30 PAPs for a total of 35.15 ha with an estimated replacement value of 425,367 Kwacha ⁶ . Additionally, where a pylon is sited on a customary residential parcel, the owner will be entitled to cash compensation for the permanent uptake. Affected land will be identified and valued once the final precise location of pylons is known and will be included in an Addendum to the current RAP. A budget estimate is provided in Chapter 8 and included in the RAP budget.
Permanent relocation of housing structure	Owner of housing structure (regardless of tenure type)	136 PAPs will lose a residential structure. Some of these PAPs have more than one house. The total number of houses to be demolished is 172.	Compensation at full replacement cost, valued at 5,244,752 Kwacha. Disturbance and vulnerability (where eligible) allowances. Where requested by PAPs, in-kind compensation for the lost house will be offered (house for house). Costs are included in the full replacement cost, and this type of compensation will be offered to all PAPs.
	Tenant	Three (3) housing rentals with charge were identified, meaning that three (3) tenants and three (3) associated landlords are eligible to transitional rental allowance.	Transitional rental allowance for three (3) months of rent to be paid, separately, to the tenant and the owner (tenancy rate), where applicable. Tenants allowance, which includes a month deposit, amounts to 5,800 Kwacha while landlords' allowance is estimated at 4,350 Kwacha.

³ It should be noted that some PAPs have more than one type of affected assets. As such, the sum of the number of PAPs per type of affected asset does not equal the total number of PAPs (990).

⁴ As detailed in Section 3.1, though the current RAP is for the entire line route between Pensulo and Kasama, a 6-km stretch was already acquired and compensated by ZESCO in early 2024. As such, the area to be acquired under the current RAP is from Pensulo Substation to MK-497, located about 6 km southeast of Kasama Substation (see Map 2-2).

⁵ Reinvesting 1% of project costs within affected communities is in line with best practices for similar infrastructure projects.

⁶ For budgetary purposes, it was assumed that all PAPs would opt for cash compensation.

Type of Impact	Categories of PAPs	Number of Affected PAPs/Assets ³	Compensation and Assistance
Permanent relocation of secondary structures and immovable equipment	Owner of structure/equipment (regardless of tenure type)	139 PAPs will lose at least one secondary structure (e.g., kitchen, latrine, etc.). Many of these PAPs will lose more than one secondary structure. The total number of secondary structures to be demolished is 409.	Compensation at full replacement cost, valued at 1,723,354 Kwacha. Disturbance and vulnerability (where eligible) allowances.
Economic Displacement – Commercial Structures			
Permanent relocation of commercial structures – either under easement or pylon base	Owner of commercial structure and parcel (titled landowners or communal landowners ⁷)	Five (5) businesses will be impacted with three (3) commercial structures requiring to be relocated.	Commercial structure compensated at full replacement cost, valued at 49,070 Kwacha. Compensation for lost revenues for three (3) months estimated at 13,500 Kwacha. Disturbance and vulnerability (where eligible) allowances.
	Tenant	No commercial tenant was inventoried within the wayleave.	Compensation for lost revenues for three (3) months, where applicable. Disturbance and vulnerability (where eligible) allowances.
	Employee	A total of four (4) employees working for one (1) affected business were identified.	Compensation for wage loss for three (3) months, estimated at 17,844 Kwacha.
Temporary disruption of commercial structures during construction	Operator	The location of temporary disruption is not known yet as this is associated with construction and decisions on key temporary construction infrastructure, e.g. laydown areas. As such, no temporarily affected business operator or employee has been identified. However, should some be affected at a later stage, they will be eligible to compensation and assistance as detailed in Chapter 4.	Compensation for lost revenues for the duration of the impact. Associated costs are included in the contingency.
	Employee		Compensation for wage loss for the duration of the impact. Associated costs are included in the contingency.
Economic Displacement – Agricultural Land, Crops, and Economic Trees			
Easement over agricultural land (permanent loss of rights)	Titled landowners	An estimated area of 39.14 ha of titled agricultural land is expected to experience a permanent loss of right due to the easement. There are 8 titled agricultural parcels belonging to 8 PAPs that would be eligible to compensation for loss of rights (i.e., parcels that are currently used for soon-to-be restricted activities).	Cash compensation proportionate to the loss of value incurred by the use restrictions valued at 346,539 Kwacha.
	Communal landowners	There are 252 parcels with customary tenure that are expected to experience a permanent loss of right due to the easement. Those belong to 251 PAPs.	ZESCO in consultation with the traditional authorities (TAs) will facilitate access to replacement land, at no cost, to cover loss of livelihood due to loss of rights within the easement. The process will be documented and aligned with ESS5 requirements. As stated above, it should be noted that access to replacement land is not constrained within the context of the transmission line.

⁷ All businesses are located on customary residential land, already captured above.

Type of Impact	Categories of PAPs	Number of Affected PAPs/Assets ³	Compensation and Assistance
Permanent loss of agricultural plot under pylon base	Owner of land or land use rights (titled)	It is estimated that 0.98 ha of agricultural land will be affected by the pylons' location. Owners and tenants will be identified before construction and will be eligible to compensations set out in Chapter 4.	Owners of titled land are already eligible for compensation for the entire parcel area located within the easement. As such, they are not entitled to additional compensation for the area located under the pylon base. Land preparation allowance.
	Owner of land or land use rights under customary tenure		Cash compensation for agricultural land being permanently affected by pylon siting. Affected land will be identified and valued once the final precise location of pylons is known and will be included in an Addendum to the current RAP. A budget estimate is provided in Chapter 8 and included in the RAP budget.
	Occupier without legal rights or claims		Land preparation allowance and other additional assistance aimed at their resettlement in dignified conditions.
	Tenant		Assistance in searching for adequate agricultural replacement land. Land preparation allowance.
Permanent loss of crops	Farmer (regardless of tenure type)	Crops located under the pylons' base have an estimated area of 0.66 ha. As the affected areas are not known yet, specific PAPs were not identified. However, 320.6 ha of areas under cultivation, owned by 597 PAPs were inventoried. Compensation will only be paid for crops that are destroyed during works (the specific affected PAPs, the extent of their losses, and compensation amounts will be detailed in an Addendum when the location of pylon is final).	Compensation at market value, estimated at 27,136 Kwacha. Compensation for loss of crops under pylons for the Kasama-Nakonde stretch is estimated at 47,087 Kwacha for 1.14 ha. Land preparation allowance will also be paid. Compensation will only be paid for crops that are destroyed during works. Official valuation will be completed by the DACO. Market study rates were used to provide a budget estimate.
Permanent loss of individualized exotic/fruit economic trees	Owner of the tree (regardless of tenure type)	A total of 5,045 fruit trees and 88 exotic trees were inventoried, belonging to 238 PAPs.	Compensation at full replacement cost valued at 8,264,840 Kwacha by DACO. Compensation at full replacement cost valued at 158,675 Kwacha by the Forestry Department.
Private Graves and Cultural Assets			
Permanent relocation of graves	Owner (regardless of tenure type)	There are no private graves or cultural assets located in the wayleave. With the continuous implementation of ZESCO Chance Find Procedure, graves or cultural assets may be identified during construction.	Relocation by a qualified archeologist. All costs will be covered by ZESCO.
Community Impacts			
Permanent relocation of community structure	Owner of structure or community	A total of eight (8) community structures are located within the wayleave.	Compensation at full replacement cost, valued at 141,620 Kwacha. Disturbance allowance.

Type of Impact	Categories of PAPs	Number of Affected PAPs/Assets ³	Compensation and Assistance
Permanent loss of association/institution land	Association (religious groups or others) or institution owning an affected piece of land	A total of ten (10) associations or institutions own a piece of land that is crossed by the line route and are affected by land repurposing. The affected area represents 26.20 ha.	The actual land, where impacted, will be made available and replaced by the TA. Further a CSI package has been designated by ZESCO to compensate communities for land repurposing and land use restriction.
Permanent relocation of cemeteries	Community	A total of three (3) graveyards are affected. The land is crossed by the wayleave and some graves may have to be relocated. The affected area represents 1.33 ha. With the continuous implementation of ZESCO Chance Find Procedure, other cemeteries may be identified during construction.	Relocation of graves by a qualified archeologist. All costs will be covered by ZESCO including ceremonial costs that include food and drink for the attendees as well as stipend payment for cultural leaders.
Permanent relocation of cultural and sacred sites	Community	There are no community cultural or sacred sites located in the wayleave. With the continuous implementation of ZESCO Chance Find Procedure, such sites may be identified during construction.	Relocation by a qualified archeologist, all costs covered by ZESCO.
Permanent loss of indigenous natural trees of use value located on individualised parcels	Community	A total of 28,930 indigenous trees were inventoried on affected parcels. Those are not eligible for compensation under the Forestry Act of 2015.	Livelihood-based reforestation program for the replacement of indigenous trees used for natural products and ecosystem services, estimated at 12,264,348 Kwacha, to cover the productive value of affected indigenous trees.
Permanent loss of natural products harvesting areas and land under easement	Community	A total of 27 natural areas under customary tenure are used by community members for livelihood activities such as wood collection, water collection and grazing. Those areas represent a total affected area of 124.68 ha. Among those are 22 forested areas, bush, fallow land or grazing land where indigenous trees potentially used by communities for livelihood will be lost, covering 117.92 ha.	An in-kind compensation package has been designated by ZESCO. The aim is to compensate communities for land repurposing and land use restriction. Lost trees will be compensated through the livelihood-based reforestation program, estimated at 12,264,348 Kwacha (as stated above).
Permanent land use restrictions over customary land under easement	Community	Communities and traditional authorities (TAs) will be expected to grant replacement land to affected customary landowners at no cost. A total of 1,107.51 ha of parcels under customary tenure were identified within the wayleave.	An in-kind compensation package has been designated by ZESCO (see Section 8.4.2). The aim is to compensate communities for land repurposing and land use restriction.

1.1.3 POLICY, ORGANIZATIONAL AND INSTITUTIONAL FRAMEWORKS

As a standard practice, and in accordance with the Electricity Act (2019) and the Energy Regulation Board “Wayleave code of Practice”, ZESCO obtains the right-of-way for the wayleave through a negotiated agreement with affected parties but does not acquire the land. PAPs continue having access to the land; however, land use and agricultural operations are restricted to growing of low height crops and animal grazing under the transmission line. Construction of buildings and planting of trees beyond 2 m are prohibited.

It is under the Electricity Act (2019) that the need for resettlement of people and removal of all trees and structures is legally justified. This Act gives power to the valuer to carry out valuation of assets and to estimate market value for replacement of impacted houses and assets.

Resettlement will be carried out in accordance with national regulation, World Bank Environmental and Social Framework (ESF), Ministry of Energy (MoE) Social Safeguard Framework and ZESCO practices as described in ZESCO Document No. PP.14630.SPPR.00019 Resettlement and Compensation Action Plan Procedure Version 2 (16/12/2024).

Some gaps between ZESCO procedures and World Bank’s ESF were identified and measures to bridge them were designed and integrated within the resettlement strategy outlined in the current RAP Report (see Chapter 4).

A dedicated unit within ZESCO, the ZTIP Project Implementation Unit (PIU), has been established to manage the implementation of the resettlement process and undertake RAP activities. The ZTIP PIU’s capacity may be enhanced, as required, through collaboration with ZESCO’s Environmental Sustainability Department (ESD). Institutional Authorities with direct interest in resettlement are the affected traditional leaders, affected local authorities, Ministry of Community Development and Social Services, the Department of Resettlements under the Office of the Vice President, Forestry Department, and the Zambia Environmental Management Agency (ZEMA).

1.1.4 RESETTLEMENT SITES

For 384 of 548 PAPs, physical impacts are limited to land use restrictions on residential land (either titled or customary). Based on the independent asset valuation conducted, structures belonging to 164 PAPs will need to be relocated outside the wayleave due to safety concerns. Most of these PAPs will not have to move to a great distance since the wayleaves are small and there is available space to re-build the structures elsewhere on their land parcels, outside the wayleave or in the surrounding communal lands. Where rebuilding on the same parcel of residential land is not possible due to limited space or unfit terrain, which is the case for 30 residential lands⁸ (30 PAPs out of the 164 PAPs) as identified during the socioeconomic survey, compensation will be provided in cash or in-kind based on the PAPs’ preference. When cash compensation is chosen, valuation of the entire residential parcel at full replacement cost will be conducted by an independent valuer and included in a RAP Addendum. Where in-kind compensation is preferred, ZESCO, in consultation with traditional authorities (TAs), will facilitate provision of replacement land of equivalent size and quality. Access to replacement land is not expected to be constrained within the context of the transmission line as density of land occupation is low. The only area where there may be some land shortage is immediately adjacent to some of the substations, especially Kasama.

⁸ Original eligibility criteria did not cover compensation for traditional land. However, this criterion was updated for those PAPs that have traditional land in the wayleave, but insufficient space left to rebuild their structures which were valued by the independent valuer. The information of these 30 PAPs affected only came to ZESCO’s attention after the valuation exercise, hence their inclusion in the report. ZESCO will verify the extent of these PAPs parcels in early 2026.

ZESCO will be responsible for ensuring that PAPs are either able to secure residential land to rebuild with the cash compensation paid or are allocated replacement customary land, by headmen/Chiefs. This is set out as a proactive requirement in Section 15. ZESCO will physically visit all land parcels allocated to impacted PAPs and ensure that land is satisfactory in terms of accessibility, quality, and size.

Though there is no need to implement a widespread search for resettlement sites, ZESCO will have to collaborate with TAs for the allocation of customary land for those who require it and opt for in-kind replacement. In addition, ZESCO will supervise the design of houses and tender for housing construction contractors to ensure adequate replacement of housing structures for PAPs that opt for in-kind compensation.

1.1.5 CONSIDERATION OF ALTERNATIVES

Since 2013, ZESCO has considered several corridor alternatives and has selected the current proposed transmission line route to avoid and reduce environmental and social impacts.

Alternatives selection has also considered the combination of the ZTIP with existing or planned transmission lines in order to reduce the associated impacts and the fragmentation of the habitats. For the Pensulo-Kasama section, the current ZTIP alignment parallels the existing Pensulo-Kasama 330kV transmission line for 294.4 km of its total length (386 km). In some areas, this results in the possibility to share a part of the wayleave from the existing line, reducing the need for additional wayleave and area affected by resettlement and land use restrictions. As a result, the wayleave was designed at 35 m instead of 50 m for a total of 193.8 km. In other areas, a 66kV transmission line is located between the ZTIP and the existing 330kV line, rendering it impossible to share wayleaves. In those stretches, the wayleave width remains at 50 m.

1.1.6 TRANSITIONAL ARRANGEMENTS

The Project will involve physical displacement of people along the line, and those who will be displaced will typically move a few meters from the wayleave, most often on their existing parcel. All PAPs will be offered the option of in-kind or cash compensation for affected housing structures. Based on past ZESCO Projects and given the short distance between the original residence and replacement structure, most PAPs are expected to choose cash compensation and build their replacement house themselves. However, in-kind compensation will be made available to all PAPs who request it. This was made evident in the disclosure meetings that ZESCO has held to date, only one PAP opting for in-kind compensation. When PAPs decide to rebuild their housing structure themselves, ZESCO will oversee monitoring to ensure the replacement structure is equivalent to the affected structure in terms of size and quality. Eligible PAPs will be provided with a compensation package that includes a disturbance allowance to rebuild a rural house on traditional land. This allowance will cover the various disturbances of moving out of the house as well as rebuilding and moving into the new house. In addition, all crops damaged during construction will be compensated.

Impacted businesses will be eligible to allowances covering the loss of revenues for a period of three months. Eligibility will be triggered in instances where there is a hiatus in the ability to trade for a period linked with the requirement to move business premises from within the wayleave. Affected employees will also benefit from wage compensation for the same period.

1.1.7 LIVELIHOODS AND ADDITIONAL ASSISTANCE

Under the Forestry Act of 2015, indigenous trees are state-owned, even if located on individual parcels. Individuals cannot claim exclusive rights to their products; communities may harvest them. Despite lack of individual compensation, livelihood loss is acknowledged. Compensation will be provided through a reforestation program and training sessions for livelihood development. Training will be organized by the Community Development Department across all affected communities, with multiple sessions where needed. A dedicated program will be implemented under the RAP to restore livelihoods linked to indigenous trees (see Section 8.4.3). Activities will include, identifying accessible plantation sites in collaboration with communities, planting indigenous species and monitoring growth, and ensuring equitable access.

Most PAPs will be relocated only a few meters away, with negligible impact on access to fields. Exceptions have been noted. Examples were found on the Kasama-Nakonde audit where some PAPs self-relocated farther away for access to developed areas. These cases will be monitored, and if livelihood loss is confirmed, additional support will be provided (e.g., help locating replacement land via local leadership and land preparation allowance). PAPs affected by compacted land will receive a land restoration allowance to resume farming post-construction. This allowance will be assessed on a case-by-case basis.

ZESCO will establish a CSI Fund representing 1% of total Project costs (see Appendix 8-6). The fund will be distributed across affected communities based on transmission line length within each territory, number of affected PAPs and area of customary land impacted by the wayleave. The purpose is to compensate for loss of community land use rights through community development initiatives.

Resettled PAPs, including women, will be prioritized for local employment opportunities during project implementation. Resource allocation to affected Communities will include cut wood near villages to be given to PAPs for personal use, sale, or charcoal production. In addition, a local procurement commitment will require contractors to source goods and services locally (e.g. sand, cement, food) wherever feasible. This requirement will be embedded in the construction Terms of Reference.

1.1.8 SOCIAL AND ENVIRONMENTAL IMPACTS OF RESETTLEMENT

Resettlement is known to introduce several risks not only to those being resettled but also to the Project. The main risks associated to the ZTIP covered by this RAP are as follows:

- Risk of confusion between ZESCO projects and different ZTIP sections.
- Risk that vulnerable PAPs will choose cash compensation for replacement housing and not be able to adequately replace their homestead conditions.
- Risk that Traditional Authorities do not have the capacity or interest in ensuring that replacement land is made available for both residential and agricultural purposes as required.
- Risk of men absconding with the compensation money or mis-using funds.
- Risk of family conflicts associated compensation payment especially for inherited land and/or property.
- Risk of delays in grievance resolution.
- Risks of reduced access to community areas used for livelihood activities.

Mitigation measures to reduce those risks include stakeholder consultation and information, a grievance redress mechanism (GRM), and a CSI Fund to compensate for repurposing of community land.

Focus group discussions with women and community assemblies with community members allowed for perceived risks to be captured. Regardless of whether these perceived risks will materialise, special consideration by ZESCO will be provided at the time of compensation payment and during engagement with communities and will be examined in the process of monitoring.

1.1.9 PUBLIC CONSULTATIONS

Public consultations were organized at all stages of the Project and are aligned with the different Environmental and Social Impact Assessment (ESIA), Environmental and Social Management Plan (ESMP), and RAP updates (see Section 2.1.3 for RAP development process). As such, public consultations were carried out between 2013 and 2017 in the context of the first ESIA and RAP. In 2019, two additional rounds were organized related to the 2021 update of those documents. In 2024, another two rounds were conducted related to the 2024 update of reports.

The eighth round of informative and consultative meetings was targeting affected communities and took place in August and September 2024. These consultations aimed to present the Project to affected communities and PAPs, inform them about compensation eligibility, and identify key issues, concerns, and expectations related to the selected line route and resettlement aspects. As part of this round, a total of 56 community assemblies were organized, reaching a total of 92 communities (and a total of 2,485 participants), with smaller communities' headmen and members attending assemblies in neighboring communities.

Focus group discussions were organized with women representatives after community assemblies to provide a safe space where women would be comfortable to share their insights and concerns. A total of 54 focus group discussions were organised with a total of 1,101 women.

1.1.10 SCHEDULE

An indicative RAP schedule is provided in Chapter 12, showing the typical stages of a RAP and its implementation and the suggested timeline for each stage. It is expected that all PAPs will receive their compensation payment before the end of the sixth month after disclosure, in accordance with ZESCO procedures. It should be noted that though the project construction schedule is divided into five packages, resettlement is expected to be implemented on the entire line length after clearance from the World Bank, starting from Pensulo with the ZTIP PIU implementation team moving towards Nakonde. Resettlement, and all obligations as per ESS5, will be completed and compensation will be fully paid before land and assets alienation.

The monitoring and evaluation program requires that monitoring take place every three months starting 6 months after disclosure until the second year, when a completion audit will be conducted. As highlighted in the RAP, and as required by international best practices, work will only begin once all compensation is paid to PAPs.

1.1.11 COSTS AND BUDGETS

As shown in Table 1-2, compensation, assistance and RAP implementation will cost an estimated amount of 44,322,766 Kwacha (1,881,250 USD). This sum includes compensation for lost structures (primary and secondary or community structures owned by associations or religious groups), a disturbance allowance for all structure and titled land owners and vulnerability allowance for eligible PAPs (see Section 8.2.2), compensation for all individualized exotic/fruit trees, compensation for all impacted residential land and for customary land and crops located under the pylon base, and a livelihood-based reforestation program. Compensation figures are based on the formal valuation exercise conducted by an independent valuer (for assets), the DACO (for fruit trees) and the Forestry Department (for exotic trees). A CSI Fund for impact on community lands is also provided with a tentative budget of 65,408,355 Kwacha (2,850,000 USD) additional to the RAP budget.

Table 1-2 Overview of RAP Budget

Item	Cost (ZMW)	Cost (USD)	% of Overall Budget
Exchange Rate ⁹	22.9503	1	-
Compensation	17,523,611	763,546	39.5
Compensation for titled land	1,299,709	56,631	2.9
Compensation for customary residential land without sufficient space for rebuilding affected structures	425,367	18,534	1.0
Compensation for crops under pylon base	27,136	1,182	0.1
Compensation for customary land under pylon base	18,533	808	Negligible
Compensation for fruit trees	8,264,840	360,119	18.6
Compensation for exotic trees	158,675	6,914	0.4
Compensation for housing structures	5,244,752	228,527	11.8
Compensation for secondary structures and immovable equipment	1,723,354	75,091	3.9
Compensation for commercial structures	49,070	2,138	0.1
Compensation for loss of commercial revenue	13,500	588	Negligible
Compensation for loss of salary	17,844	778	Negligible
Compensation for collective assets	165,620	7,216	0.4
Compensation for pylon base (customary land and crops) for the Kasama-Nakonde Section	115,211	5,020	0.3
Additional Assistance	3,421,932	149,102	7.7
Disturbance allowance	831,688	36,239	1.9
Vulnerability allowance	335,400	14,614	0.8
Livelihood restoration program	962,765	41,950	2.2
Logistical assistance during resettlement	1,257,676	54,800	2.8
Transitional rental allowance for tenants	5,800	253	Negligible
Transitional rental allowance for landlords	4,350	190	Negligible
Land preparation allowance	24,252	1,057	0.1
Subtotal of RAP Compensation and Additional Assistance	20,945,543	912,648	47.3
Contingency (15%)	3,141,831	136,897	7.1
Livelihood-based reforestation program	12,264,348	534,387	27.7
RAP implementation	5,330,882	232,279	12.0
RAP evaluation and completion audit	1,492,647	65,038	3.4
GRM Management	1,147,515	50,000	2.6
Total RAP Budget	44,322,766	1,881,250	100.0
Corporate Social Investment (CSI) Fund (1% of construction costs)	65,408,355	2,850,000	-

⁹ The rate considered is 1 USD = 22.9503 ZMW, as of December 5, 2025 (Oanda).

1.1.12 GRIEVANCE REDRESS MECHANISM

The Grievance Redress Mechanism (GRM) covers both Project preparation (before and during resettlement) and Project construction and is a cross-cutting mechanism that concerns both the ESMP and the RAP. The GRM will be managed by ZESCO, as the developer. This will be done via the ZTIP Project Implementation Unit (PIU). The ZTIP PIU has an active and dedicated officer responsible for the management of the GRM. However, the central feature of the GRM is the “Local Focal Point” (LFP) person who will liaise with the ZTIP PIU and other stakeholders to address grievances related to all RAP and other activities.

The process for receiving and logging complaints is set up in Chapter 14, as well as the process for selecting and training Local Focal Point persons. All grievances related to gender-based violence (GBV) will be handled by the GBV Specialist and/or Social Scientist on the ZTIP PIU through the GBV Resolution Mechanism (detailed in the ESMP and ZTIP GBV/SEAH Action Plan).

1.1.13 MONITORING, EVALUATION, AND ADAPTIVE MANAGEMENT

The overall objective of monitoring is to provide Project managers and lenders, as well as PAPs, with timely and indicative information on whether compensation, resettlement, and impact mitigation are on track to achieve RAP objectives and to identify adjustments or corrective measures whenever necessary.

Monitoring will start within six months of the first stages of compensation sign-off, to monitor compensation and assistance payment, and it will continue for a risk appropriate period to evaluate whether PAPs are effectively resettled both economically and physically. At least every three months, ZESCO will conduct monitoring with a statistically valid random sample of PAPs using the performance indicators presented in Chapter 15. It is recommended that a PAP representative be included in the monitoring process. Whenever monitoring reveals poor performance of indicators, corrective actions will be implemented by ZESCO and/or its local contractors.

The success of resettlement will be evaluated in a completion audit. It is envisaged that this will take place no later than two years after compensation sign-off, since after two years it is expected that all PAPs have rebuilt their home. Evaluation is focused on final results, on effectiveness of the RAP implementation, and is based on discussions with those displaced and stakeholders as well as a review of the monitoring reports and process.

RAP implementation programs are dynamic and may need to be adjusted on a regular basis. The following situations may require updates to the process of implementation as envisaged by this RAP report:

- Outcomes of various consultations with affected communities during RAP implementation may point to alternative strategies being required to be adopted;
- Outcomes of the GRM may require adaptation of the process;
- Situation of workers’ camps, access roads, and all other infrastructure that cannot be designed at this stage and will require adaptation to the RAP because affected persons may be added to the list of PAPs;
- Outcomes of the monitoring and evaluation exercise.

1.2 UBULONDOLOSHI BWE LYASHI LYA MIKUUKILE MUKWIPIFYA (BEMBA NON-TECHNICAL SUMMARY)

1.2.1 UMUSAPU

Ubu Ubutantiko bwa Kukuusha Abantu (RAP) abapumfyanishiwe umulandu wa mulimo wa kupisha intambo sha malaiti uuleitwa **Zambia-Tanzania Interconnector Project (ZTIP)**.

Umulimo wa ZTIP e cipande ca kulekelesha ku ntambo sha malaiti ico icikafikilisha ukusuntinkanya utubungwe twa malaiti tubili utwitwa Southern African Power Pool (mu kwipifya SAPP) elyo na Eastern African Power Pool (mu kwipifya EAPP). Ukufuma apo uyu mulimo wa ZTIP watampiile ku kupwa kwa mwaka wa 2013, walibombwa mu nshila na mu nshita ishapusana-pusana. Mu fiputulwa fimo mu ncende shasalwa ukupishamo intambo sha malaiti mu mulimo wa ZTIP, abantu abo uyu umulimo ukapumfyanisha (PAPs) balipeelwa kale icishinka mukofu pa fikuulwa ne fipe fimbi ifyo baluushile muli ilya ncende yasalwa. Panuma yakubapa icishinka mukofu, balikuukamo no kukuuka. Ifiputulwa umu uyu mulimo wabombelwe ni fi:

- Iciputulwa ca Kasama – Nakonde: apo apali intamfu yalepa amakilomita ayali 212 mu nshila yasalwa ukupishamo intambo sha amalaiti isha maka ya cipimo ca 330kV.
- Impanga ili pakati ka ncende yasalwa apakubika icitesheni ca malaiti mu Nakonde elyo na ku mupaka wa Zambia na Tanzania iyo ilefika ku makilomita ayali 15 mu nshila yasalwa ukupishamo intambo sha malaiti ishikwete amaka ya cipimo ca 400kV.
- Impanga yasalwa ukupishamo intambosha malaiti ishikwete amaka ya cipimo ca ca 132kV ukufuma pa ncende yasalwa apakubika citesheni ca malaiti mu Nakonde ukulungama lwa ku Isoka iyo ilefika intamfu ya makilomita ayali 12. Iyi nshila mukapita intambo sha malaiti isha mitande ibili (double circuit) ishikayasuntinkana ne shinankwe isho ishilebomba pa maka ya 66kV pali lelo. Imbi ikaya ku Nakonde elyo imbi ikalungama ku Isoka.
- Impanga iilesenda intamfu ya makilomita 6 ukufuma pa mulongoti uutali (tower) MK-497 ukuyashinta fye na mu Citesheni ca Malaiti ica ‘New Kasama Substation.’ Iyi mpanga ilesangwa kunuma ya Citesheni ca Malaiti ica ‘New Kasama Substation’ nga mwatuntukila ku masaamba ukufumina lwa ku Mpika.
- Incende yasalwa iya Citesheni ca Malaiti ica mu Nakonde ikasenda impanga iifikile fye na ku mahekita 8.

Pali kano kashita, ubu Ubutantiko bwa Kukuusha Abantu (RAP) ubwa mulimo wa ba ZTIP bulelolesha sana-sana pa ncende ya Pensulo – Kasama iyo isangilwe ukuti abantu bakukuusha baifulilako panuma yakuloleshamo na kabili ilyo imilimo yaiminineko. Ubupekanyo buli nga ifi:

- Icipande ca Pensulo – Mpika: apali intamfu yalepa amakilomita 186 umu intambo sha amalaiti ayakalamba ayakwete amaka ya cipimo ca 330kV, impanga ikalundwako pali ilya yabako kale iya mamita 50 ilefika kuli mamita 35. Iyi mpange te ya kushita lelo ni pacumfwano ca kupisha fye ne nsambu shakubomfya impanga mu cimpelesha ukulingana ne ntantiko shapelwa.
- Icipande ca Mpika – Kasama: apali intamfu yalepa amakilomita 194 umu intambo sha amalaiti ayakalamba ayakwete amaka ya cipimo ca 330kV, impanga ikalundwako pali ilya yabako kale iya mamita 50 ilefika kuli mamita 35. Muli iyi mpanga tabapendeleko ilya ncende iilepele intamfu ya makilomita 6 iyaba kunuma ya citesheni ca malaiti icikalamba mu Kasama (New Kasama Substation) apo apaikala abo bapeela kale icishinka mukofu pakuti bakasele. Iyi mpange te ya kushita lelo ni pacumfwano cakupisha fye ne nsambu shakubomfya impanga mu cimpelesha ukulingana ne ntantiko shapelwa.

- Ilya mpanga apakekala imilongoti iya kupishako intambo sha malaiti (steel tower bases) ponse muli ilya nshila yasalwa ukupishamo intambo sha malaiti ukufuma fye pa Pensulo, ukupita na mu Mpika ukuya ku Kasama no kusanshapo fye Kasama-Nakonde¹⁰.
- Apakaba inkambi ya babomfi ne misebo na muntu ikapita tafyaishibikwa pali ndakai mpaka fye ababomfi bakalamba (lead contractors) abo abakalatungilila amakuule bakeshibikwe. Pamo nga pe, ukusala kwa babomfi bakalamba kucitika libe Imilimo tailatampa. Ilingi line incende babako shishibikwa mu nshita ya kuntanshi cilya bapwisha ukulenga ifyakulekelesha fintu bapekenye ukupwishishisha amakuule. Ilingi line ishi ncende pantu ababomfi bakalamba bapangila inkambi shabo ne misebo shiba mu butantiko bwa kusuminishanya kwa kuitemenwa pakati ka bareshita elyo na bareshitisha pakutila tapali abapatikishiwe ukukuuka.

Inshila imo iya kusendelamo impanga umwa kupisha intambo sha malaiti iba ni pa cumfwano (Easement). Panuma yakumfwana ba ZESCO balakwata insambu (Right-of-Way) sha kupisha intambo shabo ukwabula ukushita ilya mpanga. Icipangano cibapo ca cibindo ca mibomfesho ya mpanga. E kutila ba ZESCO tabapoka iyo impanga mu kubelelela kabili takuba ukwaluka kwa myaka ya kwikala pali iyo impanga nangula ukupilibula amapepala ya bwine. Kanshi, impanga ikafwaika ukupokwa umuyayaya inono sana. Impanga yakupoka umuyayaya ni ilya apakekala imilongoti ya kupishako intambo sha malaiti pa ciputulwa ca Pensulo-Kasama, apo apale-enekelwa ukupumfyanya abantu mu bwikashi na mu fya bunonshi ikalatampila pa mamita 35 lelo tayakacile pa mamita 50. Mu ncende ishingiri umulimo wa ZTIP ukalaendela pamo ne ntambo ya kale iya maka ya cipimo ca 330kV.

1.2.2 UKUPENDA, UKUSALA ABALINGILE NO KUPEELA ICISHINKA MUKOFU

Ukupenda kwa mupwilapo kwalicitilwe mu ncende yasalwa ukupishamo intambo sha malaiti ukufuma pa Citesheni ca Malaiti yakalamba iciitwa Pensulo substation ukushinta na ku Citesheni ca Malaiti yakalamba iciitwa Kasama substation. Uyu wali mulimo wakwishiba ifipe fyonse ifyalesangwa mu ncende yasalwa ukupishamo intambo sha malaiti yakalamba ifyo fipangumfwanishiwa no mulimo wa kupisha intambo. Ne fipe ifyakuminweko ni mpanga sha bekala calo, ifikuulwa, imiti ya fisabo, ifimuti ifibalelela ubunonshi, elyo ne filimwa ifyali mu mabala pali ilya nshita, ukubikapo fye ne ncende shacindikwa ne sha mipashi. Panuma ya kupenda, ifipe fyangilwe ifya bantu umo-umo ne fya cintubwingi fyalitantikwe, no kubiikwa mu mabumba yalekanalekana no kulondololwa bwino bwino. Casangilwe ukuti ifipe ifikafwaika ukubapelelapo icishinka mukofu fyali mu mabumba ya mpanga ishakwata amapepala ya ku buteeko, ifikuulwa, imiti ya fisabo ne fimuti ifibalelela ubunonshi. Panuma ya ubu butantiko bwa fyangilwemo, bapelele umulimo wa kubeta imitengo ya fintu fyonse ifyatantikwe ku bantu abaibela, abashibomba ku ZESCO kabili abaishibisha imilimo yabo. Panshita imo ine, kwali ukufwailisha pafya bunonshi ne mikalile mu fitente na mu mayanda pakutila bapange ifyebho ifya kupiminako ubunonshi ne mikalile ya bantu. Ilyashi ilyatumpwikemo lili mu Cipande calenga butatu mu mukululo uli panshi.

Icipandwa 4 cilelolesha pa butantiko bwa kupeela icishinka mukofu ubwiminine pa kushininkisha ukutila kwaba umulinganya kabili takuli umucisha cinani ku bantu abo umulimo ukapumfyanya (PAPs) ne mishi ikuminweko kuli uyu umulimo ukwabula amasakamika ne nshila bakabakuushishamo. Pa nshita imo ine, ici icipande cilelolesha na pa nshila ya kusalilamo abalefwaika ubwafwilisho pa kukuuka, ukwimika ubushiku bwa kupelako ukusala abakapumfyanishiwa, intantiko ya misango sha buluuse bukasangwamo elyo ne misango yalekanalekana iya bantu abo umulimo ukapumfyanya (PAP). Ifi fintu (umusango wa buluuse, amabumba ya bantu abo umulimo ukapumfyanya (PAPs), ne fishinka mukofu) fili mu Umukululo 1-3.

¹⁰ Nangu caba ukutila aba muli ici iciputulwa ca mu mulimo wa ZTIP balipeelwa kale icishinka mukofu, nga fintu calondololwa mu Cipande 2.1.3, ilya mpanga pakekala ba pailoni tailalipilwa iyoo pantu bachili balebombelelo. Na pali uyo umulandu, ulu ulubali nalusanshiwamo muli lipoti ya ndakai iya Ubutantiko bwa Kukuusha Abantu (RAP).

Mukulolesha pa kubindwa kwa mibomfeshe ya mpanga iyaba mu ncende yasalwa ukupishamo intambo sha malaiti, aba abantu abo umulimo ukapumfyanya (PAPs) baaba mu misango ya buluuse itatu iyatantikwa nge fi:

- **Ubuluse bwa ncende apa kwikalapa:** abantu abo uyu umulimo ukapumfyanya (PAPs) abakakwata icibindo palwa mibomfeshe ya mpanga ya kwikalapo nangula ubuluuse bwa mayanda bekalamo, lelo ukwabula ukupumfyanya inshila bapangilamo ubukumu. Mukupenda kwa pakubala icipendo ca bakapumfyanyihiwa muli iyi nshila casangilwe ukuba pali 81 (PAPs) (lelo panuma ya kubebeta kwakonkelepo icipendo ca basalilwe ukutila nabalinga ukupoka icishinka mukofu cashele pali 29, ukulingana no kusanga kwa kubebeta imitengo ukwacitilwe na bantu abaibela¹¹).
- **Ubuluse bwa nshila sha kusangilamo ubukumu:** abantu abakapumfyanyihiwa mu kupokwa impanga, ifipe fyabo nangu ishuko lya kubomfya ifipe fyabo, ifyo fibapeela ubukumu ubwafwilisha mu bwikashi bwabo. Ici cilesanshako, ubuluse bwa fyakulya, ifilimwa ifya kushitisha (ifyo fili no konaulwa pa mulandu wa makuule nga yatampa) nangula ifimuti ifya bukumu. Mukupenda kwa pakubala icipendo ca bakapumfyanyihiwa muli iyi nshila casangilwe ukuba pali 442 (PAPs) (lelo panuma ya kubebeta kwakonkelepo icipendo ca basalilwe ukupoka icishinka mukofu cashele pali 76, ukulingana na fintu ababebeta imitengo abaibela basangile).
- **Ubuluuse bwa ncende yakwikalapo elyo ne nshila ya kusangilamo ubukumu:** abo abakapumfyanyihiwa panuma ya buluuse bwa cimuti ca fisabo cimo, incende ya kulimapo iyelimwa (yonse nangu uku ukusunako), icikuulwa ca makwebo ico cikafwaika ukuseshiwa nangula icibindo mu mibomfeshe ya mpanga yabo. Mukupenda kwa pakubala icipendo ca bakapumfyanyihiwa muli iyi nshila casangilwe ukuba pali 467 (PAPs) (lelo panuma ya kubebeta kwakonkelepo icipendo ca basalilwe ukupoka icishinka mukofu cashele pali 221, ukulingana na fintu ababebeta imitengo abaibela basangile).

Icishinka mukofu cikapeelwa pa mulandu wa buluuse ubukatumbuka mu kuseshiwa kulya ukushingacitilwa munshila imbi iyo (pamo nga ubuluuse bwa ng'anda nangula impanga) elyo ubwafwilisho bwa kusansa pa nshila ya kucesheshamo amasanso ya mikuukile nabo bukapakanishiwa. Umukululo uwakonkapo ulalangilila Ukutunganya kwa fipendo fya lupiya lwa cishinka mukofu ulukapoozwapo pa kwafwilisha kwa mikuukile na mafuto, ukulingana ne fipendo fyasangilwe ku bapeelwe imilimo ya kubebeta imitengo ya fipe abo abetwa ati 'Sandridge Associates', ba 'District Agricultural Coordinator' (DACO) abo ababebetele imitengo ya miti sha fisabo, elyo na ba ciputulwa ca 'Forestry Department' abo ababebetele imitengo sha miti sha bukumu. Ubulondoloshi ubwayana ubulelanga inshila babomfeshe pakusanga ifipendo nabupeeelwa mu Cipandwa 8.

Cilingile ukwishibwa ukuti pali bonse abo abalembwa ukuti bakapumfyanyihiwa ku mulimo wa kupisha intambo sha malaiti, abo abafikile ku cipendo cha 548, abali 348 bakakwata icibindo palwa mibomfeshe ya mpanga yabo elyo abali 164 e bakafwaikwa ukuselela pambi. Uku kusobolola kulelanga ukuti amasanso ya buluuse ku bantu abalembwa, ayakumine ku milimo wakupisha intambo sha malaiti, na nayacefiwa ukucila ifyo cale-enekelwa.

¹¹ Ukulingana no mutande wa balingile ukupoka ulupiya lwa cishinka mukofu, te bonse abantu abo uyu umulimo ukapumfyanya (PAPs) abali no kufikapo ukupoka ulupiya lwa cishinka mukofu ukulingana no kubebeta ukwaibela ukwa mutengo wa fintu ukwacitilwe na ba Sandridge Associates (ku fikuulwa ifikabongololwa ne mpanga iyo bakwatilapo ifipepala fya ku buteeko), ba DACO (ku fimuti fya fisabo) ne ciputulwa ca Forestry Department (ku fimuti ifya bukumu). Impendwa ya bantu abo uyu umulimo ukapumfyanya (PAPs) abalingile ukupoka ulupiya lwa cishinka mukofu pa cili conse pali ifi fintu nailangililwa ku kulanga ukumfwana ne mpendwa ya bantu abo uyu umulimo ukapumfyanya (PAPs) mu kasebo kafumine ku babebeta umutengo wa fintu abaibela. Abantu abo uyu umulimo ukapumfyanya (PAPs) abashala bali no kufikapo ukupokelela fye ubwafwilisho, ukutampa imikalile cipy-a-cipy-a, icishinka mukofu, nangu ulupiya lwa kwafwilishako abekashi (CSI) abo cikakuma impanga yabo iya cishawasha, ifilimwa, nangu ifimuti fya cikaaya epela.

Umukululo 1-3 Amasanso ya Buluuse ne Cipendo Icikapooswa pa Cishinka Mukofu

Umusango wa Busanso	Amabumba ya Bantu abo Umulimo Ukapumfyanya	Impendwa ya Bantu abo Umulimo Ukapumfyanya/Ifintu ¹²	Ifishinka Mukofu no Bwafwilisho
Impanga yonse ilekabilwa ukusuminishanya ukukonka ne funde		Amahekita 1,606.45 (ukufuma pa Pensulo ukufika ku MK-497) ¹³	Ukubinda ukwingilamo no kwalula imibomfesho ya mpanga mu mushi, cilesuminishiwa ukutila kwaba ukupanga icipao ca Ulupiya Iwa Kwafwilishako Abekashi (CSI) ulwalinganako na 1 pesenti iya lupiya ululi no kupooswa pali uyu Umulimo kabili ululi no kulabomfiwa pa nshita yonse iyo uyu Umulimo ukalabombwa.
Ukupokwa apa kwikala			
Ubuluse bwa mpanga ubwa muyayaya – kuti yaba yakwikalapo nangula iya mwisamba ya ma pailoni	Abene ba mpanga ya mapepala ya ku buteeko	Abantu abo uyu umulimo ukapumfyanya (PAPs) 22 bali no kulufya impanga ya kwikalapo iyo bakwata ne fipepala fya ku buteeko (incende iili no kukumwako ikwete amahekita 95.94).	Ifishinka mukofu ukulingana no mutengo onse uwa kupyankishapo (ukubikako shonse isho bakapoosapo) ni K953,170. Ulupiya Iwa kupeela abakapumfyanihiwa na balanda (abalingile) (moneni Icipande 8.2.2).

¹² Mufwile ukwishiba ukutila abantu abo uyu umulimo ukapumfyanya (PAPs) bamo balikwata ifipe fya mutundu na umbi ifyo uyu mulimo wakuma. Kanshi, impendwa ya bantu abo uyu umulimo ukapumfyanya (PAPs) tailingene ne mpendwa ya bantu abo uyu umulimo ukapumfyanya (PAPs) (990).

¹³ Nga fintu bakolobondamo mu Icipande 3.1, nangu cakutila Ubutantiko bwa Kukuusha Abantu (RAP) bulekuma inshila ya kupishamo intambo sha malaiti yonse pakti ka Pensulo na Kasama, intamfu ya makilomita 6 yalipokelwe kale kabili abo bapokeleko balipeelwe ne cishinka mukofu kuil ba ZESCO ku kutampa kwa 2024. Kanshi, incende iyo balingile ukupoka mu Ubutantiko bwa Kukuusha Abantu (RAP) ubwa ndakai kufuma pa Citesheni cha Malaliti icha Pensulo substation ukufikaku tower MK-497, iyabela pepi-pepi na makilomita 6 pakati ka kapinda ka ku kulyo na kabanga ka Citesheni ica Malaiti ica Kasama Substation (moneni Mapu 2-2).

Umusango wa Busanso	Amabumba ya Bantu abo Umulimo Ukapumfyanya	Impendwa ya Bantu abo Umulimo Ukapumfyanya/Ifintu ¹²	Ifishinka Mukofu no Bwafwilisho
	Impanga ya cintubwingi	Abantu abo uyu umulimo ukapumfyanya (PAPs) 518 bali no kulufya impanga ya cishawasha iya kwikalapo. Abantu abo uyu umulimo ukapumfyanya (PAPs) abengi balikwata impanga imo iya cishawasha iili no kukumwako lelo Abantu abo uyu umulimo ukapumfyanya (PAPs) 6 bakwata impanga shibili ukufika ku mpanga 524 isha cishawasha isha kwikalapo (incende yones pamo iili no kukumwako ikwete amahekita 671.65).	Nga cakutila tapali incende iya kukuula cipya-cipya icikuulwa icabongolwelwe, Abantu abo uyu umulimo ukapumfyanya (PAPs) kuti basalapo pa lupiya nangu ukubakuulila icipe/inganda. Nga basalapo ulupiya nge cishinka mukofu, uubebeta umutengo wa fintu uwaibela e ukalanda ubwingi bwa lupiya pa mpanga ya kwikalapo iya cishawasha. Nga basalapo icishinka mukofu kubakuulila, ba ZESCO, bakalanshanya na bashamfumu (ba TA) pa kutila bakapeelwa impanga imbi. Bakapeelwa icipangano ca bucingo cili no kupeelwa ukulingana ne paso lya kwikalapo ilikapeelwa na bashamfumu (ba TA) elyo no lupiya ulukapooswapo ululi no kulipilwa na bene ba mulimo. Ukushimpwa pa fyasangilwe mu kupenda, eflyo cikaba ku mpanga sha kwikalamo 30 ishikalamo Abantu abo uyu umulimo wapumfyanya (PAPs) 30 iya bukulu bwa mahekita 35.15 kabili umutengo wa kupyanyikapo iyi impanga watunganishiwa ukuba K425,367 ¹⁴ . Ukulunda pali ifyo, uko ama pailoni yakekela pa mpanga ya umwine wa iyo incende ninshi nafikapo ukupeelwa ulupiya lwa cishinka mukofu pantu ninshi iyo impanga ikapokwa umuyayaya. Impanga apo pakekela ama pailoni tayaishibika bwino bwino pali kano kashita lelo ikeshibikwa nga bapwisha ukulenga fyonse baishiba nepo ama pailoni yakekela. Mukupekanya bakabikamo mu butantiko bwa Kukuusha Abantu (RAP) ubwa ndakai. Ukutunganya kwa butantiko bwa mibomfeshe ya lupiya buli mu Icipandwa 8 kabili nabusanshiwa na mu butantiko bwa mibomfeshe ya lupiya ubwa RAP.
Ukukuusha ifikuulwa na mayanda umuyayaya	Umwine wa cikuulwa nangu ing'anda (te mulandu ne cipangano icabapo)	Abantu abo uyu umulimo ukapumfyanya (PAPs) abakaluusa amayanda ya kwikalamo bali 136. Bamo pali aba Abantu balikwata ukucila pali imo ing'anda. Impendwa iya mayanda ayali no kubongololwa ni 172.	Ifishinka mukofu ukulingana no mutengo onse uwa kupyanyishapo, lupiya luli K5,244,752. Ulupiya lwa kupeela abapumfyanyishiwa na balanda (abalingile) emo luli. Nga bakutila abantu abo umulimo ukapumfyanya (PAPS) balomba icishinka mukofu icha ku bakuulila bakapeelwa (ing'anda pa ng'anda). Umutengo yalangilwe ni yonse iya kubwekeshapo ichikuulwa kaili e ilepeelwa kuli bonse abantu abo umulimo ukapumfyanya (PAPS)
	Abasonkela inganda	Kwasangilwe amayanda ayo basonkela yatatu (3), icilepilibula ukutila abasonkela batatu (3) na bene ba mayanda batatu (3) nabafikapo ukupeelwa ulupiya lwa kusunkelela ulwa kwafwilishako.	Ulupiya lwa kusunkelela ulwa kwafwilishako ulwa myeshi itatu luli no kupeelwa, lweka fye, ku balesonkela na bene ba nganda (pa cipimo ico balesonkelelako), apo cilingile. Ulupiya lwa basonkela, ukusanshako ulwa kusunga pa mweshi, lulefika kuli K5,800 elyo ulwa bene ba mayanda lule elenganishiwa pali K4,350.

¹⁴ Pa kwafwako ukupanga ubutantiko bwa mibomfeshe ya lupiya, catunganishiwe ukutila Abantu abo uyu umulimo ukapumfyanya (PAPs) bali no kusalapo ukupoka ulupiya lwa cishinka mukofu.

Umusango wa Busanso	Amabumba ya Bantu abo Umulimo Ukapumfyanya	Impendwa ya Bantu abo Umulimo Ukapumfyanya/Ifintu ¹²	Ifishinka Mukofu no Bwafwilisho
Ukukuusha ifikuulwa ifya milimo imbi umuyayaya ne fisolobelo ifishingasela	Umwine wa cikuulwa/icisolobelo (te mulandu ne cipangano icabapo)	Abantu abo uyu umulimo ukapumfyanya (PAPs) 139 bali no kuluusapo icikuulwa cimo ica mulimo umbi (pamo nga kichini, icimbusu, na fimbipo). Abengi pali aba Abantu bali no kuluusa ukucila pa cikuulwa cimo ica milimo imbi. Impendwa ya fikuulwa ifya milimo imbi ifili no kubongololwa ni 409.	Ifishinka mukofu ukulingana no mutengo onse uwa kupyankishapo, ni K1,723,354. Ulupiya lwa kupeela abakapumfyanihiwa na balanda (lukapeelwa ku balingile).
Ubuluuse bwa nshila sha Kusangilamo Ubunonshi – Ifikuulwa fya Makwebo			
Ukukuusha ifikuulwa fya makwebo umuyayaya ukupitila mu kubomfya iyo incende nangu ukushimpamo intambo sha Malaiti pa chumfwano	Umwine wa cikuulwa ca makwebo ne mpanga (amapepala yaku buteeko angula aya cintubwingi ¹⁵)	Amakwebo ayali no kupumfyanihiwa yali yasano (5) elyo ifikuulwa fya makwebo fitatu (3) cikafwaikwa ukutula bakafikuushe.	Bakapeela icishinka mukofu ca cikuulwa ca makwebo ukulingana no mutengo onse uwa kupyankishaponi K49,070. Icishinka mukofu ca lupiya baluusa pa myeshi itatu ukutunganishiwa pali K13,500 Ulupiya lwa kupeela abapumfyanihiwa na balanda (abalingile).
	Abasonkela	Takwali uusonkela icikuulwa ca makwebo uwasangilwe ilyo kwali ukupitamo mu ncende umukapita intambo sha malaiti.	Icishinka mukofu ca baluusa baluusa pa myeshi itatu (3), ku bantu cikumine. Ulupiya lwa kupeela abapumfyanihiwa na bashakwata apakuuma ukuboko (Apo cilingile)
	Ababomfi	Kwasangilwe ababomfi bane (4) ababombela pa bukwebo bumo ubuli no kukuushiwa.	Icishinka mukofu ca malipilo ya myeshi itatu (3), ukutunganishiwa mu ndalama K17,844.
Ukupumfyanya ifikuulwa fya makwebo pa nshita iinono pa nshita uyu umulimo ukalabombwa	Abene ba bukwebo	Incende ukukaba ukupumfyanya kwa pa nshita iinono tailaishibikwa pantu ici cashintilila pa mibombele ne fikalamba ifili no kupingulwa pa kwa kubiika ifikuulwa ifikalabomfiwa muli uyu umulimo, pamo nga incende ya kukuulapo umwa kusungila ifisolobelo. Apo cili ifyo, takuli uucita amakwebo nangu umubomfi untu cili no kukuma pa nshita iinono uwasangilwe. Lelo, nga kuli abo cili no kukuma ku ntanshi, ba kapelwa icishinka mukofu no bwafwilisho nga fintu cilondolwelwe mu Icipandwa calenga 4.	Ukupeela icishinka mukofu pa kufilwa ukupanga ulupiya mu nshita bali no kukumwako ku mulimo ukalabombwa. Ulupiya lumbi ulwa-ampanako lwalisanshiwamo mu mapange ya fya mankumanya.
	Ababomfi		Ukupelwa icishinka mukofu pa kulufya amalipilo pa nshita umulimo ulebombwa. Ulupiya lumbi ulwa-ampanako lwalisanshiwamo mu filecitunga.

¹⁵ Amakwebo yonse yaba mu mishi ya bantu iyaba pe samba lya shamfumu, nga fintu cilangililwe pamuulu.

Umusango wa Busanso	Amabumba ya Bantu abo Umulimo Ukapumfyanya	Impendwa ya Bantu abo Umulimo Ukapumfyanya/Ifintu ¹²	Ifishinka Mukofu no Bwafwilisho
Ubuluse bwa nshila sha Kusangilamo Ubuonshi – Impanga ya Bulimi, Ifilimwa, Ifimuti fya bukumu			
Ukupisha intambo sha malaiti mu mpanga ya bulimi pa chumfwano (ukulufya insambu umuyayaya)	Abene ba mpanga abakwata ifipepala fya ku buteeko	Abene ba mpanga ya bulimi iyo bakwatilapo ne fipepala fya ku buteeko iletunganishiwa ukuba amahekita 39.14 cile-enekelwa ukuti bali no kupokwa insambu umuyayaya pa mulandu wa kufwaya ukuibomfya. Kwaba impanga sha bulimi 8 isho abene bakwata ne fipepala fya kubuteeko iya Abantu abo uyu umulimo ukapumfyanya (PAPs) 8 ishili no kufikapo ukupeelwa ifishinka mukofu pa mulandu wa kulufya insambu (ekutila, impanga iyo ilebomfiwa pali ino nshila ku milimo iyo bali no kubalesha ukubombamo nomba line).	Ulupiya lwa cishinka mukofu ulwalingana no kulufya kwa bukumu ukukalengwa ne cibindo ca mibomfeshe ni K346,539.
	Abene ba mpanga ya cintubwingi	Kwaba impanga 252 isha cishawasha isho tule-enekela ukutila abene bali no kushilufya insambu umuyayaya pa mulandu wa kufwaya ukubomfiwa kuli uyu umulimo. Isho impanga sha Abantu abo uyu umulimo ukapumfyanya (PAPs) 251.	Ba ZESCO mu kubombela pamo na bashamfumu (ba TA) bali no kwafwilishako ukusanga impanga imbi iya kupeela abo cili no kukuma ukwabula ukubalipilisha, pa kutila yakabe icishinka mukofu pa kulufya inshila basangilamo imikalile pa mulandu wa kubomfiwa kwa mpanga yabo. Umulimo uli no kulembwa no kulenga umfwane ne fifwaikwa fya ESS5. Nga fintu cilandilwe pamuulu, ukusanga impanga ya kupyanikapo takwapelela fye umukapita intambo sha malaiti.
Ukulufya impanga ya bulimi umuyayaya apo apakekala imilongoti ya kupishako intambo sha malaiti	Umwine wa mpanga nangu uwakwata insambu sha kubomfya iyo impanga (iyakwata ifipepala fya ku buteeko)	Ciletunganishiwa ukutila impanga ya bulimi ukufika ku mahekita 0.98 ili no kusendwa no kubikamo imilongoti ya kupishako intambo sha malaiti. Abene na basonkela bali no kwishibikwa iyo umulimo taulatampa kabili bali no kufikapo ukupeelwa icishinka mukofu icalondololwa mu Icipandwa calenga 4.	Abene ba mpanga abakwata ne fipepala fya kubuteeko bena palipeelwa kale akashinka mukofu pa mpanga yabo yonse apo bakapisha amalaiti pa cumfwano. E ico takwakabe kusanshapa amalipilo na yambi iyo Ulupiya lwa kupeelwa pa kupekanya impanga.
	Umwine wa mpanga nangu uwakwata insambu sha kubomfya ino impanga ukulingana ne funde lya cikaaya		Ulupiya lwa cishinka mukofu ulwa pa mpanga ya bulimi iyo bali no kupoka no kubiikapo imilongoti ya kupishako intambo sha malaiti. Impanga iyo ici cikakuma ili no kwishibikwa no kupima umutengo wa iko iyo incende kabili shikasashiwamo mu Ifyabo Ifyalundwapo palwa Ubutantiko bwa Kukuusha Abantu (RAP) ubwa ndakai. Ukutunganya kwa butantiko bwa mibomfeshe ya lupiya buli mu Icipandwa 8 kabili nabusanshiwa na mu butantiko bwa mibomfeshe ya lupiya ubwa RAP.
	Uwikalapo uushakwata insambu ukulingana ne funde nangu uushili umwine		Kuli no kuba ulupiya lwa kupeela pa kupekanya impanga elyo no bwafwilisho bumbi ubwalundwako pa kutila imikuukile ibe iya mucinshi.

Umusango wa Busanso	Amabumba ya Bantu abo Umulimo Ukapumfyanya	Impendwa ya Bantu abo Umulimo Ukapumfyanya/Ifintu ¹²	Ifishinka Mukofu no Bwafwilisho
	Abasonkela		Ukwafwilisha mu kufwaya impanga ya bulimi iya kupyankishapo. Ulupiya lwa kupeelwa pa kupekanya impanga.
Ukuluusa ifilimwa umuyayaya	Umulimi (te mulandu ne cipangano icabapo)	Ifilimwa ifyaba pa mpanga apakaba imilongoti ya kupishako intambo sha malaiti iletunganishiwa ukuba amahekita 0.66. Pali kano kashita inchende shi ka pakaswa tashilaishibikwa iyo kanshi na beene tabalaishibikwa. Lelo, impanga ishapendelwe sha mahekita 320.6 isha ndupwa ukufika kuli 597. Ifishinka mukofu fikapeelwa fye iyo ifilimwa fyaonaulwa pali ilya nshita yakubomba. Inshila ya kufutilamo yalitantikwa kale.	Ulupiya cishinka mukofu ukulingana no mutengo wa kushitisha pa mushiika, Iwatunganishiwa ukuba K27,136. Icishinka mukofu ca buluuse bwa filimwa mu ncende ya Kasama-Nakonde bwatunganishiwa ukufika kuli K47,087 pa mahekita 1.14. Bali no kupeelwa no lupiya lwa pa kupekanya impanga. Bali no kubapeela fya icishinka mukofu pa filimwa ifili no konaulwa iyo umulimo ukalabombwa. Ukumona umutengo ukwine-kwine kuli no kucitwa na ba DACO. Pa kutunganya imitengo baliceceetele imitengo yaliko pali kalya kashita
Ubuluuse bwa muyayaya ubwa fimuti fya bukumu/ifya fisabo ifibaletela ubunonshi	Umwine wa cimuti (te mulandu ne cipangano icabapo)	Ifimuti fyonse ifya fisabo ifyapendelwe fyali 5,045 elyo ifya bukumu fyali 88, elyo impendwa ya bene bonse (PAPs) yali 238.	Ukupelwa icishinka mukofu ukulingana no mutengo onse uwa kupyankishapo uwa K8,264,840 kuli ba DACO. Ukupelwa icishinka mukofu ukulingana no mutengo onse uwa kupyankapo uwa K158,675 ku ciputulwa icilolesha pa mpanga ica Forestry Department.
Imanda ne Ncende Ishashila Ukulingana ne Ntambi (Imanda ishaibela ne fipe fya ntambi)			
Ukukuusha imanda umuyayaya	Umwine (te mulandu ne cipangano icabapo)	Umuli no kupita intambo sha malaiti tamwaba imanda ne ncende ishaibela nangu ifipe fya ntambi. Mu kukonkanyapo kwa mibombele ya ba ZESCO iya Ukusakamana Ifintu Ifyasangwa ku Mankumanya, limbi kukaba imanda nangu incende ishashila ukulingana ne ntambi bali no Kufisanga mu Kupumikisha iyo umulimo ukalabombwa.	Ukufikuusha ukubomfya abaishibisha ifya kushula mu mushili. Akampani ka ZESCO kakalipila ulupiya lonse ulukafwaikwa kuli uyu mulimo.
Amasanso ku bekala-mushi			
Ukukuusha umuyayaya ifikuulwa fya mu mushi	Umwine wa cikuulwa nangu umushi	Ifikuulwa fya mu mushi ukufika kuli 8 fyaba umuli no kupita intambo sha malaiti.	Icishinka mukofu ukulingana no mutengo onse uwa ukupyankishapo, ni K141,620. Ulupiya lwa kupumfyanishiwa.
Ukulufya umuyayaya impanga ya tubungwe	Akabungwe (amabumba ya mapepo no tubungwe tumbi) utwakwata impanga umuli no kupita intambo sha malaiti	Utubungwe nangu amabumba 10 balikwata impanga mu nshila umwasalwa ukupisha intambo sha malaiti kabili bali no kupokwa iyi impanga. Iyi incende yaba amahekita 26.32.	Mu kubombela pamo na bashamfumu impanga ya bupyani ikasangwa no kupeelwa ku mabumba. Lubali lumbi, akampani ka ZESCO nakabika icipao ca CSI ico icikafwilishako abo bonse abakapumfyanishiwa ku mulandu wa mpanga ne mibomfeshe ya iko

Umusango wa Busanso	Amabumba ya Bantu abo Umulimo Ukupumfyanya	Impendwa ya Bantu abo Umulimo Ukupumfyanya/Ifintu ¹²	Ifishinka Mukofu no Bwafwilisho
Ukukuusha imanda umuyayaya	Imishi	Kuli imanda shitatu ishasangwa mu ncende yasalwa ukupishamo intambo sha malaiti. Limbi kuti kwaba ukushikuusha lelo tacilaishibikwa. Ishi imanda shikwete incende yakula amahekita 1.33. Mu kukonkanyapo kwa mibombele ya ba ZESCO iya Ukusakamana Ifintu Ifyasangwa ku Mankumanya, limbi imanda na shimbi shikasangwa ilyo umulimo ukalabombwa.	Ukukuusha imanda kukacitwa na baishibisha ifya kushula mu mushili. Akampani ka ZESCO kakalipila ulupiya lonse ulukafwaikwa kuli uyu mulimo ukusanshako no kucita ifiila fya cishilano pa kukuusha elyo no kushita ifyakulya ne fya kunwa abali no kusangwako elyo no lupiya lwa kupeelako intungulushi sha cikaaya.
Ukukuusha ififulo fya ntambi ne ncende ishashila umuyayaya	Imishi	Takuli ififulo fya ntambi nangu incende ishashila umuli no kupita intambo sha malaiti. Mu kukonkanyapo kwa mibombele ya ba ZESCO iya Ukusakamana Ifintu Ifyasangwa ku Mankumanya, incende ne fifulo fya musango yo limbi fikasangwa ilyo umulimo ukalabombwa.	Ukufikuusha ukubomfya abaishibisha ifya kushula mu mushili, akampani ka ZESCO kakalipila ulupiya lonse ululefwaikwa kuli uyu mulimo.
ubuluse bwa muyayaya bwa fimuti fya chikaya ifikulu mu panga sha bantu	Imishi	Ilyo kwali ukupenda, ifimuti fya cikaaya 28,930 fyalisangilwe mu mpanga iikuminweko. Ukulingana ne Funde Iya 2015 iliyakuma ifya Mpanga, abene ba mpanga umwaba ifi ifimuti tabafikilepo ukupokelela icishinka mukofu.	Kuli no kuba ubwanshiko bwa kubyala cipya-cipya ifimuti fya cikaaya ifibomfiwa ku kupanga ifintu no kwafwilishako ifilengwa Lesa, ulupiya luletunganishiwa ukupooswapo ni K12,264,348, pa kupyanyakapo ubukumu bwa fimuti fya cikaaya ifyo bali no kutema.
Ubuluse bwamuyayaya ubwa impanga intu bafumyamo ifyakubomfya mu mpanga ikapitamo intambo sha Malaiti pa chumfwano	Imishi	Incende sha filengwa na Lesa 27 isha cishawasha shilabomfiwa ku ba mu mishi ku kusangamo ifintu babomfya cila bushiku pamo nga ukuteeba inkuni, ukutapamo amenshi kabili emo inama shilya umulemfwe. Ishi incende shaba amahekita 124.68. Pali ishi incende paba amateshi 22, impanga, impanga iya cilaalu nangu iya mulemfwe umwaba ifimuti fya cikaaya ifyo aba mu mishi babomfya ili no kusendwa, yakwata amahekita 117.92.	Akampani ka ZESCO nakabika pa mbali ulupiya lwa cishinka mukofu ulwa kupyanyakishapo ifyalinganako. Ico bemininepo kupeela icishinka mukofu imishi pa kubapoka impanga no kubikapo ifibindo pa mibomfesho. Bali no kubapela icishinka mukofu pa fimuti babatemena ukupitila mu bwanshiko bwa kubyala cipya-cipya ifimuti, ubwanganishiwa ukupooswapo ulupiya K12,264,348 (nga fintu tulondolwele pamuulu).
Ichibindo cha muyayaya icha mibomfesho ya mpanga ya chintubwingi umo bakapisha intambo sha Malaiti pa chumfwano	Imishi	Incende umwikele abantu ne Ntungulushi sha Cikaya (ba TA) shikenekelwa ukupeela impanga ya kupyanyakishapo ku beene ba mpanga ukwabula ukulipila. Umukapita intambo sha malaiti mwaba impanga ya mahekita 1,107.51 iya cishawasha.	Akampani ka ZESCO nakabika pa mbali ulupiya lwa cishinka mukofu ulwa kupyanyakishapo ifyalinganako. (moneni Icipande 8.4.2) Ico bemininepo ukupeela aba mu mishi icishinka mukofu pa kubapoka impanga no kubikapo ifibindo pa mibomfesho.

1.2.3 UBUTANTIKO BWA FIPOPE, IMIBOMBELE YA KABUNGWE NA KAMPANI

Ukulingana ne mibombele ya lyonse iyasuminishiwa, kabili ukukonka ne fyalembwa mu mafunde ya calo pa lwa malaiti aya mu mwaka wa (2019) elyo ne fyasuminisha abatungilila ifya mu ciputulwa icilolesha pa maka mu calo ico beta ati ‘Energy Regulation Board’ pa “Cikomo ica Mibombele Iyakuma Incende umupita intambo sha malaiti”, ba ZESCO balapoka insambu sha kupisha intambo sha malaiti pa ncende iyasalwa, ukulingana ne fipope fya lembwa, ukufuma ku bantu abo uyu mulimo ukapumfyanya (PAPs) ukupitila mu kulanshanya no kusuminishanya libe umulimo taulabombwa. Lelo muli uku kusuminishanya, ba ZESCO tabashita mpanga ilya iyo. E kutila abasangwa pa ncende ilya (PAP) balatwalilila ukubomfya ilya mpanga panuma ya kupisha intambo sha malaiti. Ubupusano bubapo bwa mibomfeshe ya mpanga. Ici cipangano pakati ka ba ZESCO na bantu abo uyu umulimo ukapumfyanya cilbika icibindo pa mibomfeshe ya mpanga icitila kuti batwalilila ukulimapo ifilimwa filya ifishilepa ukucila pa mamita yabili (ifyapala amataba, kandolo, umusalu, na fimbipo filya fishikokola ukupya no kusombolwa) Kabili ne nama kuti shatwalilila ukulyamo umulemfwe panuma ya kupwisha imilimo ya kupisha intambo sha malaiti. Ifyaleshiwa kupangamo ifikuulwa (ifyapala amayanda ne misakuta) ne filimwa (ifyapala tuute, imilemu ne miti imbi) iyo iilepa ukucila pa mamita yabili. Ili line ifunde lya calo pa lwa malaiti ilya mu mwaka wa 2019 e lyapeela insambu sha kusesha atemwa ukukuusha abo bonse abasangwa pa ncende isalilwe ukupishapo intambo sha malaiti. Ifunde lilapeela ne nsambu sha kufumyapo fyonse ifikuulwa ne fimuti. Ifunde limo line e lipeela insambu na ba kubebeta imitengo ya fyonse ifingafwaika ukusesha ukupitila mu kupenda no kusanga ulupiya ulwingafwilishako ukubwekeshapo ifyaseshiwa ku ncende imbi.

Ukukuusha kuli no kucitwa ukulingana ne fipope fya mu calo ca Zambia, ubutantiko bwa kukuusha ubwa ba ‘World Bank’ ubwitwa ‘World Bank Environmental and Social Framework (ESF)’, Ubutantiko bwa mu cipani ca buteko icilolesha pa maka (Ministry of Energy, mu kwipifya (MoE) ubwitwa ‘Social Safeguards Framework’ elyo ne mibombele ya suminishiwa iya ba ZESCO iyalembwa mu ‘ZESCO Document No. PP.14630.SPPR.00019’ iyo beta ‘Resettlement and Compensation Action Plan Procedure, Version 2 (16/12/2024)’.

Mukulolesha ifipope fya ba ZESCO na ba World Bank, calisangilwe ukuti imo imibombele yatangikwe tayaleampana iyo. Na mu kwalulula ifi kwali ukupitulukamo no kulembulula ifyo fyonse ifishaleampana pa lwa mikuushishe ya bantu abo uyu mulimo ukapumfyanya. Ubulondoloshi bwa fyatumbwikemo fyonse bwalitantikwa mu cipandwa calenga 4 ica mikuushishe (RAP).

Mu kampani ka ZESCO mwalisontwa ibumba lya babomfi abakutungilila imilimo ya kupisha intambo sha malaiti pakati ka fyalo Zambia na Tanzania (ZTIP). Ili ibumba litwa “ZTIP Project Implementation Unit (PIU), mukwipifya (ZTIP-PIU). Ili bumba lyalisontwa no kupeelwa insambu sha kutungilila ukukuusha abantu no kubombela pa Ubutantiko bwa Kukuusha Abantu (RAP). Ili ibumba balampanako ne ciputulw cimbi ica mu ZESCO icilolesha pa kusakamana kwa filengwa na Lesa icitwa ‘Environmental Sustainability Department’ mukwipifya (ESD). Mu lyashi lya mikuushishe ya bantu, kwalibako amabumba ya bantu no tubungwe ifyaishibikwa ku buteeko ifyakwatamo ulubali. Utu tubungwe musangwa bashamfumu, ubuteeko bwa cikaaya ubwine bwa ncende umulepita amalaiti, Ifiputulwa fya mu Cipani ca Buteko Icilolesha pa Buyantanshi no Bwikashi bwa Bantu, Iciputulwa Icilolesha pa Kukuusha Abantu ica mwi Ofesi lya Nkonkani kuli Kateka (Office of the Vice President), iciputulwa icilolesha pa mpanga ica ‘Forestry Department’, akampani akalolesha pa filengwa na Lesa aka ‘Zambia Environmental Management Agency’ mukwipifya (ZEMA).

1.2.4 INCENDE SHA KUBAKUUSHISHAKO

Pa bantu abo uyu umulimo ukapumfyanya (PAPs) abafikile ku cipendo ca 548, abali 384 balepumfyanihiwa mu nshila ya cibindo ca mibomfeshe ya mpanga ya kwikalapo (abakwata amapeepala ya ku mfumu na bakwata aya ku buteeko). Ukulingana no fyasangile ababombele imilimo yaibela iya kubebeta imitengo ya fipe kunuma, abantu abo uyu mulimo

ukapumfyanya (PAPs) ukufika na ku cipendo ca 164 balefwaika ukukuushiwa no kuselela kunse ya ncende yasalwa ukupishamo intambo sha malaiti. Iyi ni nshila ya kucincintila ubusanso bwa malaiti. Pali aba abali 164, casangilwe ukuti abengi tabalefwaika ukuselela ukutali pa kukuula ifipya pantu incende ilesunako ba ZESCO inono kabili bacili nabakwata impanga apo bengakuulilamu ncende yabo eyo bapeelwa. Lelo kuliko abali 30 abo casangilwe ukuti tabakwete impanga iyalinga ukukuulilapo mu mpanga yabo eyo bapeelwa pa mulandu wa kuti limbi impanga tayawama (limbi paliba amabwe, amatenga, ifilindi nangu limbi tapalinga ukukuulapo icikuulwa), e ico bafwile bafwaya impanga imbi apo bengakuulila¹⁶. Mu mafuto yabo aya cishinka mukofu, balibebetele ukusalapo nga bafwaya kuti basenda ulupiya elyo bayashita impanga kumbi nangula akampani ka ZESCO kabakuulila pa ncende imbi iyo batemwa abene. Nga basalapo icishinka mukofu ica lupiya, kukaba ukubebetele umutengo wa iyo impanga yonse pa mutengo onse uwa kupyanikapo pali kalya kene akashita elyo na uyu umulimo ufwile ukubombwa na ba kubebetele abaibela kabili abaishibikwa ku buteeko. Panuma ya kubomba umulimo uyu, bafwile bayalunda iyashi lyonse mulyashi lyatantikwa ilya butantiko bwa Kukuusha Abantu (RAP). Kulubali lumbi, nga basalapo icishinka mukofu ca kubakuulila pancende batemenwe, ba ZESCO, bakabombela pamo ne ntungulushi sha mumishi (bashamfumu) atemwa Intungulushi sha Cikaaya (ba TA) pa kusanga impanga ya kupyanikapo iisuma kabili iyalingana ubukulu nga ilya baluushile. Ukusanga impanga ya kupyanikapo tekutula kufwile fye ukuba mu mbali ya nshila yasalwa ukupishamo intambo pantu abantu baikalako banono lelo kuti kwaba konse ukwingalinga. Uko cilemoneka ati kuli no kuba ukubulisha kwa mpanga ni ku ncende iyalolenkana ne Fitesheni fya Malaiti yakalamba (substations), maka-maka icitesheni ca ku Kasama (New Kasama Substation).

Ikaba ni ncito ya ba ZESCO ukushininkisha ukutula Abantu abo uyu Umulimo Ukapumfyanya (PAPs) basanga impanga apakukuula umwa kwikala ukubomfya ulupiya lwa cishinka mukofu ulo bapeelwe nangu bapeelwa impanga ya cishawasha imbi kuli Bashamfumu. Ifi fyalilembwa mu fifwaikwa mu Icipande 15. Ba ZESCO bali no kuyaceceeta no kushininkisha ukutula abantu abo uyu umulimo wapumfyenye nabasekelamo muli iyo impanga bapeelwe, ili iyayanguka ukufikako, yalikhwata umushili uusuma, kabili ilingene fye ubukulu ne mpanga iyo baluushile.

Nangu cakutula tabalekabila ukwimya lulu ya kufwaya incende ukwa kukuushisha abantu, ba ZESCO bafwile ukubombela pamo ne Ntungulushi sha mumishi mu kupeela impanga kuli abo bonse abapumfyanihiwe abasalilepo amafuto yabo mu nshila ya cishinka mukofu ica kubakuulila pambi. Ukulunda pali ico, ba ZESCO bale-enekelwa ukusopa imilimo ya makuule yonse ukwatampila fye ku kushila amayanda ukufika fye na ku kufwaya akampani ka kukuula pakutula kukabe ukukuula amayanda ya kupyanikapo ayalinga ukupeela Abantu abo uyu umulimo ukapumfyanya (PAPs) nga basalapo icishinka mukofu icalingana na cintu baluushile.

1.2.5 UKUTONTONKANYA PA NSHILA SHIMBI ISHA KUPISHAMO INTAMBO SHA MALAITI

Ukufuma mu mwaka wa 2013, ba ZESCO balyesha ukutontonkanyapo pa nshila shimbi isho bengapishamo intambo sha malaiti muli uyu mulimo baimya lelo casangwa ukuti iyi yine basala e nshila iyayana na mu kwafwilishako na mukefyo ukonaula kwa filengwa na Lesa elyo no kupumfyanya kwa bantu.

¹⁶ Mu kupima abafikilepo ukupokelela icishinka mukofu, pa kubala takwali ukusanshako impanga iyaba pe samba lya shamfumu. Lelo, kwali ukusanshako pakutula balya Abantu abo uyu umulimo wapumfyanya (PAPs) abakwata impanga iyaba pe samba lya bashamfumu mu incende ya mu mbali ya ntambo sha malaiti lelo ne ncende iikulu iyashala apo bengakuula cipya-cipya ifikuulwa fyabo ifyo babebetele ku ubebetele ukumona umutengo wa fintu uwaibela. Ifyebo fya Abantu abo uyu umulimo wapumfyanya (PAPs) 30 fyafikile fye kuli ba ZESCO ninshi ukubebetele kwa mutengo wa fintu kwalicitwa kale, kanshi eco bakusanshishamo muli kano akasebo. Ba ZESCO bali no kushininkisha ubukulu bwa iyi impanga ya Abantu abo uyu umulimo wapumfyanya (PAPs) ku kutampa kwa 2026.

Mu kusala kwabo muli ukupalamika intambo shipya isha ZTIP ku mbali ya shilya ishabako kale elyo mumbi namo balebomfya impanga bapekenye ukupishamo intambo shimbi kale. Muli uyu musango cilesangwa ukuti bacefyako ukupumfyanya umwikala inama sha mpanga ne fyuni ne fya mweo fimbi. Mu cipande ca Pensulo-Kasama icalepa intamfu ya makilomita 386, intambo shipya isha ZTIP shilepakana no kukonkana ne sha kale pa makilomita 294.4. Uku kupalamina kwa ntambo sha kale ne shipya kukalenga ukucefyako impanga ikasendwa ukupishamo intambo shipya ukufuma pa mamita 50 no kubwela ku mamita 35 pa ntamfu ilepele amakilomita 193.8, ico icilelunda pa kucefya aba kupumfyanya nangula umwa kubika ifibindo. Mu fifulo fimbi namo, intambo ishisenda amalaiti aya maka ya cipimo ca 66kV shilebela pakati ka ntambo sha malaiti shipya isha mulimo wa ZTIP ne ntambo sha malaiti ishabapo kale ishisenda amalaiti ya maka ya cipimo ca 330kV. E kweba ati muli ishi ncende impanga ya mamita 35 inono kanshi na pa kukumanisha ififwaika balebomfya icipendo ca mamita 50.

1.2.6 UKUPEKANYA KWA MIKUUKILE

Uyu Umulimo wa kupisha intambo sha malaiti ukalenga abo bonse abaikala mu ncende iyasalwa ukupishamo intambo shipya bakaselele mu ncende shimbi. Elyo kabili cilemoneka kwati aba bantu tabakaselele ukutali iyo pantu bacili nabakwata impanga mu ncende bapeelwa ishili kunse ya mulya umwasalwa ukupisha intambo sha malaiti. Bonse abakapumfyanishiwa bakapeelwa ishuko lya kusala ichishinka mukofu balefwaya. No ku ukusala kule-enekelwa ukuba pakati ka kupoka ulupiya nge cishinka mukofu nangula ukubakuulila/ukubwekeshapo ifipe fyabo. Lelo ukusambililako ku fyacitike kunuma ilyo umulimo uwapalanako na uyu wabombelwe, uwakumine ku kusesha abantu casangilwe ukuti tabakuukile ukutali panuma ya kupoka ulupiya lwa cishinka mukofu. Na muli uyu umulimo cile-enekelwa ukuti abengi bakasalapo ukupoka ulupiya pakuti bakaikuulile amayanda ukucila ukubakuulila. Nangula cingaba ifyo, akampani ka ZESCO kaliminina pa kweba fye ati abasala ukubakuulila kakakonka ifyo fine. Ukufika lelo, pali bonse abo baishibisha ifyo basangile panuma ya kubebeta imitengo ya fipe fyabo, bamo fye e bakeene ukusenda ulupiya nokusala ukubakuulila amayanda yakafwaika. Ilyo lyonse ilyo abantu basala ukuikulila amayanda yabo ukubomfya ulupiya lwa cishinka mukofu, akampani ka ZESCO kakalasa imilimo ya makuule no kushinkisha ukuti amayanda bakuula nayalingana ne cipendo elyo na bo bakuulila nabasekelamo pa bukulu no busuma. Kuli abo bonse abakapoka ulupiya lwa cishinka mukofu, bakababikilapo nsonse (iya cipendo ca 10% mutengo wasangilwe panuma ya kubebeta imitengo) pamulandu wa kubapumfyanya. Iyi nsonse ikabaafwako ukukuukila ku ncende ipya. Mu kusanshapo, kukaba ukubapeela icishinka mukofu pa filimwa ifikonaulwa pa nshita ya kusela.

Bali no kupeelwa icishinka mukofu pa makwebo ayakapumfyanishiwa ulusangu ulwa kucingilisha ubuluuse bwa lupiya baali no kupanga cila mweshi ukufika fye na pa myeshi itatu. Ukusala kwa bamakwebo abakapumfyanishiwa kukaba ukumona abo amakwebo yaleiminina ku mulandu wa kukuuka ukufuma pantu balebombela ukuya pambi. Nga kuli ababomfi abo iyi imikuukile ikapumfyanya amalipilo ya pa mweshi, nabo beene bakafutwa ukushinta fye na pa myeshi itatu.

1.2.7 IMIKALILE YA BANTU NO BWAFWILISHO BWA KULUNDAPO

Ukulingana ne Funde lya mu 2015 ilyakuma ifya Mpanga, ifimuti fya cikaaya ifi-imenena fye fyaba mu minwe ya buteeko. Nangu fingamena pa mpanga ya bantu takuli nangu umo uwingema no kusosa ati fyakwe, lelo balipeelwa insambu shakubomfya munshila ishasuminishiwa mubwikashi bwabo. Ku mulandu wa ico, ukutema nangula ukusesha imiti pakuti umulimo wa kupisha intambo sha malaiti ubombwe kulalufyanyako imikalile ya bekala mishi kabili cintu ico akampani kaasumina. Pa mulandu wakutila tapali mwine, amafuto yakapeelwa kubekala mishi capamo ukupitila mukubyala imiti imbi mu ncende iyasalwa mu mushi uli mupepi. Uyu mulimo ukabombwa na ba ZESCO mu kwampana ne ciputulwa ca buteko icilolesha pa Buyantanshi bwa Fitente (Community Development) kabili ukashininkisha ukutila basalamo abekala mushi no kubakaansha pa lwa kusopa ifimuti pakuti fyakula bwino. Uku kukanshiwa nga abasambi bafula, bakababika mu tubungwe pakuti bonse

bakwata ishuko lya kusambilila. Kukaba ukupekanya ukwaibela pe samba lya Ubutantiko bwa Kukuusha Abantu (RAP) ubwa kubukulula imikalile iyakuma ku fimuti fya cikaaya (moneni Icipande 8.4.3). Imilimo ikabombwa ikasanshapo fye ukubombela capamo na bekala mishi mukwishiba no kusanga impanga sha kubyalamo ifimuti, ukwishiba imitundu ya fimuti elyo no kufisopa no kusakamana imikulile yafiko mpaka fyakula kabili bonse balemwenamo ukwabula umucisha cinani nangu ubufufuntungu.

Abantu abengi abakapumfyanishiwa tabakaselele ukutali kabili ne mpanga shine bakalabomfya, lelo kuli bamo cikapusanako. Icakumwenako ca ifi casangilwe panuma ya kuceceeta icipande ca Kasama-Nakonde uko casangilwe ukuti abantu bamo basalile ukuselela ukutali mu kuitemenwa mukufwailisha impanga ukwabako ubuyantanshi. Kukaba ukulolekeshapo pali ici kabili uko bashininkisha ukutila ubwikashi nabupumfyanishiwa ku mulandu wa kucepelwa ifimuti, ubwafwilisho bwa kusanshapo bukapeelwa ukupitila muli bashamfumu abo abakafwilishako mu kusanga apakubyala imiti imbi elyo no kupekanya kwa fyonse ifikafwaikwa. Abo bonse abakasanga ukutila bekele apo umushili tawawama ku bulimi pa mulandu wakutila palepita fimashini fikalamba ifibomba mu makuule bakapeelwa ubwafwilisho bwa kupakamisha ulya mushili pakuti bakatampe ubulimi bwabo panuma yakupwisha imilimo wa kupisha intambo sha malaiti. Imilandu iyapala kukaba ukuibebeta umo na umo libe ubwafwilisho tabulasuminishiwa.

Ba ZESCO bali no kupanga icipao ica Ulupiya lwa Kwafwilishako Abekashi (CSI) icilefika fye na pali 1% iya lupiya lonse ulukaya pali uyu Umulimo (moneni Ifyalundwako 8-6). Ulu ulupiya luli no kwakanishiwa mu fitente fyonse umo mwasalwa ukupisha intambo sha malaiti mu fitungu fyonse ukulingana no kufula kwa bantu abapumfyanishiwe elyo no bukulu bwa mpanga iyapokelwe. Umulandu babikileko ici cipao balelolesha pa buluuse bwa mpanga ya cintubwingi. Imibomfesho ya cipao ici ikaba mu kubombela pamo ne Ciputulwa ca Buteeko Icilolesha pa Buyantanshi bwa Fitente.

Abantu bakakuushiwa, ukubikilako fye na banamayo, bakapeelwa ishuko lya kubalilapo ukwingila incito ilyo umulimo wa kubiika intambo sha malaiti ukatampa. Fimo ifya kupakamisha abekala mishi fintu pamo nga imiti bakatema fikapeelwa ku bantu abapumfyanishiwa pakuti babomfyako ukushitisha, ukoocako amalasha nangula ukubomfya pa nganda. Na mu kulundapo, icipope cimo ico babika mu mibombele ya babomfi bakalamba (lead contractors) cakweba ati ifintu fya kubomfya mu milimo yabo fintu ifisangwa mu ncende sha mu mishi balebombela (ifyapala umucanga, sementi ne fyakulya) fifwile ukushitwa mulya mwine pamo nge nshila ya kupakamisha abekala mishi.

1.2.8 IFYO UKUKUUKA KULI NO KUKUMA IFILENGWA NA LESA NE MIKALILE YA BANTU

Nga mulya caishibikilwa, ukukuuka kulaleta amasanso na mafya ayengi ku balekuuka elyo na ku Mulimo ulebombwa. Amafya ayakalamba ayalesangwa mu mulimo wa ZTIP ayalandilwepo muli ubu Ubutantiko bwa Kukuusha Abantu (RAP) ni aya:

- Ubwafya bwa kukanaishiba bwino imilimo ya ba ZESCO no mulimo wa ZTIP mu fiputulwa fimo-fimo.
- Ubwafya bwakutila abantu abo uyu umulimo ukapumfyanya (PAP) abashakwata apakuuma ukuboko bali no kusalapo ukupoka ulupiya nge cishinka mukofu pa ng'anda iyo bakaluusa elyo panuma bakafilwe ukubweshapo ifipe bakwete no bwikashi bakwete.
- Ubwafya bwakutila Intungulushi sha mu mishi tabakwete amaka, nangu tabapooseleko amano ya kumona ukuti bonse abapumfyanishiwe bakwata apakwikala elyo na pa kulima
- Ubwafya bwa bashitata ukubutuka no lupiya nangula ukonaula ulupiya lwa cishinka mukofu ukwabula ukufikilisha ifilefwaika.

- Ubwafya bwa ndupwa ukupusana pa lupiya lwa cishinka mukofu maka-maka nga fya cishilano nangu ifya kupyana fintu bashabombele.
- Ubwafya bwa kukokosha ukuputula imilandu ya kuilishanya no kubikapo icumfwanu.
- Ubwafya bwa kusanga impanga sha cintubwingi muntu balesanga ubwikashi.

Inshila ya kucefeshamo aya amafya na masanso ilesangwa mu kulanshanya no kwishibisha abekala mishi pa filecitika, ukupanga inshila ya kufishamo ukuilishanya kwa bekala mishi (iyo beta GRM) ku bakumine ku mibombele ya Milimo elyo no kupanga icipao ca CSI Fund icili no kwafwilishako ukufuta no kubwekeshapo impanga sha cintubwingi.

Ukulanshanya na banamayo mu tubungwe twabo elyo no kulanshanya na beklamishi mu bwingi bwabo uko kwacitike kunuma kwalyafwileko ukutantika amafya na masanso yakumine ku lyashi lya mikuukile. Nampo nga fikacitika nangula iyo, ba ZESCO bali no mulimo wa kulolekeshapo elyo no kulangulukapo bwino bwino pa kusopa iyi milandu, sana-sana pa nshita ya kupeela icishinka mukofu elyo na lyonse lintu kwaba ukulanshanya na bekala mushi.

1.2.9 UKULANSHANYA KWA CINTUBWINGI

Ukulanshanya kwa cintubwingi kwacitike pa nshita ishalekanalekana ukutula panshita uyu mulimo watampile kabili kwaliba ukwasuntinkana ku fipope ifyalembwa ifyapusanapusana pamo fye nga palwa filengwa na Lesa ne mikalile ya bantu ilya beta ‘Environmental and Social Impact Assessment’ (mukwipifya ESIA), ifya mu mapange ya kucingilila ifilengwa na Lesa ne mikalile ya bantu iyo beta ‘Environmental and Social Management Plan’ (mukwipifya ESMP) elyo ne mibombele ya mu Ubutantiko bwa Kukuusha Abantu (RAP) (moneni Icipande 2.1.3 umuli ifyo ubutantiko bwa RAP bwaenda). Ukulanshanya kwa cintubwingi ukwacitike mu mwaka wa 2013 na 2017 kwakumine ku lyashi lya ESIA na RAP. Mu mwaka wa 2019, na kabili kwali ukulanshanya kwa cintubwingi ukwacitike uko kwayafwile ukulembulula amapepala ya ESIA na RAP ukusanshamo fimbi. Mu mwaka wa 2024, na kabili kwali ukulanshanya kwa cintubwingi ukwayafwile ukupituluka mu mapepala ya ESIA na RAP ayalebomfiwa pali ndakai.

Ukulanshanya kwa cintubwingi ukwalenga 8 ukwa kuumfwa, ukwishibisha no kusambilishanya na bekala mishi kwachitike mu mwaka wa 2024 ukutampa mu mweshi wa August ukufika fye na mu mweshi wa September. Uku kulanshanya kwaloleshe sana-sana pali balya bonse abaikala mu ncende yasalwa ukupishamo intambo sha malaiti. Amalyashi yalandilwepo yakumine ku kwishibisha abantu ilyashi lya misalile ya abo abalingile ukupoka icishinka mukofu, ukwishiba amafya beleshingwana nayo, ifyo bale-enekela ukutila fili no kutumbuka Mulimo uleisa ku ncende shabo elyo na pa lwa mikalile kuli abo abakapumfyanishiwa. Muli uyu mulimo amabumba ya bantu yakumene yafikile ku cipendo ca 56, umu umwali ifitente ukufika pa cipendo cha 92 elyo na ba kupenda umu-umo abalefika ku cipendo ca 2,485. Muli uku ukulanshanya mwalesangwa ba mwine mushi na ba filolo elyo nabalefuma mu mishi ya mupepi.

Ukulanshanya na banamayo kwalecitika panuma ya kulanshanya kwa cintubwingi pakuti bapeelako banamayo inshita yakulanshanya mu mutima nteeka ukwabula insoni no mwendo wa bashitaata no kubapeela incende ne nshita ya kufumya amasakamika na maafya bashingwana nayo mubwikashi bwabo pamo nga banamayo. Utu tubungwe twa kulanshanya na banamayo twafikile na ku cipendo ca 54 elyo mukupenda umu umu banamayo basangilweko bafikile impendwa ya 1,101.

1.2.10 UBUTANTIKO BWA MIKUUSHISHE

Ubutantiko bwa mikuushishe bulesangwa mu Cipandwa 12. Bulelanga ifiputulwa umo fyakonkanine, ubupekanyo bwa kufikilisha imilimo ya mikuushie elyo no kutunganya inshita cingasenda pakuti imilimo yonse ikapwishishiwe. Ukulingana ne nshila yatantikwa iya mibombele iya ba ZESCO, cale-enekelwa ukuti abo bonse abakapumfyanishiwa kuti bapoka amafuto yabo aya cishinka mukofu ukwabula ukupitilila pa myeshi 6 ukutula pa nshita babeshibishishepo ifipendo fya cishinka mukofu. Nangu line cilesamgwa ukuti imilimo ya ZTIP ipekanishiwe mu fiputusha 5, ilyashi lya mikuushishe lyena lipekanishiwe ukubombwa mu mupwilapo ukutula pa Pensulo mpaka fye na ku Nakonde ukwabula ukulolela ilyo ba World Bank bakasuminisha ukweba ati ilyashi lya mikuushishe litwalilile. Ilyashi lya kukuusha abantu lifwile lyapwa konse ukulingana ne fyalembwa mu cipope ca ESS5 libe na bantu tabalalekako impanga shabo nga muntu balanshanishanya na ba ZESCO.

Calembwa ukutula panuma ya kupita kwa myeshi 6 ukutula pantu baishibishishe abantu ifipendo fya mafuto yabo, umulimo wa kumona ifyo imilimo ile-enda (Monitoring) ne Milimo ya kubebeta (Evaluation) ya mibombele ifwile yalacitika pa myeshi itatu mpaka fye na mu mwaka wa cibili elyo ukuceceeta kwa kupwikilisha kukacitwa. Nga filya calangililwa mu butantiko bwa mikuushishe ya bantu elyo na mu kusuminishanya kwa mibombele isuma iibomfya ne fyalo ifingi, imilimo ya kupisha intambo sha malaiti ishitya ifwile fye ukutampa ilyo umulimo wa kufuta abantu bonse abapumfyanishiwa wapwililila.

1.2.11 ULUPIYA LUKAPOOSWA NO BUTANTIKO BWA MIBOMFESHE

Nga fintu cilangililwe mu Umukululo 1-4, ulupiya lule-enekelwa ukuposwa pa mafuto ya cishinka mukofu, ubwafwilisho elyo no kupwishishisha imilimo yonse iikumine ku mikuushishe ya bantu lulefika ku cipendo ca K44,322,766 (amadola ya ku America US\$1,881,250). Muli ici cipendo mulesansha icishinka mukofu ca fikuulwa ifili no kubongololwa (amayanda ya bantu, ifikuulwa fya tubungwe na ba mapepo elyo ne fyapala ututeeba twa mbale, utumbusu, umwa kwipikila, na fimbipo), amafuto ya nsonse pa kupumfyanishiwa pa fikuulwa no mushili wakwata amapepala ya ku buteeko elyo no bwafwilisho ku bashakwata apakuuma ukuboko pamo nga abakote, abalemana, na banamayo ababula abena myabo lelo balikwata abakusunga abengi, (moneni Icipande 8.2.2), amafuto ya bakwete ifimuti fya fisabo ne fya kubaletela ubunonshi, amafuto ya mushili wakwikalapo, amafuto ya mpanga sha cintubwingi elyo na umushili ulesangwa mwisamba lya milongoti ya kupishako intambo sha malaiti ukusanshako fye no lupiya lwa kwafwilishako ukupakamisha impanga shakankanshiwa ku mulandu wa Mulimo ya kupisha amalaiti, ukupitila mu kubyala ifimuti fimbi. Ici cipendo nacingishamo ifipendwa fyangilwe kuli balya babombele imilimo ya kubebeta abaibela aba fipe fya bantu (Assets), aba ku miputule ya bulimi aba mufitungu fyalekanalekana (DACO) abo babebetele imitengo ya fimuti fya fisabo, elyo na ba ku ciputulwa icilolesha pa fimuti (Forestry Department) Icipao ca kwafwilishako abekala mishi ica CSI naci-ikwatila intantiko imbi iyo ilefika ku cipendo ca K65,408,355 (Amadola ya ku America US\$2,850,000). Ici cilelunda pa luli no kubomfiwa mu Ubutantiko bwa Kukuusha Abantu (RAP).

Umukululo 1-4 Ukusupawila Ubutantiko bwa Kubomfya Ulupiya mu Butantiko bwa RAP

Icilelandwapo	Umutengo (muli Kwacha)	Umutengo (mu ma Dollar ya ku America)	Amapesenti ya Butantiko bwa Kubomfya Ulupiya Konse
Icipendo ca 1 Dollar Kuli Kwacha ¹⁷	22.9503	1	-
Icishinka Mukofu	17,523,611	763,546	39.5
Icishinka mukofu pa mpanga iya mapepala ya buteko	1,299,709	56,631	2.9
Icishinka mukofu pa mpanga iya mapepala ya ba bashamfumu iishikwete incende iya kukuulapo ifikuulwa ifyangolwelwe	425,367	18,534	1.0
Icishinka mukofu pa mpanga iyaba pe samba lya milongoti ya kupishako intambo sha malaiti	18,533	808	Yanono sana
Icishinka mukofu pa fimuti fya fisabo	8,264,840	360,119	18.6
Icishinka mukofu pa fimuti ifibaletela ubunonshi	158,675	6,914	0.4
Icishinka mukofu pa mayanda	5,244,752	228,527	11.8
Icishinka mukofu pa fikuulwa ifya mulimo umbi elyo ne fisolobelo ifishingasela	1,723,354	75,091	3.9
Icishinka mukofu pa fikuulwa fya makwebo	49,070	2,138	0.1
Icishinka mukofu pa kuluusa ulupiya lwa mu makwebo	13,500	588	Yanono sana
Icishinka mukofu pa malipilo ya babomfi pa mulandu wa kupumfyanya amakwebo	17,844	778	Yanono sana
Icishinka mukofu pa fipe fya cintubwingi	165,620	7,216	0.4
Icishinka mukofu ca mpanga iili pe samba lya milongoti ya kupishako intambo sha malaiti mu mpanga sha mapepala ya ku mfumu mu fitungu fya Kasama-Nakonde	115,211	5,020	0.3
Ubwafwilisho na Bumbi	3,421,932	149,102	7.7
Ulupiya lwa Kupumfyanishiwa	831,688	36,239	1.9
Ulupiya lwa balanda	335,400	14,614	0.8
Ubwanshiko bwa kwafwa ukuwanya impanga basangapo ubwikashi	962,765	41,950	2.2
Ubwafwilisho bwa kubafwa mu myendele pa kukuuka	1,257,676	54,800	2.8
Ulupiya lwa kusonkela pa nshita ya kupembela ku basonkela	5,800	253	Yanono sana
Ulupiya lwa kusonkesha ulwa bene ba cikuulwa	4,350	190	Yanono sana
Ulupiya lwa kupeelwa pa kupekanya impanga	24,252	1,057	0.1
Ulupiya Lonse ulwa Icishinka mukofu mu Butantiko bwa RAP no Bwafwilisho na Bumbi	20,945,543	912,648	47.3
Ulupiya lwa fintu fishitantikwe (15%)	3,141,831	136,897	7.1
Ubwanshiko bwa kubyala ifimuti cipya-cipya mu kwafwilishako ukubwasha impanga musangwa ubwikashi	12,264,348	534,387	27.7
Ulupiya lwa mikuukile ya bantu	5,330,882	232,279	12.0
Ukubebeta kwa kulekelesha pa kufikilisha umulimo wa mikuukile (RAP)	1,492,647	65,038	3.4
Inshila ya kutungililamo inshila yakufishishamo ukuilishanya elyo na masakamika (GRM)	1,147,515	50,000	2.6
Ulupiya Lonse mu Butantiko bwa Mikuukile ya Bantu (RAP)	44,322,766	1,881,250	100.0
Ichipao cha CSI	65,408,355	2,850,000	-

¹⁷ Icipendo ca dollar kuli Kwacha ni 1 dollar kuli K22.9503 ica pa 5 December, 2025.

1.2.12 INSHILA YA KUFISHISHAMO AMASAKAMIKO YA BEKALAMISHI

Inshila ya kufishishamo amasakamika no kuilishanya kwa bekala mishi uko kwitwa ‘Grievance Redress Mechanism’ mukwipifya GRM, ilelolesha pa mbali shonse shibili, iya kupekanya amakuule ya ntambo sha malaiti (pa ntanshi ya kukuusha na lintu kukaba ukukuusha abantu) elyo ne nshita ya makuule ya ntambo sha malaiti mpaka fye na kukupwisha. Iyi nshila ikalatungililwa na babomfi ba ZESCO aba mwi bumba lya ZTIP-PIU. Muli ili ibumba mwaliba umubomfi asontwa ukulabakilila imibombele ya iyi nshila abantu abacenjela sana mu mibombele abakalasangwa mu fitente fya bantu abo abetwa ama ‘Local Focal Point Persons’ mukwipifya LFPP abo tuleita ati e menso ya ba ZESCO mu bekala mishi. Aba e bantu ba ntanshi ebo bonse bakalatuulila amalyashi ya masakamika na ya kuilishanya elyo bena bafisha ku babomfi ba ZESCO. Amalyashi bakalabomba nayo yatampila fye pa lwa kukuushiwa kwa bantu elyo na yonse ayakumine ku Milimo ya ZTIP.

Inshila ya kupokelela amalyashi ya masakamika elyo no kuilishanya, no kulemba mu fitabo fintu bapeelwa kwalembwa mu Icipandwa 14. Calitwalililapo fye no kutantika inshila ya kusalilamo aba bantu betwa ama LFPP elyo pamo no kubasambilisha ifya kusenda amalyashi busaka-busaka. Lelo amalyashi ayakumine ku Lukakaala Pakati ka Banamayo na Bashitata (GBV)’ yena yakalatungililwa na umo uwa mwi bumba lya ZTIP-PIU uwitwa ‘GBV Specialist’. Uyu muntu e wasontwa ukukankabula amalyashi yonse ayakumine ku Lukakaala Pakati ka Banamayo na Bashitata nga filya fine catantikwa mu GRM. Intantiko shimbi shalembe mu kushika mu bulondoloshi bwa ‘ESMP’ elyo na mu ‘ZTIP GBV/SEAH Action Plan.

1.2.13 UKULOLESHA MU MIBOMBELE, UKUBEBETA ELYO NO KUSOPA KWA MILIMO MU NSHILA YASALWA

Umulandu uukalamba Uwalenga kube ukulalolesha mu Milimo fintu ile-enda wa kulacinkula munshita iyalinga basolwesolwe mu kutungilila Umulimo wa kupanga kwa ntambo sha malaiti abetwa ba ‘Project Manager (PM)’, ukucinkulako aba ku cipao citungilila amakuule (Funders) elyo na bantu bene abapumfyanishiwa. Ilyashi lisangwa mu kulolekesha mu Milimo fintu ileyenda lilafwilishako ukwishiba imilimo ya mikuukile ya bantu nga ile-enda bwino nge fyo ifwile ukuba, na masanso yalesangwa nga yalesendwa munshila yasuminishiwa pakuti ifipope fya mikuushishe fifikilishiwe bwino bwino. Panuma ya ifyo ilafwa no kusanga inshila ya kwalulako nangu inshila ya kulungikilamo ifishili bwino pa nshita yonse fyafwaikwa.

Panuma ya bantu ukupoka amafuto yabo no kusumina ati balipoka, imilimo ya kulolesha mufyo umulimo wa kukuusha abantu waendele ufwile watampa mu nshita iishipitilile pa myeshi 6. Uyu mulimo ufwile watwalililapo pa nshita iyalinga mu kushinkisha ati abantu bekele fye bwino mu bwikashi bwabo ubupya nabakwata ne nshila sha kukwatilamo ubunonshi. Cila myeshi itatu, ababomfi ba ZESCO bakalaimya lulu ya kuceceeta ifyo abantu bekele no kwishibisha abakwangalila. Iyi nshila ikalaba fye mu kupatankanya no kukonka ifilangililo fyalembwa mu Icipandwa 15. Caliba cipope ukutila kufwile kwabako abeminishi ba bantu bapumfyanishiwa mu kusopa iyi Milimo. Apo ponse casangwa ukuti kuli ifishiweme, ababomfi ba ZESCO ukubombela fye pamo na ba ‘Contractor’ bali mu ncende bafwile ukulungika ifilubene.

Pa kwishiba nga cakuti umulimo wa mikuushishe ya bantu walibombeke fye bwino kukaba ukubebeta ukukacitika pa kulekelesha. Uku kubebeta takufwile kwacila imyaka ibili ukufuma pantu abantu basuminine ukweba ati balipoka icishinka mukofu. Mu myaka ibili abantu bale-enekelwa ukupwisha imilimo yabo yonse iya makuule. E mukutila uku kubebeta kukalalolesha pa fintu mu mupwilapo, ukupima fintu imikuushishe yafikilishiwe mukupitila mu kulanshanyapo na bantu baseshiwe elyo nabo abalandilako icintubwingi pa malyashi ya mikalile ya bantu. Uyu mulimo na kabili ukalolesha pa kupituluka mu inshila ya kuloleseha mu Milimo ilebombwa.

Ubutantiko bwa Kukuusha Abantu (RAP) tabwayanguka kabili kuti bwakabila ukwalulwa libili-libili. Ifintu ifyakonkapo kuti fyakabila ukutila kwaba ukwalulako imibombele ya ubu ubutantiko ukulingana no kutunganya kwa nsebo ya ubu Ubutantiko bwa Kukuusha Abantu (RAP):

- Ifitumbuka mu ku lanshanya na bantu baseshiwe ilyo umulimo ucili ulebombwa filafwilishako ukusanga inshila shimo ishingafwa ukuwamya imibombele ya kuntanshi.
- ifitumbuka mukufikilisha inshila ya kufishishamo amasakamika no kuilishanya kwa bantu kulafwilisha ukulembulula ifyakitike umupwilapo.
- Imibele ya nkambi sha babomfi, imisebo, na fyonse ifikuulwa fimbi ifyo teti kube ukupanga umusango wa kufipangilamo pali ino nshita kabili fikakabilwa ukwalulwa ukukonka no Ubutantiko bwa Kukuusha Abantu (RAP) pantu abantu abo cikumine limbi kuti balundwako ku mutande wa bantu abo umulimo ukapumfyanya (PAPs).
- Ifikafumamo mu kuceceeta no kulengulula.

2 INTRODUCTION

This Resettlement Action Plan (RAP) concerns an electricity transmission line project called the Zambia-Tanzania Interconnector Project (ZTIP). This RAP primarily covers the Pensulo-Kasama portion of the ZTIP. The already compensated Kasama to Nakonde line is also considered but in an approach that differs from a normative resettlement planning approach. Each is discussed further in sections that follow.

Under the laws of Zambia, and as per the World Bank Environmental and Social Framework (ESF), the Project requires the completion of an Environmental Social Impact Assessment (ESIA) accompanied by a Resettlement Action Plan. This Resettlement Action Plan is an instrument that presents ZESCO commitments for ensuring that resettlement of people is done in an appropriate manner, in compliance with both national requirements and the World Bank's ESF environmental and social standards (ESS).

2.1 DESCRIPTION OF THE PROJECT AND ITS LOCATION

2.1.1 REGIONAL BACKGROUND

Regional integration plays a vital role in Southern and Eastern Africa's economic growth and ability to weather economic downturns, and remains a political priority in both Southern and Eastern Africa, where the regional integration agenda has been driven by several regional economic cooperation and trade initiatives and blocs established since the 1990s. Abundant, diverse energy resources in Southern and Eastern Africa underpin significant potential benefits from regional energy sector integration. The growing need to address national electricity supply and demand imbalances, in the most cost-effective manner, boosted interest in cross-border electricity trade and resulted in the establishment of the Southern African Power Pool (SAPP) in 1995, and the Eastern Africa Power Pool (EAPP) in 2005, under the umbrellas of Southern African Development Community (SADC) and Common Market for Eastern and Southern Africa (COMESA), respectively.

The objectives of the SAPP and EAPP are to coordinate power pool operations and implement regional power trade. The SAPP is now the most advanced power pool on the continent and its role aligns with the SADC 1996 Protocol on Energy, which acts as a policy framework for effective use and development of energy in the region. The EAPP on the other hand, compared to SAPP, is nascent in its development but is making rapid advances to interconnect and reap the benefits of stronger regional integration. Increasing interconnections among the EAPP countries and the link to SAPP will create a large subcontinental market that could pave the way for greater regional integration in other sectors. With the planned interconnection of the EAPP and SAPP, both power pools are working on the harmonization of rules and procedures to enable mutually beneficial trade across the potentially largest interconnected geography in the world. Increased power trade between countries will work to deepen regional integration and build trust among countries.

2.1.2 PROJECT BACKGROUND

The Zambia-Tanzania Interconnector Project (ZTIP) is the last electrical line segment to be completed to enable the interconnection between the Southern African Power Pool (SAPP) and the Eastern Africa Power Pool (EAPP). This critical point of connection between the two power pools will facilitate future power trading transactions between countries as far south as South Africa and as far north as Libya. Once completed, this could create the largest geographic energy market in the world – from Cape Town to Cairo.

ZESCO, as an intended implementing agency for the ZTIP, has started the preparation of the Project. Cities and Infrastructure for Growth Zambia (CIGZambia) is a facility set up with the objective of providing high quality independent technical advice and assistance to Zambian government bodies and private sector organisations engaged in projects and programmes that will help harness the potential of Zambia’s cities and towns to act as drivers for economic growth and job creation. CIGZambia is funded by the United Kingdom (UK) Foreign, Commonwealth and Development Office (FCDO). CIGZambia, in collaboration with Cowater International (the Client), is currently assisting the Ministry of Energy to prepare Zambia’s first Integrated Resources Plan (IRP) for the electricity sector and to close the financing gap to realise the IRP’s objectives. A set of energy projects aligned with the IRP and expected to raise financing, have been identified as requiring CIGZambia’s support.

2.1.3 PROJECT DEVELOPMENT PROCESS

The Zambia-Tanzania Interconnector Project (ZTIP) has significantly evolved since its initiation in late 2013. The Project was then coordinated by the Nile Basin Initiative / Nile Equatorial Lakes Subsidiary Action Program (NBI/NELSAP). The original design aimed at connecting the cities of Mbeya (Tanzania) and Kasama (Zambia). This design was later reconsidered to reach the city of Kabwe in Zambia, allowing for improved interconnection of the respective countries’ electrical networks. This alternative design kept the Mbeya to Kasama link but also included a link between Nakonde (in Zambia, near the Tanzania-Zambia border) and Mpika (Zambia), and an additional link between Mpika and Kabwe.

In 2015-16, the design was again revised for the section in Zambia, abandoning the Nakonde-Mpika link and replacing it by a link between Kasama and Mpika. In 2017, the design was further refined to reduce the length of the line without reducing the power transmission capacity. The Mpika-Kabwe section was shortened by relocating the end point of the line in Pensulo.

An environmental and social scoping report was then prepared in early 2017, to present the retained design for the Zambian section of the Project to the Zambia Environmental Management Agency (ZEMA). This scoping report included the proposed terms of reference for conduction of the Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP), covering the retained Project design, and was submitted to ZEMA on June 1, 2017. The Scoping Report and corresponding Terms of Reference (ToR) were then approved by ZEMA through a letter to the ZESCO Limited (ZESCO) dated June 27, 2017. A draft ESIA and Environmental and Social Management Plan (ESMP) were then produced and submitted to ZESCO in October 2017.

The design was again revisited in 2019, and the following adjustments were made:

- A new alignment proposed between Mpika and Pensulo to reduce the overall length and the amount of required vegetation clearing. The revised alignment does not encroach on Kasanka National Park’s bird migration area, avoids planned development land within the Lavushi Manda District Council, and avoids a farm block of concern;
- A new alignment proposed to avoid wetlands/dambo areas and farm holdings;
- A route adjustment south of Kasama to reduce the number of river crossings and to follow existing linear disturbance.

An ESIA, an ESMP and a revised RAP were produced to reflect the 2019 route refinement and updates related to decommissioning, cumulative impacts, gender-based violence, sexual exploitation and abuse, and aspects of the biological environment (i.e., birds, large mammals, bats, protected areas, etc.). These updates were completed in compliance with national requirements and with the outdated World Bank’s Operational Policies. The ESIA was submitted to ZEMA on October 25, 2023, and a decision letter (ref.: ZEMA/EIA/EIS/EAC17/924) was delivered by ZEMA on March 19, 2024.

In parallel, ZESCO conducted an Environmental Impact Statement (EIS) and a Resettlement and Compensation Action Plan (RCAP) of a second line from Kasama to Nakonde, as part of a project under a Chinese contractor (Industrial and Commercial Bank of China [ICBC] funding) based on a single circuit 330kV line design which was approved by ZEMA in 2017. At that time, there were thus two proposals for the Kasama-Nakonde stretch running parallel, the ICBC Project and the ZTIP Phase II Project. The contract previously under the ICBC funding was cancelled in 2022 and it was therefore proposed that the ZTIP shall use the wayleave for the Kasama-Nakonde single circuit 330kV line previously under ICBC funding. The revised scope shall have both lines as a double circuit 330kV line on single structure. ZEMA, on August 8, 2023, has granted ZESCO a “No Objection” to the extension of the validity of the Decision Letter for this line section. The alignment for the section in between Pensulo and Kasama remains the same.

The ZTIP main components are now:

- The Kasama-Nakonde section which consists of:
 - 212 km of a 330kV double circuit transmission line from Kasama to Nakonde;
 - A new 330/132/66kV substation at Nakonde (including installation of a dynamic voltage support device [± 250 MVar SVC or STATCOM]);
 - 15 km of a 400kV double circuit transmission line from Nakonde to the Zambia – Tanzania border;
 - 12 km of a 132kV double circuit into the existing Isoka-Nakonde 66kV line (loop in loop out).
- The Pensulo-Kasama section which consists of:
 - 386 km of a 330kV single-circuit transmission line between the Pensulo and Kasama Substations, via the Mpika Substation; this line will be more or less parallel to an existing 330kV single-circuit transmission line (Pensulo to Mpika 186 km and Mpika to Kasama 200 km);
 - Expansion works on the existing substations at Pensulo, Mpika and Kasama;
 - Installation of Dynamic Voltage Support Device (± 250 MVar SVC or STATCOM) and associated substation works at Pensulo Substation.

As indicated the Resettlement Action Plan presented in this document deals with the Pensulo-Kasama section. The Resettlement Action Plan consists of a complete update of the planning work undertaken for the report published in 2021¹⁸. An overview of the RAP Reports that were prepared for this project, as well as the evolution of the project scope and an overview of the approval process, is presented in the Table 2-1.

¹⁸ WSP. 2021. *Resettlement Action Plan for The Zambia Tanzania Power Interconnection Study*. Report produced for Southern African Power Pool (SAPP). WSP ref.: 191-09831-00. 16 chapters.

Table 2-1 Overview of RAP Development Process

RAP Version	Project Scope and Description	Compliance with World Bank ESF	Approval Process and Implementation
RAP Report prepared by WSP in 2017	Portion of the ZTIP located in Zambia when the project was coordinated by the NBI/NELSAP. The RAP scope included the entire line route from Pensulo to Nakonde Substations, through Mpika and Kasama. Between Kasama and Nakonde Substations, the ZTIP line route was parallel to the ICBC line.	This RAP was prepared in compliance with the World Bank's Operational Policies and Bank Procedures.	Approval by ZEMA was obtained, and the report was reviewed by the KfW. The World Bank was not involved in the review process and did not clear this report. This RAP was never implemented.
RCAP Report prepared by ZESCO in 2017	Kasama-Nakonde 330/132kV transmission line project under ICBC funding. The RAP scope covered the line from Kasama to Nakonde Substations.	This RCAP was not prepared in compliance with World Bank requirements.	Approval by ZEMA was obtained in 2017. Implementation started in 2020.
RAP Report prepared by WSP in 2021	Portion of the ZTIP located in Zambia when the project was coordinated by the SAPP. The RAP scope included the entire line route from Pensulo to Nakonde Substations, through Mpika and Kasama. Between Kasama and Nakonde Substations, the ZTIP line route was parallel to the ICBC line. The update was conducted to consider line route optimization between Pensulo and Mpika and close to Kasama Substation.	This RAP was prepared in compliance with the World Bank's Operational Policies and Bank Procedures. Census and acquisition of socio-economic data were led by ZESCO.	ZEMA approval was obtained in 2024, and the report was reviewed and cleared by the World Bank. This report was disclosed but not implemented.
Current RAP Report prepared by WSP (update of the 2021 RAP Report)	The RCAP for the ICBC funded line (see above) was implemented and the wayleave was acquired before the project was cancelled and it was decided that the ZTIP should use the acquired corridor between Kasama and Nakonde. As such, land acquisition is no longer required for the Kasama-Nakonde stretch of the ZTIP. The current RAP scope is thus limited to land acquisition between Pensulo and Kasama Substations. However, because the RCAP Report used for resettlement and land acquisition between Kasama and Nakonde Substations was not developed based on World Bank's requirements, an audit (see Appendix 2-1) was completed to ensure the resettlement process was compliant with the ESF.	This RAP was updated to comply with the World Bank's ESF.	It was confirmed that ZEMA approval in 2024 still applies to the current update. World Bank clearance is in process.

As shown in the previous table, the ZTIP is now designed to use the wayleave for the Kasama-Nakonde single circuit 330kV line previously acquired under ICBC funding. For that portion, structures affected by the Project were compensated for, and the owners have since been relocated based on the associated Resettlement and Compensation Action Plan (RCAP). The corridor where resettlement was implemented, but where the ICBC Project will no longer be constructed, will be used for the ZTIP for the Kasama-Nakonde section. As such, an RCAP audit has been completed to assess how the resettlement was conducted (see Appendix 2-1). In this context, the current RAP Report is for the Pensulo-Kasama stretch.

The overall objectives of the RCAP Audit along the Kasama-Nakonde section of the ZTIP were to:

- Understand the extent to which the resettlement process for this section complied with the approach, and fulfilled commitments, set out in the RCAP, signed off and disclosed from 2017. While the RCAP (ZESCO, 2017) is the central comparative document, it must be noted that the 2017 and 2021 RAP Reports prepared by WSP (see Table 2-1) were also examined as relevant to the audit.
- Understand the extent to which the RCAP that was prepared includes all the PAPs and their eligible losses.

- Understand the extent to which the process undertaken would be compliant with the new World Bank Environmental and Social Standard (ESS) 5.
- Identify areas to strengthen RAP implementation; and recommend gap filling measures in relation to commitments originally taken as well as those applicable to the new Environmental and Social Framework (ESF) requirements, especially World Bank ESS5.

2.1.4 GENERAL PROJECT DESCRIPTION

The proposed alignment results from a detailed analysis of alternatives and considering technical, environmental and social criteria, corridor alternatives considered for interconnecting the Tanzanian and Zambian national electricity transmission systems were jointly developed by AECOM (as Feasibility Consultants) and WSP. These corridor alternatives were developed at various stages of the feasibility and environmental and social (E&S) studies that have been conducted for the Project. During the alternatives analysis, various corridors were assessed as potential locations for the line route. Those corridor alternatives were 2 km wide and varied in length. They represent large-scale corridors where the line route could be implemented. The line route options within those corridor alternatives were optimized where possible to reduce impacts, including resettlement, and in consideration of technical elements (i.e., reducing the number of angle towers along the centreline). Environmental and social constraints within the Project area are numerous, due in part to the extent of the Project footprint, in which protected areas, wetlands, and human activity are common. This final optimization notably allowed the transmission line (and its 35 to 50-meter wayleave) to be located in a way that avoids the sensitive elements, such as schools, churches, etc., and minimizes the need to construct new access tracks.

The analysis of alternatives is briefly presented in Chapter 7 of the present report.

2.1.5 PROPOSED LINE ROUTE

The proposed line route for the segment of the double circuit 400kV line between the Nakonde Substation and the Tanzanian border starts at the Nakonde Substation and extends towards the northwest for approximately one kilometer and then turns north to cross the D1 Road. It continues towards the north for 7 km and then turns to the north-east and continues straight to the border.

The proposed 12 km double circuit 132kV transmission line starts at the proposed Nakonde 330/132kV Substation, extending east in a straight line traversing Nakonde Zambia Forestry and Forest Industries Corporation (ZAFFICO) Pine Plantation for a distance of approximately 1.4 km before terminating on to the existing 66kV Isoka-Nakonde line.

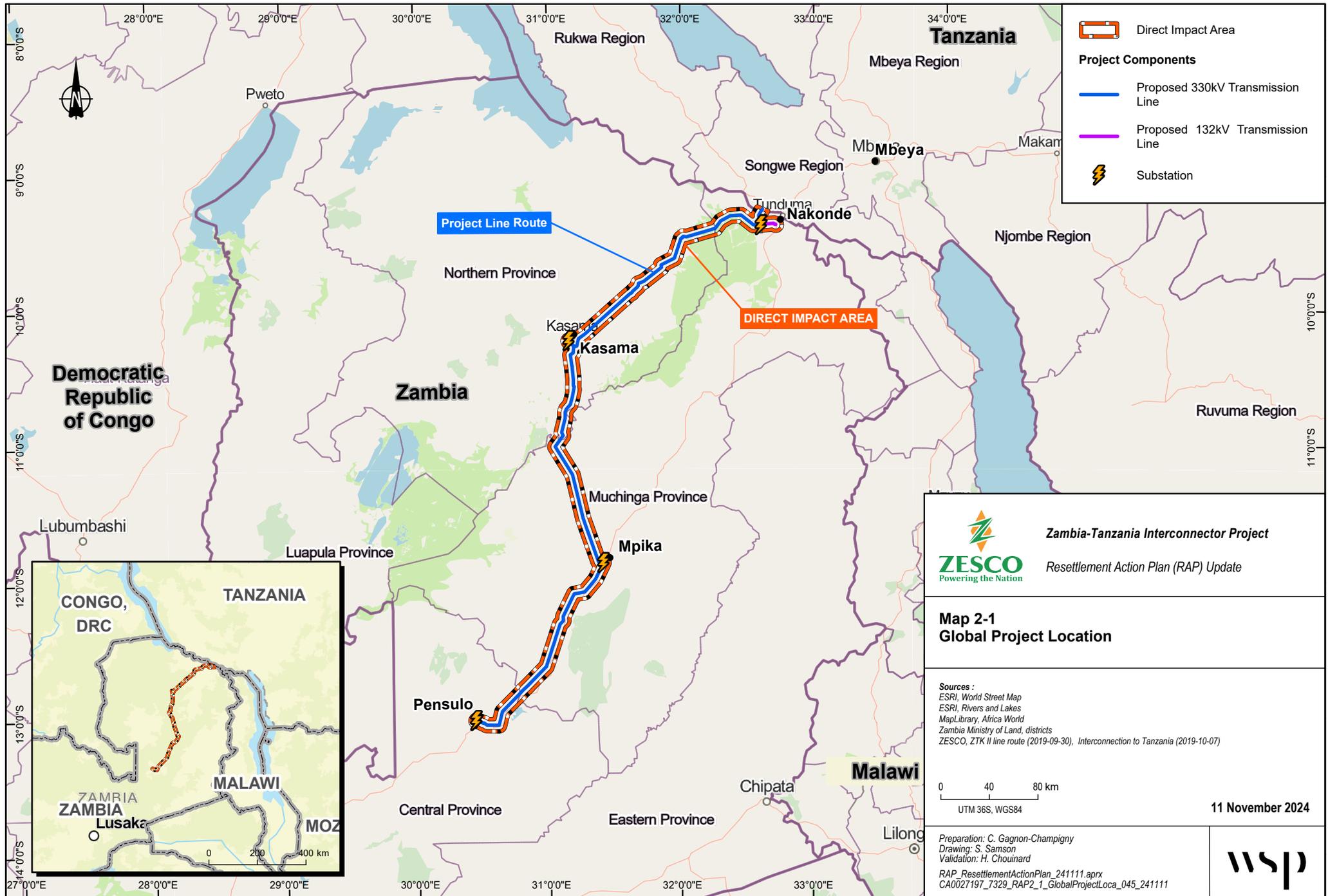
As for the main double circuit 330kV line route, it starts at the proposed location of the Nakonde Substation (see Map 2-1). It then follows a section of the south side of the D1 Road towards the northwest before turning west and following the southern side of the D3 Road. The proposed alignment then leaves the side of the D3 Road and descends in a straight line towards Kasama district traversing Mungwi, Chitimukulu and Kasama National Forests respectively. After crossing the D18 Road, the alignment turns towards the southwest to bypass Kasama's built area from the south and crossing the M1 Road before turning towards the northwest and reaches the Kasama Substation.

From Kasama, the proposed line continues south following the western side of the M1 Road as well as the alignment of a recently built 330kV Pensulo-Kasama line for about 11 km, before diverging towards the west to avoid the Bwikashi farm, with which negotiations proved difficult during the Pensulo-Kasama 330kV Project construction. The line then goes in a southwestern direction for about 3 km, where it makes an angle to head in a south-south-western direction. It crosses the Pensulo-Kasama 330kV Project at kilometer point (KP) 24 and continues in the same direction until it reaches Road M1 at KP 35 and veers in a southern direction.

The Project follows Road M1 for approximately 5 km before crossing to its eastern side and then crossing the Tanzania-Zambia Railway Authority (TAZARA) railway to get to its eastern side. It follows the TAZARA railway and M1 Road until PK 77, where it veers to the south-south-east to follow Road RD56, avoiding Chambeshi to the east and south. From there, it joins again with the Pensulo-Kasama 330kV Project, crosses it and follows its western side until reaching the Mpika Substation located in the southern part of the community (see Map 2-1).

For the last segment between Mpika and Pensulo, the proposed alignment follows a southwestern route corresponding, for the most part, to the previously selected corridor 8 (see Map 2-1). It veers west after Lake Lusiwasi, at the level crossing of the town of Kanona within Kanona National Forest, to connect to the Pensulo Substation from the north-east.

Coordinates of Project components are provided in Appendix 2-2.



Boundaries and measurements shown on this document must not be used for engineering or land survey delineation. A land register analysis conducted by a land surveyor was not undertaken.

2.1.6 PROJECT COMPONENTS RESPONSIBLE FOR DISPLACEMENT

As indicated above, the ZTIP has significantly evolved since its initiation in late 2013. As explained, for some portions of the ZTIP wayleave, PAPs have already been compensated for their assets and resettlement was completed essentially under the Project previously under ICBC funding. These portions are:

- Kasama – Nakonde Section: a 212 km long portion of the 330kV transmission line;
- 15 km of a 400kV double circuit transmission line from Nakonde to the Zambia – Tanzania border;
- 12 km of a 132kV double circuit from Nakonde to Isoka (loop in and out of 66kV Isoka - Nakonde line);
- 6 km stretch while entering in the Kasama Substation from the South (from Mpika);
- Nakonde Substation which will cover approximately 8 ha.

The Project components responsible for additional displacement and considered under the present RAP are as follows:

- Pensulo – Mpika Section: a 186 km long portion of the 330kV transmission line with a 35 to 50 m easement;
- Mpika – Kasama Section: a 194 km long portion of the 330kV transmission line (as a 6 km portion entering the Kasama Substation has already been compensated) with a 35 to 50 m easement;
- Pylons siting for the entire wayleave of the ZTIP;
- Worker camp and access road surfaces and locations will likely remain unknown until lead Contractors are identified ahead of construction. Their locations are usually determined at a later stage of the Project, such as the contractor’s final design or work plans.

For the main part, the impact is derived from the wayleaves required for the transmission lines. Wayleaves are expressions of easement with areas under the transmission lines where land use will be modified and restricted: houses and other structures will need to be displaced, trees will be cut, and agricultural activity may be impacted for the duration of the construction work. People will be allowed to carry out agricultural activities even during construction. However, they will no longer be allowed to build any structures nor plant trees.

Easement for wayleaves is also called right-of way (ROW) because ZESCO neither acquires land nor alienates land under transmission lines. As such there is limited permanent land acquisition and no changes in land tenure. Permanent land acquisition will however be required at pylons locations. The wayleave requirements for the Pensulo-Kasama section, where economic and physical resettlement is foreseen mainly in rural areas, varies according to the proximity of the ZTIP with the existing 330kV Pensulo-Kasama transmission line. The table below clarifies distances and shares of the wayleave with the existing 330kV Pensulo-Kasama transmission line. Different sections with varying wayleave width are also illustrated on Map 2-2.

Table 2-2 Share of the ZTIP Wayleave with the Existing 330kV Pensulo-Kasama Transmission Line

ZTIP Section	Share of the Wayleave	Length of the Portion (km)	Supporting Satellite Imagery	Location (PK)
Pensulo-Mpika	Share of a 15 m width with the existing line – additional 35 m wayleave required.	82.8		Pk 0 – Pk 82.8
Pensulo-Mpika	Parallel to the existing line but no share of the wayleave – additional 50 m wayleave required	94.9		Pk 82.8 – Pk 119.7 Pk 127.2 – Pk 185.2
Pensulo-Mpika	Not in parallel with the existing line – additional 50 m wayleave required	7.5		Pk 119.7 – Pk 127.2
Mpika-Kasama	Share of a 15 m with the existing line – additional 35 m wayleave required.	111.0		Pk 0 – Pk 105.5 Pk 188.4 – Pk 193.9
Mpika-Kasama	Parallel to the existing line but no share of the wayleave – additional 50 m wayleave required	5.9		Pk 193.9 – Pk 199.8

ZTIP Section	Share of the Wayleave	Length of the Portion (km)	Supporting Satellite Imagery	Location (PK)
Mpika-Kasama	Not in parallel with the existing line – additional 50 m wayleave required	82.9		Pk 105.5 – Pk 188.4

Resettlement will require PAPs, in most instances, to move a few meters outside of the wayleave, as illustrated in the next figures.



Location of assets before the Project

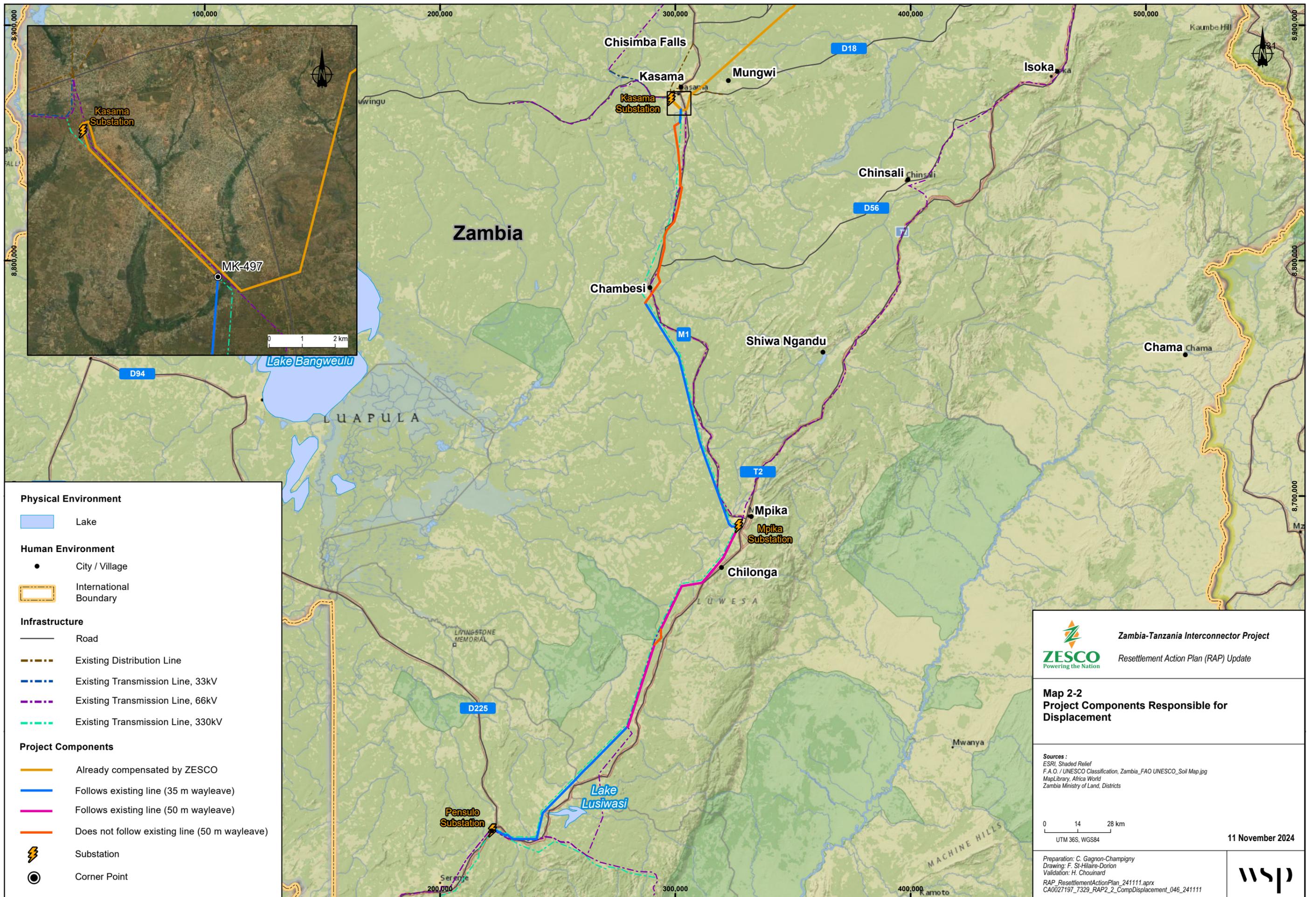


Location of Project infrastructure and resettled house

Figure 2-1 Example of Wayleave and Resettlement

As detailed in Section 2.3, construction activities are divided into five separate packages, each of which is set to last 24 months from the start-up meeting of the construction contract to commissioning.

The work camps should be around the Pensulo, Mpika, and Kasama Substation sites but their exact locations are yet to be confirmed. During transmission line construction works for all line components, there will be temporary worker camps on certain sections of the respective line routes. The total number of workers at the peak of the construction works will be approximately 600. At this stage, locations of the work camps are unknown and Chapter 15 presents the adaptive management to adopt when updates of the RAP may be necessary to reflect additional required wayleaves.



Physical Environment

■ Lake

Human Environment

● City / Village

▭ International Boundary

Infrastructure

— Road

— Existing Distribution Line

— Existing Transmission Line, 33kV

— Existing Transmission Line, 66kV

— Existing Transmission Line, 330kV

Project Components

— Already compensated by ZESCO

— Follows existing line (35 m wayleave)

— Follows existing line (50 m wayleave)

— Does not follow existing line (50 m wayleave)

⚡ Substation

● Corner Point

ZESCO Powering the Nation

Zambia-Tanzania Interconnector Project
Resettlement Action Plan (RAP) Update

Map 2-2
Project Components Responsible for Displacement

Sources :
ESRI, Shaded Relief
F.A.O. / UNESCO Classification, Zambia_FAO UNESCO_Soil Map.jpg
MapLibrary, Africa World
Zambia Ministry of Land, Districts

0 14 28 km
UTM 36S, WGS84

11 November 2024

Preparation: C. Gagnon-Champigny
Drawing: F. St-Hilaire-Dorion
Validation: H. Chouinard
RAP_ResettlementActionPlan_241111.aprx
CA0027197_T329_RAP2_2_CompDisplacement_046_241111



Boundaries and measurements shown on this document must not be used for engineering or land survey delineation. A land register analysis conducted by a land surveyor was not undertaken.

2.2 PROJECT COMPONENTS

2.2.1 VOLTAGE LEVEL

The transmission line will be operated at 330kV from the Pensulo Substation to the Nakonde Substation, which is the standard high-voltage tension level in Zambia. However, the last section between the Nakonde Substation and the Tanzanian border will be designed and built at 400kV but operated at 330kV.

Note that in addition to the above, the Project also includes the construction of a line segment designed at 132kV between the Nakonde Substation and linking to the 66kV Isoka-Nakonde line; this is part of ZESCO's scope, to reinforce the existing network and increase reliability and security of energy supply.

2.2.2 NUMBER OF CIRCUITS

The Project involves four distinct line segments:

- The section between the Tanzanian border and the Nakonde Substation will be a double circuit 400kV line.
- The section between Kasama and Nakonde will be a double circuit 330kV line.
- The section between Pensulo and Kasama will be a single circuit 330kV line and it will be operated in pair with an existing Pensulo-Kasama 330kV single circuit line.
- The section between Nakonde and Isoka will be a double circuit 132kV line (loop in and out of 66kV Isoka-Nakonde line).

Overall, these components will form a double circuit interconnection with the Tanzanian network, mounted on two distinct one-circuit lines for the section between Pensulo and Kasama and on one double circuit line for the section between Kasama and Nakonde.

The pylons configuration along the line will be adapted based on voltage level and number of circuits for each section.

2.2.3 TOWER TYPES

Technical studies recommend selection of a combination of guyed and self-supporting lattice steel towers, as they are commonly used in Zambia. However, ZESCO is presently opting to predominantly use self-supporting steel lattice towers at the 330kV voltage level and this will be adopted for this Project. Tower characteristics that are planned in double circuit and single-circuit scenarios are presented in Table 2-2 below. It should be noted that pylon heights vary in function of technical requirements caused by local constraints such as topography, line spans, crossings of infrastructure, etc. Aspects of self-supporting and guyed 330kV single-circuit towers are illustrated on Figure 2-2, while Figure 2-3 illustrates a 330kV double circuit DC suspension tower. Figure 2-4 shows an example of a 440kV double circuit transmission line. Pylons drawings are included in Appendix 2-3.

Table 2-3 Tower Characteristics¹⁹

Characteristics	Single circuit, Rigid Suspension, 330kV	Double Circuit DC Suspension 330kV	Double Circuit DC Suspension 400kV	Double Circuit Suspension 132kV
Tower heights (m from top of foundations to top of pylons)	Standard: 31 Minimum: 26.5 Maximum: 37	Standard: 44.45	Standard: 50.3 Minimum: 44.3 Maximum: 60.8	Standard: 21 Minimum: 18 Maximum: 30
Average line span (m)	400	375	400	300
Locations	Kasama to Pensulo Substations	Kasama to Nakonde Substations	Nakonde Substation to Tanzanian border	Nakonde new Substation to Nakonde–Isoka (Loop in-Loop out)
Footprint (m ²) ²⁰	Average: 34.2 Minimum: 26.4 Maximum: 149.6	Average: 103.0 Minimum: 81.0 Maximum: 182.9	Average: 77.9 Minimum: 64.0 Maximum: 140.4	Average: 30.2 Minimum: 25.9 Maximum: 55.2



Source: AECOM, 2017²¹.

Figure 2-2 Combined Use of Self-Supporting and V-Guyed Single-Circuit Towers

¹⁹ AECOM, 2017. Feasibility Study and Conceptual Design of Tanzania-Zambia Power Interconnection Study. Final Feasibility Study.

²⁰ As detailed in Project Component Coordinates (Appendix 2-2).

²¹ AECOM, 2017. Feasibility Study and Conceptual Design of Tanzania-Zambia Power Interconnection Study. Final Feasibility Study.



Figure 2-3 Typical Suspension Double Circuit Towers



Figure 2-4 Example of a 400kV Double Circuit Transmission Line

2.2.4 PHASE CONDUCTORS

Conductors will be the Bison type (ACSR) for the single circuit (Pensulo-Kasama) and double circuit (Kasama-Nakonde) 330kV line. Their use is justified because of their high strength parameter, necessary for very long spans and heavy loads. A bundle of two conductors per phase is necessary.

For the 400kV double circuit line between the Nakonde Substation and the Tanzania border, the conductors will be BlueJay type (ACSR) in bundle of two conductor per phase. For the 132kV double circuit line that will loop in and out of the 66kV Isoka-Nakonde line, the conductor will be a Wolf ACSR.

2.2.5 FOUNDATIONS

Foundation design will be subject to re-evaluation on completion of the site geotechnical investigations. Soil properties including actual quantities of foundations for each tower type located in these soil classifications will be estimated following a full review of the geotechnical results and quantified within the Price Schedules.

- Rock Socket / Rock Anchors where solid rock is encountered
- Concrete pad and chimney: generally based on the allowable bearing capacity of each soil type
- Special foundations either piled or raft type, where soils are particularly poor.

The contractor will be fully responsible for determining the soil classification at each tower location prior to installation.

A slab foundation with reinforced concrete body consists of reinforced concrete slabs buried about 3.0 m below the ground, one for each leg of the tower. Backfilling is done with dug up material excluding organic surface matter. This foundation is adequate for firm or rigid clay soils, firm or rigid laterite soils, medium to large grained alluvial formations lying above the water table, and diggable bedrock. In firm soil the slab may be poured directly into the dug-up soil to take advantage of the better capacity of intact soil. Wider footings will be required for foundations in loose soil or soil below the water table.

When bedrock is encountered that is too hard to be excavated by an excavator, rock-anchored concrete blocks will be required to support the towers. Reinforcement bars are driven and grouted into holes bored into the rock. This type of foundation is appropriate for locations where bedrock is found less than 3.0 m below the surface and is too hard for digging without hammer tools or blasting.

Concrete pylon foundations are commonly used in Zambia.

2.2.6 RIGHT-OF-WAY (ROW)

2.2.6.1 REQUIRED RIGHT-OF-WAY

The width of the right-of-way had to be determined to satisfy minimum technical requirements and comply with the Energy Regulation Board (ERB) Wayleave Code of Practice standards which ZESCO uses. ROW width will vary according to the voltage level.

Furthermore, the width of the acquired wayleave varies along the alignment, depending on whether or not the Project is paired with another ZESCO wayleave. The additional wayleaves required can be summarized as follows (AECOM, 2017):

- 60 m for the double circuit 400kV line between Nakonde and the Tanzanian border;
- 50 m when the new 330kV line wayleave is not paired with another existing wayleave;
- 35 m for 330kV line segments paired with the existing 330kV line present between Pensulo and Kasama (see Section 2.1.6);
- 32 m for the 132kV between the Nakonde Substation and linking to the 66kV Isoka-Nakonde line.

2.2.6.2 RIGHT-OF-WAY MANAGEMENT

The current ROW management practices in Zambia, according to ZESCO officials, are described in the following table.

Table 2-4 Current ROW Management Practices in Zambia

Item	Practices
ROW acquisition practices	ZESCO obtains the right-of-way for the wayleave through a negotiated agreement with affected parties but does not acquire the land.
Uses allowed in the ROW	Growing of seasonal low-laying crops; below 2 m in height (e.g., maize, wheat, etc.) is allowed.
Uses not permitted	Growing crops exceeding 2 m in height is not allowed. As per ZESCO policy, crop(s) destroyed during construction or maintenance will be compensated for.
Policy regarding service road minimization	The ZESCO environmental guidelines urge the contractors to only create new access roads where there are no existing ones. They are always encouraged to use and maintain existing roads.

Also, in order to maximize chances of achieving the above-mentioned ROW requirements and reduce theft of steel bracing and grounding materials from towers to a minimum, experience from other projects in the region has shown that engaging local communities along the line in maintenance and monitoring of the line can be effective.

The Consultant's other recommendations are the following:

- Within the wayleave, all structures that could be a nuisance to the safety and reliability of the network should be removed;
- In addition, ZESCO, who will be responsible for maintenance, may find it advantageous to be on good terms with the users of the ROW and to give them responsibility for vegetation control in their respective section of the ROW. This type of agreement allows the individual to continue to operate (e.g., agriculture, livestock, etc.), as long as they do not pose a risk to the network's operation. For the operations manager, these agreements help to reduce the risk of theft and vandalism on the line.

2.2.7 SUBSTATIONS

Only one substation will need to be built for the Project, that is: the Nakonde Substation. All other substations are already built but will require the addition of some new equipment within their existing boundaries in relation with the new interconnector Project (substation layout plans are provided in Appendix 2-3). No substation upgrade will require resettlement, considering the Nakonde Substation site has already been acquired and PAPs have been compensated.

2.2.8 TEMPORARY FACILITIES

During construction, it will be necessary to establish temporary facilities and installations where required:

- Construction camps,
- Access roads,
- Laydown and storage areas,
- Concrete facilities, etc.

Construction activities are forecast to include the following activities, as per detailed in the ESIA: site preparation, transportation and traffic circulation, construction (including tower erection, stringing works, etc.), and waste management and hazardous materials management. Those broad categories will be defined in more detail by the Contractor at the beginning of the assignment, during the pre-construction phase, when the Contractor will develop various construction plans.

The location and extent of these components are not yet known and will be the Contractor's responsibility. To the extent possible, the sites required for that infrastructure should be acquired under willing-buyer, willing-seller agreements to avoid involuntary resettlement.

The procedure to compensate PAPs when additional land is required during construction is explained in Section 15.3.2.

2.3 PROJECT COSTS AND SCHEDULE

The budgetary estimate for the Project is 285 million USD, including associated project management and capacity building costs.

The Project shall be co-financed with contributions from the European Union (EU) and United Kingdom (UK) Government through the Foreign, Commonwealth and Development Office (FCDO) and the World Bank, with the World Bank acting as the fund administrator. The Project will be implemented by ZESCO and incorporated within ZESCO's Planning and Projects Directorate. As for implementation schedule, activities are divided into five separate packages, all of which are planned to require 24 months, starting from the start-up meeting of the construction contract to commissioning. Package 1 is for the Pensulo-Mpika Section, Package 2 is for the Mpika-Kasama Section, Package 3 is for the Kasama-Nakonde Section, Package 4 is for the new Nakonde Substation and Package 5 is for the DVSDs at Pensulo and Nakonde Substations. For each of these packages, the first months will be dedicated to preparation activities such as detailed survey, preparation of construction schedule, detailed design, etc. Field construction activities are planned to begin at month 7 and therefore will last 17 months. Details of the construction schedule are provided in the ESIA (stand alone report). It should be noted that though the project construction schedule is divided into five packages, resettlement is expected to be implemented on the entire line length after clearance from the World Bank. All resettlement obligations as per ESS 5 requirements, including compensation payment, will be complete before land and assets alienation. The resettlement schedule is detailed in Chapter 12.

Some uncertainty remains, however, regarding the preparation time that will be needed to reach the effective date of contract commencement. Among others are delays for resettlement actions, which will be spread over a considerable period of time (estimated timing provided in Chapter 12). It is therefore not possible to predict with accuracy the beginning of construction activities without considering the implementation schedule for the Resettlement Action Plan (RAP), although the current estimate is for works to be in place in Q1 2026. Only upon compensation and relevant assistance obligations would the contractor be granted free of third-party interest access.

2.4 PROJECT ACTIVITIES

2.4.1 PRE-CONSTRUCTION PHASE

The pre-construction phase will start once all studies are completed and the Project is ready to be implemented. The main activities being conducted at different stages include:

- Labour recruitment, including hiring of local and foreign workers.
- Land use restrictions and resettlement of PAPs and assets, which will include displacement of economic activities.
- Site preparation: site preparation activities, including establishment of equipment storage yards and worker camps, vegetation clearing, removal of topsoil, excavation, earthworks and construction of access roads. The exact size and location of the storage yards and worker camps remain to be specified. The extent and configuration of vegetation clearing will require only strips of land to be cleared due to it being for line construction and certain access roads.

2.4.2 CONSTRUCTION PHASE

The construction phase will mainly involve the following activities:

- Transportation and traffic: road transportation of materials, equipment and workers to and from the site, including fueling and maintenance of vehicles and machinery.

- Construction activities: construction of the power transmission line and substations, including temporary facilities used during the work phase, such as borrow pits, as well as the erection of towers and stringing of conductors.
- Waste and hazardous materials management: management and storage of waste, hazardous substances and other materials to be removed, including hydrocarbons.
- Purchase of materials, goods and services: purchases required for the construction of the power transmission line and substations.
- Presence of workers: presence of the construction workforce, including hiring foreign and local skilled/unskilled workers, as well as the installation and operation of construction work camps.

2.4.3 OPERATION PHASE

The following activities are expected during the operation phase:

- Presence and operation of line, substations, and access roads: presence and operation of facilities.
- Transportation and traffic: road transportation of materials and equipment, including vehicle fueling and maintenance.
- Maintenance and repairs: inspection, maintenance, and repair of conductors, towers, and structures in substations, as well as ROW maintenance.
- Waste and hazardous materials management: handling operations and storage of hazardous waste used during the operation, including oil used in transformers at substations.
- Purchase of materials, goods, and services: purchases required for the operation of the substations and the transmission line.
- Presence of workers: hiring local and foreign workers, as appropriate, and presence of employees operating substations, during maintenance along the line.

2.4.4 DECOMMISSIONING PHASE

The Project, like other transmission lines, involves the construction of permanent electricity infrastructure, and therefore, it is not envisaged that the transmission line will be decommissioned soon. However, after the Project's operational design lifespan, a reassessment of the status of the transmission line shall be carried out. The decommissioning phase refers to all activities related to the proposed transmission line when it is no longer in use.

The following activities are expected during the decommissioning phase:

- Decommissioning activities: dismantling of equipment, including lines, transmission towers, substations and other associated components, removal of temporary structures, landscaping, clearing of the ROW and access roads, filling in pylon locations, removal of construction materials and waste, levelling, sloping, and revegetation.
- Transportation and traffic: traffic related to vehicle transport of materials, goods, and workers associated with the decommissioning work, removal or handover of service roads and construction access roads.
- Waste and hazardous materials management: safe disposal of waste generated by dismantling of equipment.
- Purchase of materials, goods and services: purchases required for operation of the worker camps.

- Presence of workers: presence of the construction workforce, including hiring of foreign and local skilled/unskilled workers, as well as the installation and operation of construction work camps.

2.5 OBJECTIVES OF THE RESETTLEMENT ACTION PLAN

Prior to this report, a RAP was produced in 2021 covering the same alignment between Pensulo and Kasama. As stated in Section 2.1.3, this RAP Report was cleared by the World Bank and disclosed, though not implemented. Recommendations and concerns expressed by stakeholders from this RAP were considered in the current report and were validated and verified by additional consultations with decentralized authorities and affected communities conducted in 2024 (see Chapter 11). However, the results from the census completed in 2019 were judged to be outdated. Additionally, there is a need to align the RAP with the World Bank ESS5 as the previous RAP was prepared in compliance to the World Bank Operational Policy (OP) 4.12.

The following components of the RAP have been revised and renewed for this Resettlement Action Plan:

- Census of people, their assets and livelihood;
- Valuation of assets, and crops and planted trees;
- Review and update of the eligibility criteria and associated compensation;
- Public consultations with stakeholders including traditional authorities and district agencies as well as affected communities and PAPs.

The Resettlement Action Plan establishes the resettlement and compensation principles, organizational arrangements and design criteria to be applied to meet the needs of the people who may be affected by the Project.

The Resettlement Action Plan is prepared to the standards of ZESCO's own policy, RAP format prescribed by the Zambia Environmental Management Agency (ZEMA) (see Appendix 2-4), and standards of the World Bank, ESS5.

2.6 OVERALL ESTIMATES OF LAND USE RESTRICTIONS AND RESETTLEMENT

The Project will result in impacts and provide compensation as described in Table 2-5. Categories of PAPs and more details on the type of impacts are provided in this RAP in Chapter 3. More information on the rationale and calculation methods for compensation, allowances, and assistance is provided in Chapter 8.

Table 2-5 Summary of Impacts and Compensation Costs

Type of Impact	Categories of PAPs	Number of Affected PAPs/Assets ²²	Compensation and Assistance
Total land required for the wayleave		1,606.45 ha (from Pensulo to MK-497 ²³)	For access restrictions and land repurposing in community land, it is recommended that a CSI Fund equivalent to 1% of Project costs ²⁴ be set up and expended throughout the Project duration.
Physical Displacement			
Permanent loss of residential land – either under easement or pylon base	Owner of titled land	22 PAPs will be affected by the loss of a titled residential land (totalling 95.94 ha of affected area).	Compensation at full replacement cost (inclusive of transaction costs), valued at 953,170 Kwacha. Disturbance and vulnerability (where eligible) allowances (see Section 8.2.2).
	Holder of communal land	518 PAPs will be affected by loss of customary residential land. Most PAPs have one affected customary residential parcel, but six PAPs have two for a total of 524 affected customary residential parcels (totalling 671.65 ha of affected area).	Where there is not sufficient space on the affected parcel to rebuild an affected structure, PAPs can choose between cash or in-kind compensation to acquire replacement residential land to build the replacement structure. When cash compensation is selected, full replacement cost will be established by an independent asset valuer for the entire residential customary land. When in-kind compensation is preferred, ZESCO, in consultation with the TA, will facilitate provision of replacement land. Security of tenure to be provided as per certificate of occupancy provided for by the TA and costs to be covered by the project. Based on census results, that is the case for 30 residential lands held by 30 PAPs for a total of 35.15 ha with an estimated replacement value of 425,367 Kwacha ²⁵ . Additionally, where a pylon is sited on a customary residential parcel, the owner will be entitled to cash compensation for the permanent uptake. Affected land will be identified and valued once the final precise location of pylons is known and will be included in an Addendum to the current RAP. A budget estimate is provided in Chapter 8 and included in the RAP budget.
Permanent relocation of housing structure	Owner of housing structure (regardless of tenure type)	136 PAPs will lose a residential structure. Some of these PAPs have more than one house. The total number of houses to be demolished is 172.	Compensation at full replacement cost, valued at 5,244,752 Kwacha. Disturbance and vulnerability (where eligible) allowances. Where requested by PAPs, in-kind compensation for the lost house will be offered (house for house). Costs are included in the full replacement cost, and this type of compensation will be offered to all PAPs.
	Tenant	Three (3) housing rentals with charge were identified, meaning that three (3) tenants and three (3) associated landlords are eligible to transitional rental allowance.	Transitional rental allowance for three (3) months of rent to be paid, separately, to the tenant and the owner (tenancy rate), where applicable. Tenants allowance, which includes a month deposit, amounts to 5,800 Kwacha while landlords' allowance is estimated at 4,350 Kwacha.

²² It should be noted that some PAPs have more than one type of affected assets. As such, the sum of the number of PAPs per type of affected asset does not equal the total number of PAPs (990).

²³ As detailed in Section 3.1, though the current RAP is for the entire line route between Pensulo and Kasama, a 6-km stretch was already acquired and compensated by ZESCO in early 2024. As such, the area to be acquired under the current RAP is from Pensulo Substation to MK-497, located about 6 km Southeast of the Kasama Substation (see Map 2-2).

²⁴ Reinvesting 1% of project costs within affected communities is in line with best practices for similar infrastructure projects.

²⁵ For budgetary purposes, it was assumed that all PAPs would opt for cash compensation.

Type of Impact	Categories of PAPs	Number of Affected PAPs/Assets ²²	Compensation and Assistance
Permanent relocation of secondary structures and immovable equipment	Owner of structure/ equipment (regardless of tenure type)	139 PAPs will lose at least one secondary structure (e.g., kitchen, latrine, etc.). Many of these PAPs will lose more than one secondary structure. The total number of secondary structures to be demolished is 409.	Compensation at full replacement cost, valued at 1,723,354 Kwacha. Disturbance and vulnerability (where eligible) allowances.
Economic Displacement – Commercial Structures			
Permanent relocation of commercial structures – either under easement or pylon base	Owner of commercial structure and parcel (titled landowners or communal landowners ²⁶)	Five (5) businesses will be impacted with three (3) commercial structures requiring to be relocated.	Commercial structure compensated at full replacement cost, valued at 49,070 Kwacha. Compensation for lost revenues for three (3) months estimated at 13,500 Kwacha. Disturbance and vulnerability (where eligible) allowances.
	Tenant	No commercial tenant was inventoried within the wayleave.	Compensation for lost revenues for three (3) months, where applicable. Disturbance and vulnerability (where eligible) allowances.
	Employee	A total of four (4) employees working for one (1) affected business were identified.	Compensation for wage loss for three (3) months, estimated at 17,844 Kwacha.
Temporary disruption of commercial structures during construction	Operator	The location of temporary disruption is not known yet as this is associated with construction and decisions on key temporary construction infrastructure, e.g. laydown areas. As such, no temporarily affected business operator or employee has been identified. However, should some be affected at a later stage, they will be eligible to compensation and assistance as detailed in Chapter 4.	Compensation for lost revenues for the duration of the impact. Associated costs are included in the contingency.
	Employee		Compensation for wage loss for the duration of the impact. Associated costs are included in the contingency.
Economic Displacement – Agricultural Land, Crops, and Economic Trees			
Easement over agricultural land (permanent loss of rights)	Titled landowners	An estimated area of 39.14 ha of titled agricultural land is expected to experience a permanent loss of right due to the easement. There are 8 titled agricultural parcels belonging to 8 PAPs that would be eligible to compensation for loss of rights (i.e., parcels that are currently used for soon-to-be restricted activities).	Cash compensation proportionate to the loss of value incurred by the use restrictions valued at 346,539 Kwacha.
	Communal landowners	There are 252 parcels with customary tenure that are expected to experience a permanent loss of right due to the easement. Those belong to 251 PAPs.	ZESCO, in consultation with the TA, will facilitate access to replacement land, at no cost, to cover loss of livelihood due to loss of rights within the easement. The process will be documented and aligned with ESS5 requirements. As stated above, it should be noted that access to replacement land is not constrained within the context of the transmission line.

²⁶ All businesses are located on customary residential land, already captured above.

Type of Impact	Categories of PAPs	Number of Affected PAPs/Assets ²²	Compensation and Assistance
Permanent loss of agricultural plot under pylon base	Owner of land or land use rights (titled)	It is estimated that 0.98 ha of agricultural land will be affected by the pylons' location. Owners and tenants will be identified before construction and will be eligible to compensations set out in Chapter 4.	Owners of titled land are already eligible to compensation for the entire parcel area located within the easement. As such, they are not entitled to additional compensation for the area located under the pylon base. Land preparation allowance.
	Owner of land or land use rights under customary tenure		Cash compensation for agricultural land being permanently affected by pylon siting. Affected land will be identified and valued once the final precise location of pylons is known and will be included in an Addendum to the current RAP. A budget estimate is provided in Chapter 8 and included in the RAP budget.
	Occupier without legal rights or claims		Land preparation allowance and other additional assistance aimed at their resettlement in dignified conditions.
	Tenant		Assistance in searching for adequate agricultural replacement land. Land preparation allowance.
Permanent loss of crops	Farmer (regardless of tenure type)	Crops located under the pylons' base have an estimated area of 0.66 ha. As the affected areas are not known yet, specific PAPs were not identified. However, 320.6 ha of areas under cultivation, owned by 597 PAPs were inventoried. Compensation will only be paid for crops that are destroyed during works (the specific affected PAPs, the extent of their losses and compensation amounts will be detailed in an Addendum when the location of pylon is final).	Compensation at market value, estimated at 27,136 Kwacha. Compensation for loss of crops under pylons for the Kasama-Nakonde stretch is estimated at 47,087 Kwacha for 1.14 ha. Land preparation allowance will also be paid. Compensation will only be paid for crops that are destroyed during works. Official valuation will be completed by the DACO. Market study rates were used to provide a budget estimate.
Permanent loss of individualized exotic/fruit economic trees	Owner of the tree (regardless of tenure type)	A total of 5,045 fruit trees and 88 exotic trees were inventoried, belonging to 238 PAPs.	Compensation at full replacement cost valued at 8,264,840 Kwacha by DACO. Compensation at full replacement cost valued at 158,675 Kwacha by the Forestry Department.
Private Graves and Cultural Assets			
Permanent relocation of graves	Owner (regardless of tenure type)	There are no private graves or cultural assets located in the wayleave. With the continuous implementation of ZESCO Chance Find Procedure, graves or cultural assets may be identified during construction.	Relocation by a qualified archeologist. All costs will be covered by ZESCO.
Community Impacts			
Permanent relocation of community structure	Owner of structure or community	A total of eight (8) community structures are located within the wayleave.	Compensation at full replacement cost, valued at 141,620 Kwacha. Disturbance allowance.

Type of Impact	Categories of PAPs	Number of Affected PAPs/Assets ²²	Compensation and Assistance
Permanent loss of association/institution land	Association (religious groups or others) or institution owning an affected piece of land	A total of ten (10) associations or institutions own a piece of land that is crossed by the line route and are affected by land repurposing. The affected area represents 26.20 ha.	The actual land, where impacted, will be made available and replaced by the TA. Further an in-kind compensation package has been designated by ZESCO to compensate communities for land repurposing and land use restriction.
Permanent relocation of cemeteries	Community	A total of three (3) graveyards are affected. The land is crossed by the wayleave and some graves may have to be relocated. The affected area represents 1.33 ha. With the continuous implementation of ZESCO Chance Find Procedure, other cemeteries may be identified during construction.	Relocation of graves by a qualified archeologist. All costs will be covered by ZESCO including ceremonial costs that include food and drink for the attendees as well as stipend payment for cultural leaders.
Permanent relocation of cultural and sacred sites	Community	There are no community cultural or sacred sites located in the wayleave. With the continuous implementation of ZESCO Chance Find Procedure, such sites may be identified during construction.	Relocation by a qualified archeologist, all costs covered by ZESCO.
Permanent loss of indigenous natural trees of use value located on individualised parcels	Community	A total of 28,930 indigenous trees were inventoried on affected parcels. Those are not eligible for compensation under the Forestry Act of 2015.	Livelihood-based reforestation program for the replacement of indigenous trees used for natural products and ecosystem services, estimated at 12,264,348 Kwacha, to cover the productive value of affected indigenous trees.
Permanent loss of natural products harvesting areas and land under easement	Community	A total of 27 natural areas under customary tenure are used by community members for livelihood activities such as wood collection, water collection and grazing. Those areas represent a total affected area of 124.68 ha. Among those are 22 forested areas, bush, fallow land or grazing land where indigenous trees potentially used by communities for livelihood will be lost, covering 117.92 ha.	An in-kind compensation package has been designated by ZESCO. The aim is to compensate communities for land repurposing and land use restriction. Lost trees will be compensated through the livelihood-based reforestation program, estimated at 12,264,348 Kwacha (as stated above).
Permanent land use restrictions over customary land under easement	Community	Communities and TAs will be expected to grant replacement land to affected customary landowners at no cost. A total of 1,107.51 ha of parcels under customary tenure were identified within the wayleave.	An in-kind compensation package has been designated by ZESCO (see Section 8.4.2). The aim is to compensate communities for land repurposing and land use restriction.

2.7 REPORT STRUCTURE

This report is organized in compliance with ZEMA guidelines (see Appendix 2-4) and complies with the World Bank ESS5:

- Executive summary (see previous chapter);
- Introduction;
- Census and socioeconomic surveys;
- Definitions and eligibility criteria;
- Policy, organisational and institutional frameworks;
- Resettlement sites;
- Consideration of alternatives;
- Compensation and assistance;
- Transitional arrangements;
- Social and environmental impacts of the resettlement program;
- Public consultations;
- Schedule;
- Costs and budgets;
- Grievance redress mechanism;
- Monitoring, evaluation, and adaptative management;
- Appendices.

This report is also aligned to the World Bank Environmental and Social Framework and the various topics of significance for the World Bank are studied in this report.

2.8 APPROVAL AND DISCLOSURE OF THE RAP REPORT

This RAP will be publicly disclosed. To support disclosure of the RAP locally and in a culturally appropriate manner, a non-technical summary in Bemba is provided in Section 1.2. It will also be disclosed on the ZESCO and ZEMA websites as well as on the World Bank’s external website. Furthermore, information sessions will be organized in affected communities during awareness sessions set out in ZESCO’s Stakeholder Engagement Plan (SEP). This will allow disclosure to be more effective at PAP and affected community levels.

For any changes made to the RAP, the same approval and disclosure protocols will be followed.

3 CENSUS AND SOCIOECONOMIC SURVEYS

A full census of the wayleave was completed between the Pensulo and Kasama Substations to identify all affected assets, including land, structures and buildings, economic trees, crops cultivated at the time of the census, and sacred assets. Private assets as well as communal assets were inventoried, categorised and then characterised during the census. Socioeconomic surveys were also conducted at the community and household levels to collect baseline socioeconomic data. The method for the census and surveys is detailed below, and the results are presented in the following sections, including a description of affected areas, categories of PAPs, affected assets and vulnerable people.

3.1 METHOD FOR CENSUS

The census of PAPs and their assets was carried out in August and September 2024 between Pensulo and Kasama Substations. An approximate 6 km long stretch extending from Kasama Substation to MK-497 (see Appendix 2-2) was left out of the census as it had already been acquired and compensated by ZESCO in early 2024. As such, this stretch is covered in the RCAP Audit Report (see Appendix 2-1) and was not covered by the census nor the surveys.

The census and socioeconomic surveys covered a wayleave of:

- 35 m where the projected 330kV Pensulo-Kasama line parallels the existing 330kV Pensulo-Kasama line and shares part of its wayleave (see Section 2.1.6);
- 50 m where the projected 330kV Pensulo-Kasama line does not share its wayleave with the existing 330kV Pensulo-Kasama line.

3.1.1 CENSUS AND SURVEY PLANNING

Several tools and methods were used to facilitate census and survey planning, including questionnaires, a surveyor handbook and training sessions. A team of 20 surveyors was mobilized to conduct the census and surveys.

As mentioned previously, the census and socioeconomic surveys were conducted at both the community and the household levels. As such, two distinct questionnaires were developed: a household questionnaire and a community questionnaire (see Appendix 3-1). The household questionnaire targeted the household head and aimed to identify all PAPs occupying or using land within the wayleave, to characterize affected assets and to collect socioeconomic data at the household level. The community questionnaire targeted the community chief or headman and aimed to identify communal assets located within the wayleave and to collect socioeconomic data at the community level.

Both questionnaires were programmed into Survey123, the data collection software that was used with electronic tablets on the field. The team was trained in Kasama in early August 2024 ahead of the field work to make sure all surveyors were competent in using the data collection tools and had a common understanding of the census objectives and survey questions. The training included pilot fieldwork sessions to acclimatise to the survey tools and census process. The surveyors were also supplied with a Surveyors' Handbook that compiled all relevant information for the census and surveys.

3.1.2 CENSUS AND SURVEY PROGRESS

To mobilize affected communities and PAPs, ZESCO's team contacted and met with each chiefdom impacted by the line route to notify them of the upcoming field activities. Chiefs were asked to help identify and mobilize affected communities along the line route as well as to facilitate community entry. The community surveys were conducted during stakeholder consultation at the community level (see Chapter 11); with the team moving ahead of the household census team so to inform potentially affected households of upcoming surveys. Following the community assembly, the community chief or headman completed the community survey and community members were mobilized to identify any community asset located within the wayleave.

Following the community survey, the community headman or representatives were asked to notify any potentially affected household of the upcoming census to ensure that household heads or respondents would be readily available. Before conducting the census, respondents signed an agreement to confirm their consent to being surveyed. They were notified that the socioeconomic survey, conducted in parallel with the census, was not compulsory and would not prejudice their access to compensation. In addition, they were made aware that if they did not want to answer any particular question, they could notify the surveyor of their intent to decline. The fact that some people exercised this option explains why the number of respondents varies slightly from one socioeconomic question to the other. Furthermore, the cut-off date and its implications were presented and explained to the respondents, as detailed in the household questionnaire (see Appendix 3-1).

Throughout the census, data collected was synchronized to the central database where quality control was done continuously. That allowed for mistakes or imprecisions to be identified and corrected while the team was still on the field.

3.1.3 DATA ANALYSIS AND QUALITY CONTROL

Following the census and surveys, all data was analysed by WSP's multidisciplinary team, including geomatic, resettlement, and data management specialists, in collaboration with the local team of surveyors. Both quantitative data, from the surveys, and qualitative data, from the focus group discussions and community assemblies (see Chapter 11) were collected and used to develop the database of affected PAPs and assets. A spatial and qualitative quality control process was completed to ensure that all data collected were precise and that no asset or PAP was counted twice.

To facilitate data presentation and interpretation, the data on affected assets and socioeconomic status is presented for each of the affected provinces, i.e., Northern, Muchinga, and Central provinces. Furthermore, the number of respondents is specified at the bottom of each table as it may vary depending on the question (respondents sometimes refusing to answer or not having sufficient information to supply an informed response).

3.1.4 VALIDATION OF CENSUS RESULTS DURING THE FORMAL VALUATION PROCESS

During the formal valuation process detailed in Chapter 8, census data was made available to the valuer²⁷, including PAP information (name, contact information, identification document number) and asset detail (location, type, etc.).

²⁷ As specified in Section 8.1.1, the formal valuation process was conducted by registered valuation surveyors on behalf of Sandridge Associates in accordance with the Zambian Institute of Valuation Surveyors Act, No. 9 of 2023. Valuation reports are available in Appendix 8-1.

This data was used by the valuer throughout the valuation process and, when discrepancies were identified on the field, those were communicated with WSP's team, and the database of affected assets was updated when required. Modifications made include changes to identification document numbers, changes to structure dimensions, and, in some cases, changes to asset owners. In the case of changes to asset owners, ZESCO's team conducted verifications on the field to confirm who was the rightful owner of any given asset.

3.2 AREA AFFECTED BY THE PROJECT

The total area impacted by the Project covers several hundred hectares and is mostly associated with the following project components:

- The wayleave, whose width is either 50 m or 35 m as detailed in Chapter 2, represents a total of 1,606.45 ha (from Pensulo Substation to MK-497), of which:
 - 521.53 ha are given over to agricultural land.
 - 762.03 ha are demarcated as residential land.
 - 152.21 ha are community areas, including 124.68 ha of natural areas used by communities for livelihood (wood, wild fruits, grazing, etc.), 1.33 ha of graveyards and 26.20 ha of other community land (school land, church land, etc.).
- The pylons that will occupy land for a total of:
 - 496 pylons between MK-497 and Mpika Substation (an estimated footprint of 1.64 ha²⁸).
 - 475 pylons between Mpika and Pensulo Substations (an estimated footprint of 1.65 ha).
- Temporary facilities required during construction, including construction camps, access roads, laydown and storage areas, concrete facilities, etc. These are currently not known with certainty.

As explained in Chapter 2, land and crops under the pylon base for the Kasama-Nakonde stretch were not compensated and will be compensated as part of this RAP to address some gaps identified in the RCAP Audit Report (see Appendix 2-1). The 630 pylons on the stretches covered under the RCAP Audit Report will occupy a total area of 5.71 ha:

- 14 pylons between Kasama Substation and MK-497 (an estimated footprint of 0.07 ha²⁹).
- 539 pylons between Kasama and Nakonde Substations (an estimated footprint of 5.22 ha).
- 36 pylons between Nakonde and the Tanzanian border (an estimated footprint of 0.29 ha).
- 41 pylons between Nakonde and Isoka (an estimated footprint of 0.12 ha).

²⁸ Based on technical data provided by ZESCO (see Appendix 2-2).

²⁹ Based on technical data provided by ZESCO (see Appendix 2-2).

There is a total of 106 communities affected by the location of Project-related infrastructure between Pensulo and Kasama. Their location is shown on Maps 3-1 and 3-2 and their characteristics are discussed in Section 3.6. There are 990 PAPs, as detailed in Section 3.7. The following administrative and traditional divisions are crossed by the line route between Pensulo and Kasama and affected by the Project³⁰:

- Three (3) provinces: Northern, Muchinga, and Central.
- Six (6) districts: Kasama, Kanchibiya, Mpika, Lavushi Manda, Chitambo, and Serenje.
- Twenty (20) wards: Kumpumaula, Chiba, Chibundu, Kasamba, Chambeshi, Muchinga, Mansha, Mumbubu, Dnk, Mukungwa, Lubambala, Chishibesonde, Nachifuku, Mutinondo, Chikanda, Nakatambo, Kanona, Chitambo, Muchinka, and Kabamba.
- Seven (7) Chiefdoms: Mwamba, Nkolemfumu, Chanda Mukulu, Mpepo, Chikwanda, Mpumba, and Muchinka.

3.3 CATEGORIES OF PAPs

Considering land use restrictions within the project wayleave, PAPs are exposed to three types of displacement:

- **Physical displacement:** PAPs facing land use restrictions on residential land or loss of dwelling shelter, i.e., whose housing structure will have to be moved, but whose income and livelihood will not be affected. This applies particularly with the fact that the introduction of a registered wayleave with easement prohibits structures within the determined corridor for safety concerns. This is the case for 81 PAPs (of which 29 are eligible to cash compensation as per the independent asset valuation³¹).
- **Economic displacement:** PAPs facing loss of land, assets or access to assets, leading to loss of income sources or increased pressure on livelihoods. This includes the loss of food and cash crops (where destroyed by construction activity) or economic trees. This can result from a non-compliance of assets with wayleave restrictions (trees for instance), damages during construction, temporary loss during construction due to temporary Project infrastructure (worker camps and access roads for instance), or permanent loss of land where pylons will be located. This is the case for 442 PAPs (of which 76 are eligible to cash compensation as per the independent asset valuation).
- **Physical and economic displacement:** PAPs that will lose at least one fruit tree or cultivated or agricultural plot, whether in whole or in part, or a commercial structure and for whom a housing structure will have to be relocated. This is the case for 467 PAPs (of which 221 are eligible to cash compensation as per the independent asset valuation).

It should be noted that most physically affected PAPs (384 of 548 physically or both physically and economically displaced) will only experience land use restrictions on residential land, with only 164 PAPs needing to relocate their dwelling and/or associated structures. This reduces the expected magnitude of physical impact associated with the Project.

³⁰ It should be noted that additional administrative divisions are affected by the project on the Kasama-Nakonde stretch, including Mungwi, Senga Hill, and Nakonde Districts, Mulalo, Popomozi, Ngumba, Isunda, Musyani, Kapongolo, Lualuo, Mulilansolo, Ngulula, Mungwi, Chanfubu, Fube, Iyaya, Kabisha, Mpanda, Lubala, and Chozi Wards, as well as Luchembe, Makasa, Nawaitwika, Mailo, Kabamba, and Nsokolo Chiefdoms.

³¹ As per the entitlement matrix, not all PAPs are eligible to cash compensation as independently valued by Sandridge Associates (for affected structures and titled lands), DACO (for affected fruit trees), or the Forestry Division (for affected exotic trees). Numbers of PAPs eligible to cash compensation for either of these assets are highlighted to reflect compliance with the number of PAPs in independent valuation reports. Remaining PAPs are eligible to assistance, livelihood restoration, or compensation for affected customary land, crops, or indigenous trees only.

More specifically, the compensation framework (detailed in Chapter 4) identifies the following categories of PAPs for which specific measures are provided:

- **Owners and/or occupants of affected housing structures:** PAPs living under the wayleave will be physically resettled prior to construction. People will be allowed to salvage bricks and other material from their houses and secondary structures (e.g., latrine, kitchen, etc.) to be demolished. People will be compensated for the full replacement cost of their primary structures (house). A disturbance allowance will be paid to all PAPs that are physically affected (see Chapter 8).
- **Owners and/or occupants of secondary structures:** PAPs owning secondary structures or equipment (kitchen, latrines, kraal, chicken coop, etc.) located within the wayleave will be compensated for their relocation prior to construction.
- **Owners and/or users of trees of economic value (fruit trees and exotic trees) to be cut down:** all trees located within the wayleave will be cut down as they interfere with the line. Some planted fruit trees (such as mango) and exotic trees (such as pine trees) used for livelihood (fruit, timber, etc.) may be affected. PAPs will be compensated based on the market value of the lost production or based on timber value at maturity. It should be noted that indigenous trees, though used for livelihood, cannot be individualised as per the Forestry Act of 2015. As such, they will be compensated through the livelihood-based reforestation program (see Chapter 8).
- **Owners and/or users of crops that may be damaged during construction activities:** crops under the wayleave will normally not be destroyed and people will be allowed to continue their agricultural activities during construction activities as long as there are no safety issues. However, some crops may be damaged during construction. Those will be compensated at market value following the procedures detailed in Chapter 4.
- **Owners and/or users of agricultural land under the towers (pylons):** some small areas of agricultural land will be permanently impacted by the physical footprint of pylons, because access under a pylon will be restricted and land will become unusable. Lost land and crops will be compensated. It is difficult to identify the exact crops that will be impacted by the location of pylons at this stage. However, an estimated figure is provided in Section 3.4 and budgeted for in Chapter 13.
- **Owners (whether titled or not) of land within the wayleave:** all land under the wayleave will be repurposed and there will be land use restrictions throughout. Restrictions include the prohibition to plant trees that will exceed a height limit, and to build houses or other structures. To compensate for such land repurposing and restriction of rights, landowners will be compensated. For titled land, compensation will be cash, and for customary land compensation will be in-kind.
- **Owners and/or operators of displaced businesses:** businesses operating or having structures within the wayleave will need to be relocated and, as such, will be entitled to cash compensation as well as a disturbance allowance.
- **Employees of displaced businesses:** employment may be interrupted, although the relocation of businesses will be made prior to the start of construction. As such, employees will be eligible to compensation for lost salary.
- **Communities with affected structures or land:** community structures will need to be relocated, and community land will be repurposed. Structures will be compensated at full replacement value and a CSI Fund will be secured by ZESCO and expended in communities that are losing customary land throughout the project duration. This fund will be dedicated to developing social infrastructure in affected communities (see Section 8.4.2).

Private and collective assets located within the wayleave and affected by the project area further described in Section 3.4.

3.4 DESCRIPTION OF PRIVATE AND COLLECTIVE ASSETS TO BE AFFECTED

The census allowed for the identification of all assets that will be impacted by the Project. Table 3-1 summarizes the number of PAPs for each type of impact. A detailed description of private and collected affected assets is provided in the sub-sections below.

Table 3-1 Number of PAPs by Impact Type

Type of Impact	Categories of PAPs	Number of PAPs ³²
Physical Displacement		
Permanent loss of residential land ³³ - either under easement or pylon base	Owner of titled land	22 PAPs will be affected by the loss of a titled residential land (totalling 95.94 ha of affected area).
	Owner of land under customary tenure	518 PAPs will be affected by loss of customary residential land. Most PAPs have one affected customary residential parcel, but six PAPs have two for a total of 524 affected customary residential parcels (totalling 671.65 ha of affected area).
Permanent relocation of housing structure	Owner of housing structure (regardless of tenure type)	136 PAPs will lose a residential structure. Some of these PAPs have more than one house. The total number of houses to be demolished is 172.
	Tenant	Three (3) housing rentals with charge were identified, meaning that three (3) tenants and three (3) associated landlords are eligible to transitional rental allowance.
Permanent relocation of secondary structures and immovable equipment	Owner of structure/ equipment (regardless of tenure type)	139 PAPs will lose at least one secondary structure (e.g., kitchen, latrine, etc.). Many of these PAPs will lose more than one secondary structure. The total number of secondary structures to be demolished is 409.
Economic Displacement – Commercial Structures		
Permanent relocation of commercial structures – either under easement of pylon base	Owner of commercial structure and parcel (titled landowners or communal landowners ³⁴)	Five (5) businesses will be impacted with three (3) commercial structures requiring to be relocated.
	Tenant	No commercial tenant was inventoried within the wayleave.
	Employee	A total of four (4) employees working for one (1) affected business were identified.
Temporary disruption of commercial structures during construction	Operator	The location of temporary disruption is not known yet as this is associated with construction and decisions on key temporary construction infrastructure, e.g. laydown areas. As such, no temporarily affected business operator or employee has been identified. However, should some be affected at a later stage, they will be eligible to compensation and assistance as detailed in Chapter 4.
	Employee	

³² It should be noted that some PAPs have more than one type of affected assets. As such, the sum of the number of PAPs per type of affected asset does not equal the total number of PAPs (990).

³³ For land to be categorized as residential it requires that at least one dwelling structure is present on the parcel to be impacted. The structure does not need to be within the portion of the parcel that is within the wayleave.

³⁴ All businesses are located on customary residential land, already captured above.

Type of Impact	Categories of PAPs	Number of PAPs ³²
Economic Displacement – Agricultural Land, Crops, and Economic Trees		
Easement over agricultural land (permanent loss of rights)	Holder of titled land	An estimated area of 39.14 ha of titled agricultural land is expected to experience a permanent loss of right due to the easement. There are 8 titled agricultural parcels belonging to 8 PAPs that would be eligible to compensation for loss of rights (i.e., parcels that are currently used for soon-to-be restricted activities).
	Owner of land or land use rights under customary tenure	There are 252 parcels with customary tenure that are expected to experience a permanent loss of right due to the easement. Those belong to 251 PAPs.
Permanent loss of agricultural plot under pylon base	Owner of land or land use rights (titled)	It is estimated that 0.98 ha of agricultural land will be affected by the pylons' location ³⁵ . Owners and tenants will be identified before construction and will be eligible to compensations set out in Chapter 4.
	Owner of land or land use rights under customary tenure	
	Occupier without legal rights or claims	
	Tenant	
Permanent loss of crops ³⁶	Farmer (regardless of tenure type)	Crops located under the pylons' base have an estimated area of 0.66 ha. As the affected areas are not known yet, specific PAPs were not identified. However, 320.6 ha of areas under cultivation, owned by 597 PAPs were inventoried. Compensation will only be paid for crops that are destroyed during works (the specific PAPs, the extent of their losses and compensation amounts will be detailed in an Addendum when the location of pylon is final).
Permanent loss of individualised exotic/ fruit economic trees	Owner of the tree (regardless of tenure type)	A total of 5,045 fruit trees and 88 exotic trees were inventoried, belonging to 238 PAPs.
Private Graves and Cultural Assets		
Permanent relocation of graves	Owner (regardless of tenure type)	There are no private graves or cultural assets located in the wayleave. With the continuous implementation of ZESCO Chance Find Procedure, graves or cultural assets may be identified during construction.
Community Impacts		
Permanent relocation of community structure	Owner of structure or community	A total of eight (8) community structures are located within the wayleave.
Permanent loss of association/ institution land	Association (religious groups or others) or institution owning an affected piece of land	A total of ten (10) associations or institutions own a piece of land that is crossed by the line route and are affected by land repurposing. The affected area represents 26.20 ha.
Permanent relocation of cemeteries	Community	A total of three (3) graveyards are affected. The land is crossed by the wayleave and some graves may have to be relocated. The affected area represents 1.33 ha. With the continuous implementation of ZESCO Chance Find Procedure, other cemeteries may be identified during construction.

³⁵ The precise number of PAPs affected by this type of loss is not yet known as the location of pylons could still be slightly modified by the Contractor. However, it can be estimated that each pylon located on customary agricultural land will be affecting a separate PAP. Since 30% of the wayleave is customary agricultural land, it can be assumed that 30% of pylons (i.e., 289) will be located on such land, affecting 289 PAPs. Affected land will be identified and valued once the final precise location of pylons is known and will be included in an Addendum to the current RAP.

³⁶ Those figures exclude the eligible PAPs along the Kasama-Nakonde stretch. It is estimated that 1.14 ha of crops may be affected on that stretch, associated to the pylons' base.

Type of Impact	Categories of PAPs	Number of PAPs ³²
Permanent relocation of cultural and sacred sites	Community	There are no community cultural or sacred sites located in the wayleave. With the continuous implementation of ZESCO Chance Find Procedure, such sites may be identified during construction.
Permanent loss of indigenous natural trees of use value located on individualised parcels	Community	A total of 28,930 indigenous trees were inventoried on affected parcels. Those are not eligible for compensation under the Forestry Act of 2015. However, they will benefit from the livelihood-based reforestation program.
Permanent loss of natural products harvesting areas and land under easement	Community	A total of 27 natural areas under customary tenure are used by community members for livelihood activities such as wood collection, water collection and grazing. Those areas represent a total affected area of 124.68 ha. Among those are 22 open forested areas, bush, fallow land or grazing land where indigenous trees potentially used by communities for livelihood will be lost, covering 117.92 ha.
Permanent land use restrictions over customary land under easement	Community	Communities and TAs will be expected to grant replacement land to affected customary landowners at no cost. A total of 1,107.51 ha of parcels under customary tenure were identified within the wayleave.

3.4.1 PRIVATE ASSETS

As detailed in Section 3.1, private assets were inventoried within the wayleave during the census conducted in August 2024 and September 2024. These assets will need to be displaced for safety reasons. The number and type of affected assets inventoried are presented below. Some types of affected assets (namely titled land, structures and fruit/exotic trees) were independently valued between February and April 2025. The number of affected assets presented in the following subsections for affected titled lands, structures and fruit/exotic trees are in line with independent valuation reports from Sandridge Associates (affected titled land and structures), DACO (affected fruit trees), and the Forestry Department (affected exotic trees). For other affected assets such as customary land and crops, the data presented below was solely extracted from the full wayleave census conducted in August and September 2024 as no formal independent valuation was required for those assets.

3.4.1.1 LAND

The wayleave crosses a total of 1,019 parcels owned or used by 990 PAPs (Table 3-2). While the majority of PAPs have only one affected parcel, 29 PAPs own or use two parcels located within the wayleave. These include 18 PAPs in Northern Province, seven (7) in Muchinga Province and four (4) in Central Province. It should be noted that all land will be affected permanently even when not entirely alienated. This is due to land use restrictions that will be applied within the wayleave throughout the operation phase.

Table 3-2 Overview of Affected Parcels, by Province

Affected assets	Province			Total	
	Northern	Muchinga	Central		
Number of affected parcels	358	533	128	1,019	
Number of PAPs	340	526	124	990	
Number of parcels owned/used by PAPs	One parcel	322	519	120	961
	Two parcels	18	7	4	29

Source: Household Survey, August-September 2024

As shown in Table 3-3, most affected parcels are denoted as residential (544), i.e., there is a least one dwelling structure, within the wayleave or not, on the impacted parcel³⁷. A significant portion of affected parcels (475 parcels) are used for economic purposes only, i.e., they are used for livelihood activities and contain trees, crops, or grazing land. A number of residential parcels are also used for economic activities such as trees and crops.

Table 3-3 Type of Affected Parcels, by Province

Type of parcel	Province			Total
	Northern	Muchinga	Central	
Agricultural parcel	108	300	67	475
Residential parcel	250	233	61	544
Total number of affected parcels	358	533	128	1,019

Source: Household Survey, August-September 2024

It should be noted that some parcels are located within the Kanona Forest Reserve, near the Pensulo Substation (Central Province), and the Nkole Mfumu Forest Reserve in Northern Province. A total of 63 parcels were identified in the Kanona Forest Reserve (including 35 residential parcels) and seven (7) parcels were identified in the Nkole Mfumu Forest Reserve (including one residential parcel). As per the entitlements detailed in Chapter 4, those are not eligible for compensation for land.

As shown in Table 3-4, most PAPs own their affected parcels, with owners representing more than 80% across provinces. One (1) squatter was also identified in Northern Province as well as two (2) in Muchinga Province.

Table 3-4 Occupation Type for Affected Parcels, by Province

Occupation type	Province			Total ¹
	Northern	Muchinga	Central	
Ownership	304 [84.9%]	436 [81.8%]	106 [82.8%]	846 [83.0%]
Rental (with or without charge)	54 [15.1%]	97 [18.2%]	22 [17.2%]	173 [17.0%]
Squatting	1 [0.0%]	0 [0.0%]	0 [0.0%]	1 [0.1%]
Total number of affected parcels	358	533	128	1019

Source: Household Survey, August-September 2024.

Note: ¹ Percentages may not add up to 100% due to rounding.

Of the 846 owned parcels, 732 (86.5%) are owned under customary tenure. Other types of ownership are shown in Table 3-5. As confirmed during the independent valuation process conducted by Sandridge Associates, there are 27 titled parcels and three (3) with title deeds currently being processed.

³⁷ Dwelling structures located outside the wayleave are considered to identify what plots are used for residential purposes, though structures located outside the wayleave will neither be relocated nor compensated.

Table 3-5 Parcel Ownership Types, by Province

Type of ownership	Province			Total ¹
	Northern	Muchinga	Central	
Customary	258 [84.9%]	372 [85.3%]	102 [96.2%]	732 [86.5%]
Titled ²	21 [6.9%]	5 [1.1%]	1 [0.9%]	27 [3.2%]
Resettlement scheme	0 [0.0%]	23 [5.3%]	0 [0.0%]	23 [2.7%]
Title currently being processed ²	0 [0.0%]	3 [0.7%]	0 [0.0%]	3 [0.4%]
Other ³	8 [2.6%]	3 [0.2%]	0 [0.0%]	8 [1.3%]
Not specified	17 [5.6%]	30 [6.9%]	3 [2.8%]	50 [5.9%]
Total number of owned affected parcels	304	436	106	846

Source: Household Survey, August-September 2024.

Notes: ¹ Percentages may not add up to 100% due to rounding.

² The numbers of affected titled parcels and parcels with a title currently being processed were initially identified during the census and validated during the independent valuation process. Numbers presented are thus aligned with the independent valuation report (Appendix 8-1).

³ The 'Other' category includes conflicted land and agreements whose nature could not be clearly associated with one of the tenure types.

In the case of rentals, Table 3-6 shows that most parcels are loaned free of charge, especially for parcels in Central Province where 72.7% of rented parcels are loaned. There is a number of caretakers (9.2%) as well as users without any formal rental agreement (9.8%).

Table 3-6 Parcel Rental Types, by Province

Rental Types	Province			Total ¹
	Northern	Muchinga	Central	
Loan (free of charge)	30 [55.6%]	57 [58.8%]	16 [72.7%]	103 [59.5%]
Rental (with charge)	5 [9.3%]	4 [4.1%]	1 [4.5%]	10 [5.8%]
Caretaker ²	12 [22.2%]	3 [3.1%]	1 [4.5%]	16 [9.2%]
No formal rental agreement	2 [3.7%]	13 [13.4%]	2 [9.1%]	17 [9.8%]
Unknown	3 [5.6%]	7 [7.2%]	0 [0.0%]	10 [5.8%]
Not specified	2 [3.7%]	13 [13.4%]	2 [9.1%]	17 [9.8%]
Total number of rented affected parcels	54	97	22	173

Source: Household Survey, August-September 2024

Notes: ¹ Percentages may not add up to 100% due to rounding.

² A 'caretaker' usually refers to someone who looks after a property, including gardening, farming, maintenance, and security. The goal being to avoid encroachments and opportunistic occupation of land in the absence of the owner. Caretaking agreements may or may not include a salary but are most often informal agreements in exchange for lodging and/or the ability to farm parts of the land.

3.4.1.2 STRUCTURES

A total of 584 affected structures located partially or completely within the wayleave (Table 3-7) were identified during the census and validated during the independent valuation by Sandridge Associates, including 172 residential structures (137 main residences and 35 auxiliary houses), 106 ordinary pit latrines, 90 bathrooms, and 70 kitchens³⁸.

³⁸ Where secondary structures and/or immovable assets are affected, the impact is considered to be physical. In most cases, owners of affected secondary structures/ fixed equipment also have affected residential structures or residential land (which qualifies them as definitively physically displaced). However, there are eight (8) PAPs that own affected secondary structures but no housing. Structures for these PAPs are wells, bathrooms, animal pens, fishponds, kitchens and one latrine. The current RAP considers these PAPs to be physically displaced.

The numbers presented in Table 3-7 are thus aligned with the independent valuation report (Appendix 8-1). More than half of all affected structures are located in Northern Province (379 structures), especially in Mwaushi and Chanda Mukulu where the line route follows the M1 road. Affected structures will need to be relocated, and owners/users are eligible to compensation and assistance as detailed in Chapter 4. Photos 3-1 to 3-4 show typical nature of affected structures inventoried in the wayleave.

It should be noted that a number of those structures are either dilapidated (34 structures) or under construction (12 structures). Some structures (58 structures) are dilapidated, but it was possible to confirm that they were standing and functional at the date of the previous census. When such situations could be verified with the past census data, the state of the structure at the time of the last survey was considered, given that it could be argued that they were abandoned in anticipation of resettlement.

It should be noted that three (3) housing rentals with charge were identified, meaning that there are three tenants and three associated landlords eligible to transitional rental allowance (see Section 8.2.2).

Table 3-7 Type and Number of Affected Structures, by Province

Type of structure	Province			Total
	Northern	Muchinga	Central	
Residential structures				
Main residence	84	48	5	137
Auxiliary house	25	8	2	35
Sub-total residential structures	109	56	7	172
Secondary structures and fixed equipment				
Ordinary pit latrine	66	28	12	106
Bathing room/area	60	26	4	90
Kitchen	52	15	3	70
Well - Traditional	33	10	0	43
Animal - Pen or housing	17	18	1	36
Plate stand	24	3	1	28
Shelter	5	6	1	12
Fishpond	5	2	0	7
Storeroom	4	2	1	7
Fence / Enclosure	1	2	0	3
Warehouse/storehouse	2	0	0	2
Kiln	0	0	2	2
Maize barn	0	2	0	2
Outdoor living room	1	0	0	1
Sub-total secondary structures and fixed equipment	270	114	25	409
Commercial structures				
Shop	0	3	0	3
Sub-total commercial structures	0	3	0	3
Total number of affected structures	379	173	32	584

Source: Valuation Reports (Appendix 8-1).



Source: WSP, 2024

Photo 3-1 Typical Residential Structure



Source: WSP, 2024

Photo 3-3 Typical Pit Latrine



Source: WSP, 2024

Photo 3-2 Typical Kitchen



Source: WSP, 2024

Photo 3-4 Typical Bathing Area

The three commercial structures inventoried are associated with five businesses, two of which were inventoried but are not associated with any immovable structures to be compensated. These are a privately owned sports field rented out to community members and a location used for making burnt bricks, both in Northern Province.

No grave nor private sacred site were inventoried within the wayleave.

3.4.1.3 ECONOMIC TREES

A total of 34,063 economic trees were inventoried within the wayleave and will need to be cut down, including 20,697 mature trees and 13,366 immatures trees. The number of economic trees inventoried within the wayleave during the socio-economic survey and validated during the valuation process conducted by DACO for fruit trees and the Forestry Department for exotic trees (see Chapter 8), are detailed in Table 3-8. They include 5,045 fruit trees and 88 exotic trees, as well as 28,930 indigenous trees used by PAPs for livelihood (either for fruit or timber). It should be noted that figures presented in Table 3-8 include both mature and immature trees. As per the eligibility criteria set out in Chapter 4 and the Forestry Act of 2015, exotic/fruit trees are eligible for cash compensation, but indigenous trees are not³⁹.

³⁹ As per the Forestry Act of 2015, indigenous trees are not eligible to cash compensation paid to individual PAPs as ownership of such trees is vested in the President (article 3).

Table 3-8 Number of Affected Economic Trees, by Province

Tree species	Province			Total
	Northern	Muchinga	Central	
Fruit trees (as identified and valued by DACO)				
Banana	1,351	1,448	302	3,101
Mango	800	468	17	1,285
Guava	43	182	12	237
Avocado	57	65	4	126
Mexican Apple	36	59	5	100
Lemon	46	31	1	78
Orange	37	34	0	71
Other ¹	28	25	14	67
Sub-total fruit trees	2,378	2,312	355	5,045
Exotic trees (as identified and valued by the Forestry Department)				
Pine tree	17	29	0	46
Gmelina arborea	16	3	0	19
Ornamental tree	0	14	0	14
Eucalyptus	7	0	0	7
Cypress	1	1	0	2
Sub-total exotic trees	41	47	0	88
Indigenous trees (as identified during the census)				
Wild loquat (Amasuku)	236	3,844	2,003	6,083
Mfungo	128	882	488	1,498
Mobola plum (Mupundu)	197	571	609	1,377
Bamboo	557	0	0	557
Natal orange (Kasongolo)	252	162	61	475
Musafwa	1	85	319	405
Thorned shrub	48	289	14	351
Nsongwa	96	34	16	146
Not specified	3,357	10,890	2,201	16,448
Other indigenous trees ²	1,017	492	81	1,590
Sub-total indigenous trees	5,889	17,249	5,792	28,930
Total number of affected trees	8,267	19,561	6,147	34,063

Source: Household Survey, August-September 2024; DACO Valuation Reports (Appendix 8-2) and Forestry Department Valuation Reports (Appendix 8-3).

Note: ¹ The 'Other fruit tree' category includes mulberry, mandarine, castor oil, and papaya.

² The 'Other indigenous tree' category includes several species, including onalmet trees, cactus, wild loquat, *Azzeria quazensis*, fish-bean, *Pterocarpus angolensis*, *Commiphora mollis*, and baobab.

The most common economic trees recorded within the wayleave are the wild loquat (Amasuku), mostly found on parcels in Muchinga and Central provinces, the banana and mango trees are the most widespread among fruit trees, whereas pines are the most common exotic trees.

3.4.1.4 CROPS

There are a number of fields used for agriculture within the wayleave. Though crops will be allowed within the wayleave if they are under 2 m in height, they were inventoried as they may be affected permanently by the pylons or temporarily by construction activities or related infrastructure. The most widespread type of crop that is grown within the wayleave is maize, followed by cassava and groundnut (Table 3-9). There are also relatively large areas of fallow land (43.68 ha). The compensation for crops will however be based on the crops that will be affected during construction and not necessarily the data provided in Table 3-9.

Table 3-9 Area (in ha) of Crops within the Wayleave, by Province

Type of crop	Province			Total
	Northern	Muchinga	Central	
Maize	17.39	91.88	13.22	122.50
Cassava	28.09	20.00	6.88	54.97
Groundnuts	5.46	14.28	0.38	20.12
Sweet potatoes	9.50	8.46	1.80	19.77
Beans	3.87	12.61	1.44	17.92
Soya beans	1.77	3.21	4.45	9.43
Market gardening (vegetables)	1.27	5.24	0.71	7.22
Millet	0.72	4.12	0.57	5.41
Sunflower	0.00	4.51	0.00	4.51
Sorghum	0.00	1.77	0.63	2.40
Bambara nuts	2.04	0.08	0.00	2.13
Not specified	0.13	1.34	0.18	1.65
Other ¹	2.14	2.25	0.09	4.48
Subtotal of crop area	72.40	169.74	30.36	272.50
New fields	1.00	2.43	1.01	4.45
Fallow land	2.98	35.05	5.65	43.68
Total agricultural area	76.38	207.22	37.02	320.63
Number of parcels with crops	210	335	68	613
Average area of crops (excluding new fields and fallow land) per affected parcel	0.34	0.51	0.45	0.44

Source: Household Survey, August-September 2024

Note: ¹ The 'Other' category includes papaya, lemon, Mexican apple, jatropha, mupapa, mulombwa, eucalyptus, apricot, cactus, baobab, fish-bean, white apple, mana and other indigenous trees.

As stated previously, most crops will be maintained in the wayleave. As such, not all crops will be compensated. However, crops located under the pylons will be destroyed and therefore compensated. The compensation for crops will be based on the crops that will be affected during construction and not the data provided in Table 3-9.

However, as detailed in Chapter 8, the data in Table 3-9 was used to provide an estimate of costs for the compensation of crops. Based on the proportion of the wayleave that is cultivated (320.63 ha out of 1,606.45 ha of wayleave area, i.e., 20%), there should be an estimated 0.66 ha of affected crops underneath the pylons between Pensulo and Kasama (20% of the pylon footprint of 3.29 ha) and 1.14 ha between Kasama and Nakonde (20% of the pylon footprint of 5.71 ha). The final figures for affected crops will be disclosed in a RAP Addendum.

3.4.2 COMMUNAL ASSETS

Several communal assets, including community structures and land, sacred sites and natural areas used for livelihood have been recorded within the wayleave. They are presented and briefly described in Table 3-10 and represent a total affected area of about 152.21 ha. Maps 3-1 and 3-2 show the geographical location of these various communal assets. Photos 3-5 to 3-10 show some of the affected assets.

Among the affected community structures, there is a community borehole in Demo Daily, an unprotected well in Chanda Mukulu, church auxiliary buildings (one bathing area and two pit latrines) in Leo, two auxiliary buildings, both under construction, in Chanda Mukulu and Ngobesha, and a church building in Kasenga.

Some community land is also crossed by the transmission line, including school lands in Kapwanya, Chaiwa and Ngalande, hospital land in Mpumba and church land in Chanda Mukulu and Leo. Two football grounds are also partially affected by the wayleave, as well as a community farm in Ngobesha and a cooperative land in Malambwa. There were six (6) mango trees identified on a church land in Chanda Mukulu.

In terms of sacred sites, three graveyards were recorded within the wayleave in Mwaba Malama, Ngobesha and Kamuchanga. Additional stakeholder engagement was completed with headmen of those communities to confirm that graves could be moved if needed. As detailed in Chapter 11, all three headmen opted for keeping the graves in place if that was possible, but agreed that graves could be moved if required, conditional to the appropriate rituals being conducted. It should be noted that those graveyards have a low density of graves, with only four graves having been located on the 1.33 ha area of graveyard.

Aside from those, 27 natural areas under customary tenure (bushes, forested areas, rivers, and wetlands) are used by community members for livelihood activities such as wild fruit picking, wood and water collection, grazing and gardening, among others. Among those, there are 22 natural areas that have indigenous trees used by communities for livelihood, covering 117.92 ha. It is estimated that those contain about 25,117 trees⁴⁰ that will be compensated in-kind through the livelihood-based reforestation program (see Chapter 8).

⁴⁰ As per the Biodiversity Management Plan, it is estimated that natural habitats contain, on average, 213 stem/ha (see ESMP, stand alone report).



Source: Community Survey, August-September 2024.

Photo 3-5 Community Borehole in Demo Daily



Source: Community Survey, August-September 2024.

Photo 3-6 Football Ground in Chanda Mukulu



Source: Community Survey, August-September 2024.

Photo 3-7 Graveyard in Ngobesha



Source: Community Survey, August-September 2024.

Photo 3-8 Manyowe Farm in Ngobesha



Source: Valuation Report (Appendix 8-1).

Photo 3-9 Affected Church in Kasenga



Source: Community Survey, August-September 2024.

Photo 3-10 Community Forest in Mukonteka

Table 3-10 Affected Communal Assets recorded within the Wayleave

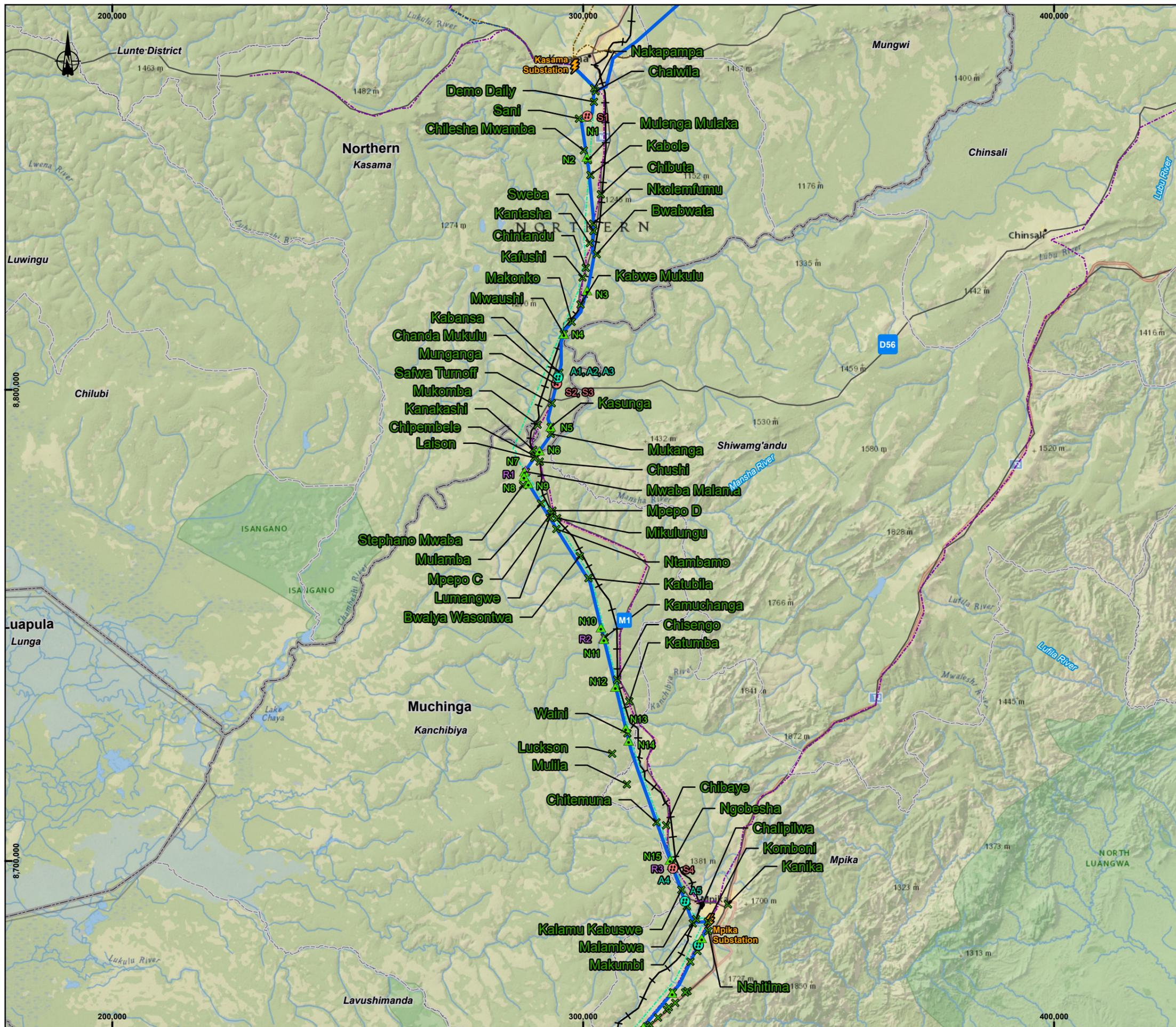
Type of asset	ID ¹	Province	District	Community	Description
Community structure and land					
Borehole	S1	Northern	Kasama	Demo Daily	The borehole fitted with a hand pump, located on a private parcel, is owned by the community.
Church land	A1	Northern	Kasama	Chanda Mukulu	Affected area is 3,557.90 m ² . Used for crop farming and mango trees, owned by St Kalolo Lwanga Catholic Church. Church owns six (6) affected mango trees located on its land.
Church land	A2				Affected area is 1,893 m ² . Land owned by the Jehovah Witness Church.
Shelter	S2				Shelter under construction (about 20% completed), owned by Mu Nganga Cooperative. Located on a land, owned by the cooperative, of which 1,899.91 m ² are affected. The incomplete shelter is 11.8 m ² and made of timber gum pole frames.
Unprotected well	S3				Owned by Mu Nganga Cooperative, unprotected well with an approximate depth of 10 m.
Football ground	A3				Football field known as Microwave Ground used by community members.
Community farm	A4	Muchinga	Mpika	Ngobesha	The name of this community farm is Manyowe Farm and the affected area is 121,487.30 m ² . A building (worker's cottage), in poor state is located in the wayleave. It has asbestos roofing, plastered concrete block walls and concrete screed floor, with a total area of 32.4 m ² .
Auxiliary house	S4				
Cooperative land	A5	Muchinga	Mpika	Malambwa	The land, owned by a cooperative, is used by community members for wood and wild fruit as well as crop farming. The affected area is 6,264.30 m ² .
Church land	A6	Muchinga	Mpika	Leo	Pentecostal Holiness Church land. Affected area is 17,800 m ² and mostly consisting of forest area. Affected assets include a bathing area (12 m ²) and two pit latrines (9 m ² each). It was agreed by the Church Elder that those assets could be moved.
Bathing area	S5				
Pit latrines (2)	S6, S7				
Church building	S8	Muchinga	Mpika	Kasenga	Main church building made from grass thatched with a total area of 38.9 m ² .
School land	A7	Muchinga	Lavushi Manda	Chaiwa	Reserved land for the construction of Red Rhino Secondary School. Affected area is 9,327.96 m ² .
Hospital land	A8	Muchinga	Lavushi Manda	Mpumba	Reserved land for the construction of Lavushi Manda Hospital. Affected area is 75,800 m ² . Area is currently used by community members for wild fruit and honey.
School land	A9	Muchinga	Lavushimanga	Kapwanya	School land for Kapwanya Primary School. Affected area is 10,246 m ² and includes a football field.
School land	A10	Central	Chitambo	Ngalande	Affected area is 13,727.46 m ² . None of the school infrastructure (classroom, sports field, etc.) are within the wayleave. Main building is 170 m from the edge of the wayleave.

Type of asset	ID ¹	Province	District	Community	Description
Sacred assets					
Graveyard	R1	Muchinga	Kanchibiya	Mwaba Malama	The affected area is 10,312.75 m ² . The graveyard, used as a burial site and cemetery, is owned by the community, and it was agreed with the headman that graves could remain in place or be moved if the appropriate rituals were followed.
Graveyard	R2	Muchinga	Kanchibiya	Kamuchanga	The affected area is 1,950.60 m ² . The graveyard, used as a burial site and cemetery, is owned by the community, and it was agreed with the headman that graves could remain in place or be moved if the appropriate rituals were followed.
Graveyard	R3	Muchinga	Mpika	Ngobesha	The affected area is 986.71 m ² . The graveyard is owned by the community, and it was agreed with the headman that graves could remain in place or be moved if the appropriate rituals were followed.
Natural areas used for livelihood					
River / wetland	N1	Northern	Kasama	Demo Daily and Sani	River Mulilansolo separates Demo Daily and Sani communities. Affected area of 11,397.70 m ² is used by community members for water collection and gardening.
Stream	N2	Northern	Kasama	Chileshe Mwamba	Chibuli Stream is used by community members for water collection. Affected area is 2,676.31 m ² .
River / wetland	N3	Northern	Kasama	Kafushi	Affected area is 4,403 m ² and is used for wild fruit and wood gathering by community members.
Fallow land	N4	Northern	Kasama	Mwaushi	Affected area is 3,222.49 m ² . Mainly used for wild fruit picking.
Bush	N5	Northern	Kasama	Kasunga	Affected area is 569.64 m ² . Used for medicinal plants, wood and wild fruit gathering as well as grazing.
Fallow land	N6	Muchinga	Kanchibiya	Kanakashi	Affected area is 26,593.77 m ² . Used for collecting medicinal plants, wood, wild fruit and wood, and for grazing.
Bush	N7	Muchinga	Kanchibiya	Mwaba Malama	Affected area is 4,889.4 m ² . Bush is used for wood and wild fruit collection as well as grazing.
Bush	N8				Affected area is 52,711.9 m ² .
Bush	N9	Muchinga	Kanchibiya	Stephano Mwaba	Affected area is 34,406.68 m ² . Used for collecting medicinal plants, wood, wild fruit and water, and for grazing.
Grazing land	N10	Muchinga	Kanchibiya	Kamuchanga	Affected area is 74,400 m ² .
Wetland	N11				Affected area is 9,355 m ² . Wetland is used for water collection and grazing.
Community forest	N12	Muchinga	Kanchibiya	Chisengo	Affected area is 38,499.31 m ² . Community forest is used for wood and wild fruit collection.
Bush	N13	Muchinga	Kanchibiya	Waini	Affected area is 42,174.12 m ² .
Bush	N14	Muchinga	Kanchibiya	Luckson	Affected area is 24,272.79 m ² . Used by community members for the collection of medicinal plants and wild fruit.
Wetland	N15	Muchinga	Mpika	Ngobesha	Affected area is 41,651.07 m ² . Used for water collection and gardening.
Community forest	N16	Muchinga	Mpika	Nshitima	Affected area is 3,500 m ² . Nshitima Forest is used by community members for wood collection.
Grazing land	N17	Muchinga	Mpika	Chisongo	Land used for grazing. Affected area is 8,650.70 m ² .

Type of asset	ID ¹	Province	District	Community	Description
Community forest	N18	Muchinga	Mpika	Kapata	Used for collecting medicinal plants, wood and wild fruits and for grazing. Affected area is 57,300 m ² .
Fallow land	N19	Muchinga	Mpika	Kabutula	Affected area is 94,448 m ² . Community land is used for wild fruit collection and grazing.
Grazing land	N20	Muchinga	Mpika	Masanta	Land used for grazing. Affected area is 130,987.29 m ² .
Community forest	N21	Muchinga	Mpika	Nkuka	Affected area is 139,538.26 m ² . Community forest is used for wild fruit and water collection.
Community forest	N22	Muchinga	Mpika	Chibeka Nkuka	Affected area is 79,762.61 m ² . Chibeka Nkuka Forest is used for wood and wild fruit collection.
Bush	N23	Muchinga	Mpika	Chibuye Chibuye	Affected area is 86,510.73 m ² . Bush is used by community members for wood collection.
Community forest	N24	Muchinga	Lavushi Manda	Mpumba	Lavushi Manda Town Council Forest Area, used for medicinal plant and wild fruit collection. Affected area is 17,600 m ² .
Bush	N25	Muchinga	Lavushi Manda	Kamanango	Affected area is 73,429.65 m ² .
Grazing land	N26	Muchinga	Lavushi Manda	Mpumba	Affected area is 181,322.33 m ² . This community land is used for grazing and wood collection.
River / wetland	N27	Central	Chitambo	Katoba	Affected area of 2,565 m ² is used by community members for gathering wild fruits and mushrooms.

Source: Community Survey, August-September 2024.

Note: ¹ ID numbers refer to Maps 3-1 and 3-2.



Human Environment

- Northern**
 - Province Limit
- Nakonde**
 - District Limit
- Affected Community

Affected community assets

- Community structure
- Community area
- Natural area
- Religious/sacred area

Infrastructure

- Road
- Railroad
- Existing Distribution Line
- Existing Transmission Line, 33kV
- Existing Transmission Line, 66kV
- Existing Transmission Line, 330kV

Project Components

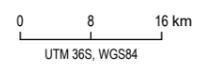
- Proposed 330kV Transmission Line
- Substation

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Resettlement Action Plan (RAP) Update

Map 3-1
Affected Communities and Communal Assets
Kasama-Mpika Segment

Sources :
ESRI, National Geographic and World Hillshade
MapLibrary, Africa World
Open Street Map, 2019, roads, railways, rivers
Zambia Ministry of Land, districts

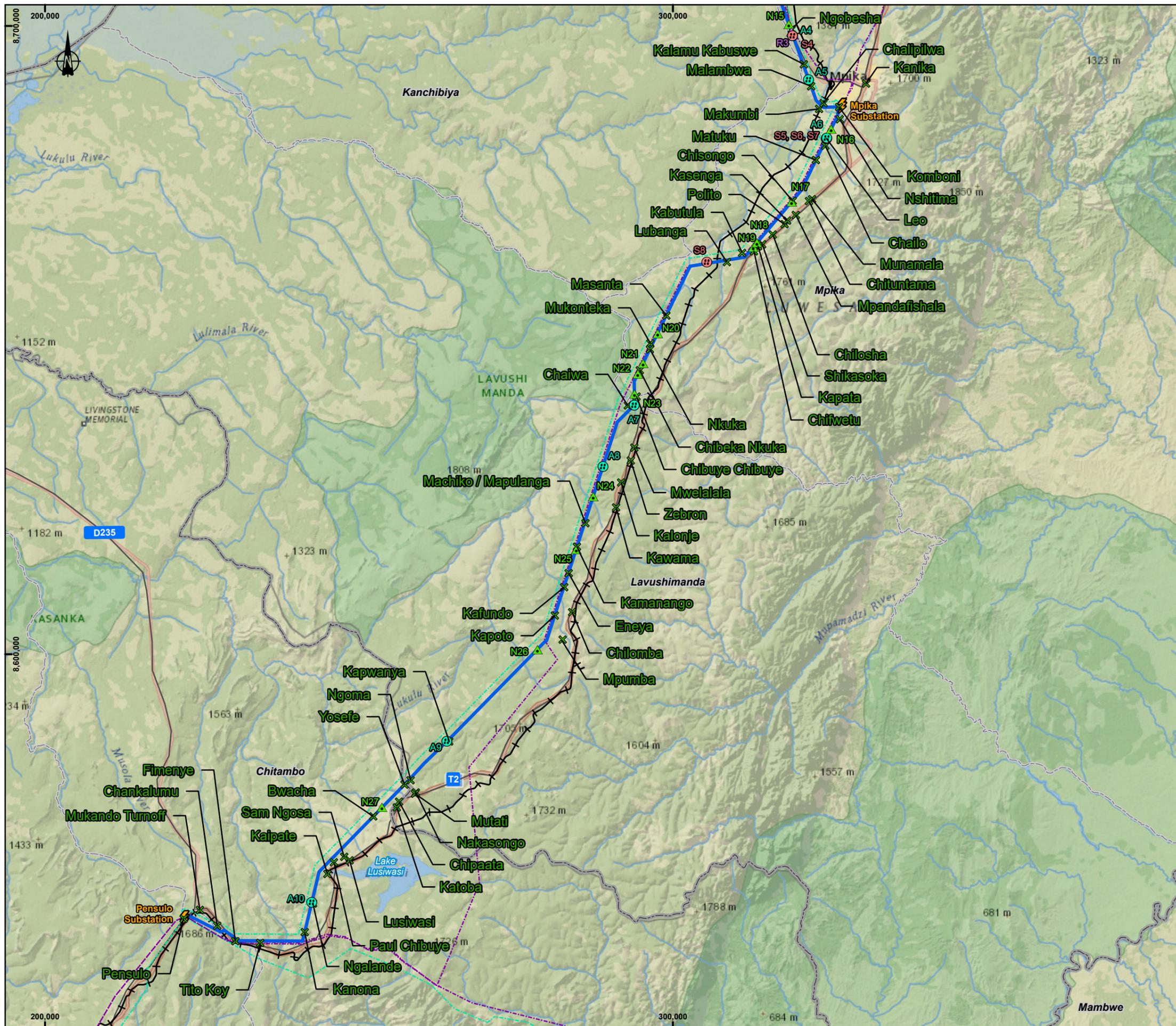


11 November 2024

Preparation: C. Gagnon-Champigny
Drawing: F. St-Hilaire-Dorion
Validation: H. Chouinard
RAP_ResettlementActionPlan_241111.aprx
CA0027197_T329_RAP3_1_AffectedCom_North_047_241111



Boundaries and measurements shown on this document must not be used for engineering or land survey delineation. A land register analysis conducted by a land surveyor was not undertaken.



Human Environment

- Northern**
 - Province Limit
- Nakonde**
 - District Limit
- Affected Community

Affected community assets

- Community structure
- Community area
- Natural area
- Religious/sacred area

Infrastructure

- Road
- Railroad
- Existing Distribution Line
- Existing Transmission Line, 33kV
- Existing Transmission Line, 66kV
- Existing Transmission Line, 330kV

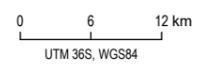
Project Components

- Proposed 330kV Transmission Line
- Substation

Zambia-Tanzania Interconnector Project
 Resettlement Action Plan (RAP) Update

Map 3-2
Affected Communities and Communal Assets
Mpika-Pensulo Segment

Sources :
 ESRI, National Geographic and World Hillshade
 MapLibrary, Africa World
 Open Street Map, 2019, roads, railways, rivers
 Zambia Ministry of Land, districts



11 November 2024

Preparation: C. Gagnon-Champigny
 Drawing: F. St-Hilaire-Dorion
 Validation: H. Chouinard
 RAP_ResettlementActionPlan_241111.aprx
 CA002197_T329_RAP3_2_AffectedCom_South_048_241111



Boundaries and measurements shown on this document must not be used for engineering or land survey delineation. A land register analysis conducted by a land surveyor was not undertaken.

3.5 VULNERABLE PAPS

Any person that may be faced with disproportionate impacts or challenges that constitute a disadvantage due to resettlement is considered vulnerable. Good international practices also recommend classifying persons that are heavily dependent on others for coping strategies or livelihood assistance as “vulnerable”.

Vulnerable PAPS were identified based on data gathered during the census. As detailed in Chapter 4, those PAPS will qualify for additional assistance. This would be made up of aspects such as in-kind compensation, upon request, and additional counselling.

For all PAPS, ZESCO provides cash compensation and leaves the responsibility of rebuilding the house with this money to the PAP. This is at full replacement value and allows for materials and cost of labour to rebuild. Socioeconomic surveys indicate that in addition to cash compensation, many PAPS will also disassemble their house to remove salvageable materials and then rebuild a structure further away from the wayleave.

Since this activity is physically difficult, most widows and physically challenged heads of household will require help to rebuild a house. ZESCO policy in such cases recommends these PAPS be eligible for replacement house compensation, with allowance for the house to be rebuilt by a contractor. This assistance is further detailed in Chapter 8.

Vulnerable PAPS were identified based on the following criteria:

- PAPS whose household has already been resettled for the existing Pensulo-Kasama 330kV line as successive resettlement may cause greater impact on livelihoods⁴¹.
- Female headed affected households with no male adult as well as child (under 18 years of age), or elderly (over 65) headed affected households. Due to their demographic characteristics, those affected households may face more difficulties during the resettlement program since they may not be physically capable of rebuilding their own house or may be marginalized in the negotiation process.
- Economically disadvantaged affected households who have been identified, based on the number and types of equipment owned (or not owned), the variety of livelihood activities as well as the ratio of dependents to income-generating adults.
- Affected households with limited education, i.e., those where neither the head nor the spouse have gone to school and where no household member has attended secondary school.
- Affected households where either the head or the spouse has a disability or a long-term illness.
- Affected households experiencing food insecurity, either due to a low number of meals per day or limited capacity to meet their dietary needs.

Table 3-11 provides data on vulnerable PAPS identified according to those criteria among affected households having completed the socioeconomic survey.

⁴¹ PAPS that have been resettled for the existing Pensulo-Kasama Transmission Line and who may be resettled again may have more difficulty restoring their livelihoods or may be impacted disproportionately due to successive resettlement. Indeed, having already been through the process of displacing their home and/or livelihood activities, some PAPS may be more stressed, have more grievances, or have more difficulty restoring their livelihood as they have already been resettled recently.

Table 3-11 Number of PAPs identified as Vulnerable for each Category, by Province

Vulnerability category	Province			Total
	Northern	Muchinga	Central	
PAP's household has already been resettled	0	6	2	8
Vulnerability based on demographic characteristics	84	90	20	194
Female headed affected household without a male adult	33	39	5	77
Elderly headed affected households (>65)	60	64	16	140
Child headed affected households (<18)	1	0	0	1
Economically disadvantaged affected households	44	83	24	151
Affected households with limited education	47	44	7	98
Affected household heads or spouses with disabilities or long-term illness	45	76	20	141
Affected households experiencing food insecurity	34	26	11	71
Total	178	209	57	444

Source: Household Survey, August-September 2024

Based on available socioeconomic data, there are 444 vulnerable PAPs within those interviewed⁴². If extrapolated to the total number of PAPs, it is estimated that there may be 559 vulnerable PAPs, representing 56.4% of all PAPs. It should be noted that a single PAP can qualify as vulnerable under more than one category. Table 3-12 shows the number of vulnerable PAPs based on the number of vulnerability categories under which they qualify.

Table 3-12 Number of PAPs based on the Number of Vulnerability Categories

Number of Applicable Vulnerability Categories	Province			Total	Proportion (%)
	Northern	Muchinga	Central		
1	117	128	34	279	62.8
2	46	50	19	115	25.9
3	12	23	3	38	8.6
4 or more	3	8	1	12	2.7

Source: Household Survey, August-September 2024

⁴² As detailed in Section 3.7, 78.4% of affected households participated in the socioeconomic survey. Identification of vulnerable PAPs is based on the socioeconomic data gathered during that survey. In total, 444 of the 776 households that participated in the socioeconomic survey are deemed vulnerable. The identification of vulnerable PAPs based on the established criteria will be ongoing during the compensation disclosure and payment process. By extrapolating the socioeconomic data collected during the survey, it is estimated that 559 of the 990 PAPs should be considered vulnerable.

3.6 RELEVANT SOCIAL AND CULTURAL INFORMATION ON SURVEYED COMMUNITIES

As stated in Section 3.2, there are 106 communities crossed by the wayleave. They are listed in Table 3-13 in the order they are crossed from Kasama to Pensulo Substations (excluding the first 6 km stretch, as explained in Section 3.1), alongside their administrative divisions, estimated population and the number of PAPs within the community.

Table 3-13 List of Affected Communities and Number of PAPs

No.	Community	Province	District	Ward	Chiefdom	Estimated Population ¹	Number of PAPs					
1	Nakapampa	Northern	Kasama	Kumpumaula	Mwamba	n/a ²	4					
2	Chaiwila				Nkolemfumu			900	23			
3	Demo Daily							600	17			
4	Sani							Chiba	2,500	11		
5	Chileshe Mwamba							Chibundu			1,500	11
6	Mulenga Mulaka										700	10
7	Kabole										1,300	9
8	Chibuta										1,200	7
9	Nkolemfumu										n/a	3
10	Sweba										384	7
11	Kantasha										300	14
12	Bwabwata										365	8
13	Chintandu										800	11
14	Kafushi										700	15
15	Kabwe Mukulu										1,800	14
16	Makonko										5,000	27
17	Mwaushi										500	51
18	Kabansa										n/a	23
19	Munganga							n/a	10			
20	Chanda Mukulu							Chanda Mukulu			5,000	44
21	Safwa Turnoff			n/a	9							
22	Mukomba			800	4							
23	Kasunga			320	5							
24	Mukanga			n/a	3							
25	Kanakashi	Muchinga	Kanchibiya	Chambeshi	Mpepo	300	4					
26	Chipembele					n/a	4					
27	Laison					n/a	3					
28	Chushi					800	7					

No.	Community	Province	District	Ward	Chiefdom	Estimated Population ¹	Number of PAPs
29	Mwaba Malama					300	5
30	Stephano Mwaba					1,000	2
31	Mulamba					n/a	1
32	Mpepo D					1,222	8
33	Mpepo C					1,600	5
34	Lumangwe			Mansha		n/a	6
35	Mikulungu					800	2
36	Ntambamo					100	0
37	Bwalya Wasontwa					n/a	8
38	Katubila					317	6
39	Kamuchanga			Mumbubu		400	12
40	Chisengo					500	13
41	Katumba					450	2
42	Waini					400	6
43	Luckson					500	2
44	Mulila		Mpika	Mukungwa	Chikwanda	500	26
45	Chitemuna					n/a	7
46	Chibaye					1,800	7
47	Ngobesha					475	21
48	Kalamu Kabuswe					n/a	15
49	Malambwa					n/a	11
50	Kanika					100	7
51	Makumbi			Lubambala		700	1
52	Chalipilwa					n/a	6
53	Komboni					n/a	20
54	Nshitima					900	27
55	Leo			Chishibesonde		800	4
56	Chailo					400	5
57	Matuku					n/a	2
58	Munamala			Nachifuku		300	8
59	Chituntama					2,010	14
60	Chisongo					n/a	7
61	Mpandafishala					3,000	19
62	Kasenga					300	76
63	Polito					500	4
64	Chilosha					500	11
65	Shikasoka					600	4

No.	Community	Province	District	Ward	Chiefdom	Estimated Population ¹	Number of PAPs			
66	Kapata					300	0			
67	Chifwetu					1,000	8			
68	Kabutula					2,000	1			
69	Lubanga					600	6			
70	Masanta					200	7			
71	Mukonteka					350	2			
72	Nkuka					200	13			
73	Chibeka Nkuka					900	1			
74	Kawama					500	4			
75	Chibuye Chibuye					Mutinondo	Mpumba	150	5	
76	Chaiwa					Lavushi Manda	Nachifuku		180	6
77	Mwelalala						Mutinondo		800	9
78	Zebron						1,200		3	
79	Kalonje						n/a		1	
80	Machiko/ Mapulanga			n/a	2					
81	Eneya			1,600	3					
82	Kafundo			n/a	5					
83	Chilomba			300	14					
84	Kamanango			Chikanda			500		0	
85	Kapoto						n/a		2	
86	Mpumba						2,400		13	
87	Kapwanya	500	15							
88	Nakantanga	n/a	2							
89	Ngoma	320	6							
90	Nakasongo	350	0							
91	Mutati	300	0							
92	Yosefe	Central	Chitambo	Nakatambo	Muchinka		125		12	
93	Chipaata					2,300	11			
94	Katoba					3,540	5			
95	Bwacha					n/a	1			
96	Lusiwasi					500	10			
97	Sam Ngosa			500		9				
98	Paul Chibuye			500		7				
99	Kaipate			1,500		13				
100	Ngalande			2,500		19				
101	Kanona			Kanona			n/a	8		

No.	Community	Province	District	Ward	Chiefdom	Estimated Population ¹	Number of PAPs	
102	Tito Koy			Munchika		1,800	8	
103	Fimenye						n/a	5
104	Chankalumu			Serenje		Kabamba	2,100	6
105	Mukando Turnoff		Munchika			4,000	6	
106	Pensulo					n/a	4	
Total Number of PAPs							990	

Source: Community Survey, August-September 2024

Notes: ¹ Estimated population, as provided by headman or representatives during community surveys. Where market non-available (n/a), the estimated population was not provided.

² Some communities are crossed by the wayleave, but did not complete a community survey, either because the community was too small or because the headman was not available to provide answers. In those cases, the estimated population is marked as non-available (n/a). However, the entire wayleave was surveyed, and communal assets were inventoried in all communities; only socioeconomic data is lacking in some cases.

The following sections highlight the baseline socioeconomic conditions in surveyed communities. In each table, the number of responding communities is indicated. The number varies depending on the availability of information (i.e., in some cases, the community representative may not have had sufficient information to answer).

3.6.1 ETHNIC GROUPS, RELIGIONS AND MAIN OCCUPATIONS

The main ethnic groups represented in the communities crossed by the Project are, by order of significance, the Bemba, especially dominant in the surveyed communities of Northern Province where they represent 76.2% of the population, Bisa, representing nearly 30% of the population in surveyed communities of Muchinga Province, and Lala, dominant in surveyed communities of Central Province where it represents 88.9% of the population. Table 3-14 presents the distribution of ethnic groups in surveyed communities, as compiled during the community survey.

Table 3-14 Distribution of Ethnic Groups (in %) in Surveyed Communities

Ethnic group	Province			Total ¹
	Northern	Muchinga	Central	
Bemba	76.2	51.7	0.9	50.2
Bisa	0.0	28.6	1.8	18.4
Lala	0.0	2.8	88.9	14.1
Mambwe	14.0	4.4	0.0	6.0
Namwanga	3.0	3.0	0.0	2.6
Tonga	0.3	1.7	0.0	1.2
Tumbuka	1.4	1.2	0.0	1.1
Other ²	5.1	6.5	8.4	6.4
Number of respondents	18	51	11	80

Source: Community Survey, August-September 2024

Notes: ¹ Percentages may not add up to 100% due to rounding.

² The 'Other' category includes the Ngoni, Chewa, Kadonde, Lamba, Lenje, Lozi, Luvale, and Tinga.

As shown in Table 3-15, in surveyed communities of Northern and Muchinga provinces, the predominant religion is Roman Catholicism (representing 49.4 and 41.7% respectively), followed by the United Church of Zambia (representing 27.2 and 23.4% respectively). In Central Province, the main religions practiced in surveyed communities are Jehovah's Witnesses (representing 36.4%) and the United Church of Zambia (representing 30.5%).

Table 3-15 Distribution of Religions (in %) in Surveyed communities

Religion	Province			Total ¹
	Northern	Muchinga	Central	
Roman Catholic	49.4	41.7	6.4	38.6
United Church of Zambia	27.2	23.4	30.5	25.2
Jehovah's Witness	4.6	8.6	36.4	11.5
Adventist	11.4	9.9	3.2	9.3
Pentecostal	4.0	9.6	12.7	8.8
Apostolic	0.3	2.7	4.1	2.3
Baptist	0.0	0.9	5.5	1.3
Other ²	3.1	3.2	1.4	2.9
Number of respondents	18	51	11	80

Source: Community Survey, August-September 2024

Notes: ¹ Percentages may not add up to 100% due to rounding.

² The 'Other' category includes Evangelical, Christian Mission in Many Land, Mutumwa, Reformed Church in Zambia, End Time Message, African National Church, Missionary Church, Seventh Day Adventist, New Jerusalem, Church of God and Narrow Way.

The main occupation of community members in surveyed communities are presented in Table 3-16 for men and Table 3-17 for women. The main occupation for men is agriculture, representing 82.1% of men in surveyed communities. Livestock breeding/herding was reported as the main occupation for 6.1% of men in surveyed communities. Trading, occasional work, and gardening are also among main occupations.

Table 3-16 Distribution of Main Occupations for Men (in %) in Surveyed communities

Occupation	Province			Total ¹
	Northern	Muchinga	Central	
Agriculture	77.0	83.3	85.0	82.1
Herding	8.1	5.9	4.1	6.1
Trade	2.0	3.0	10.0	3.8
Occasional Work	1.7	4.0	0.9	3.1
Gardening	3.4	1.4	0.0	1.6
Employment in the Public Sector	0.0	1.6	0.0	1.0
Charcoal Burning	2.8	0.2	0.0	0.8
Fishing	1.7	0.0	0.0	0.4
Carpentering	2.0	0.0	0.0	0.4
Disabled/Unemployed	1.1	0.2	0.0	0.4
Other ²	0.3	0.4	0.0	0.3
Number of respondents	18	51	11	80

Source: Community Survey, August-September 2024

Notes: ¹ Percentages may not add up to 100% due to rounding.

² The 'Other' category includes retired elderly and brick layering.

For women, the census has also revealed that the main occupation is agriculture (representing 79.4% of women in affected communities). Trade is also an important occupation for women in surveyed communities, with nearly 10%.

Table 3-17 Distribution of Main Occupations for Women (in %) in Surveyed communities

Occupation	Province			Total ¹
	Northern	Muchinga	Central	
Agriculture	65.6	83.2	84.5	79.4
Trade	15.0	6.9	15.5	9.9
Domestic Work	5.6	2.6	0.0	2.9
Employment in the Public Sector	0.0	2.2	0.0	1.4
Herding	2.2	1.4	0.0	1.4
Gardening	2.5	1.2	0.0	1.3
Occasional Work	1.7	0.2	0.0	0.5
Employment in the Private Sector	0.0	0.6	0.0	0.4
Disabled/Unemployed	0.8	0.3	0.0	0.4
Other ²	6.7	1.6	0.0	2.5
Number of respondents	18	51	11	80

Source: Community Survey, August-September 2024

Notes: ¹ Percentages may not add up to 100% due to rounding.

² The 'Other' category includes village banking, women clubs, sale of vegetables, and sale of silk.

3.6.2 CHILD LABOUR

Surveyed communities were asked about the proportion of children that were engaged in economic activities for three age categories: those under 10, those between 10 and 15, and those between 16 and 18. Results are compiled in Table 3-18.

For children aged under 10 years, employment rates were reported as low, with an overall proportion of just 4.6% being said to be economically active. This indicates that very few children in this age group are engaged in work. This may however be an under representation as people are potentially aware of the prohibitions on child labour. For children aged less than 10, the highest proportion was reported in surveyed communities of Northern Province and the lowest proportion is observed in surveyed communities of Central Province.

For children aged between 10 and 15, the employment rates increase to an overall proportion of 24.7%. For children/young adults aged between 16 and 18, the employment rate is much higher, with an overall proportion of 70.7%. Surveyed communities in Northern Province report 60.6% of children in that age group being engaged in economic activities, while the proportion is 72.7% in Muchinga Province, and 88.5% in Central Province. This indicates that, as children approach adulthood, their participation in the workforce becomes much more prevalent, particularly in Central Province, suggesting a possible economic necessity or cultural expectation for older youth to contribute financially. In almost all cases, children are involved in agricultural activities.

Table 3-18 Proportion of Children (in %) Engaged in Economic Activities in Surveyed communities

Age Group	Province			Total ¹
	Northern	Muchinga	Central	
Less than 10	7.6	3.9	0.0	4.6
Between 10 and 15	31.8	23.4	11.5	24.7
Between 16 and 18	60.6	72.7	88.5	70.7
Number of respondents	18	51	11	80

Source: Community Survey, August-September 2024

Notes: ¹ Percentages may not add up to 100% due to rounding.

3.6.3 INFRASTRUCTURE AND SERVICES IN THE COMMUNITIES

This section provides an overview of the infrastructure and services available within affected communities. This overview is based on data collected during the community census, with community chiefs/headmen and/or their representatives. Although a thorough review of the results was conducted by the field survey team, it is possible that some data may not accurately represent the actual situation due to biases that may have occurred in understanding and interpreting the responses. The data presented aims to document, in general terms, the living conditions in surveyed communities.

It is important to note that this section does not address community structures and lands located within the project corridor, and thus needing to be relocated, but focuses specifically on infrastructure and services available within surveyed communities. Affected community structures and land are detailed in Section 3.4.2.

3.6.3.1 COMMUNITY INFRASTRUCTURE

Some educational infrastructures are available in the communities affected by the project (see Table 3-19). In total, 36 primary schools and seven secondary schools have been identified across all 80 surveyed communities. Of the 80 surveyed communities, 45 do not have any educational infrastructure. The province with the largest proportion of surveyed communities without educational facilities is Northern Province (11 surveyed communities out of 18 do not have schools). Very few educational facilities (11) are connected to the electrical grid.

Health facilities are even less widespread, with only 18 of the 80 surveyed communities having a health center or hospital. A total of 18 health centers were identified, of which eight are connected to the electrical grid. Additionally, there are three hospitals located in the affected communities of Mpandafishala, Mpepo D, and Mpumba, all located in Muchinga Province.

There are seven markets (across seven communities), seven administrative buildings (across five communities), and 42 community buildings (across 25 communities). Community buildings include various structures and facilities such as community centers, sporting grounds, etc. Aside for markets – half of which are connected to the electrical grid – very few of those facilities are connected to the electrical grid (none of the administrative buildings and 4.8% of community infrastructures).

As for religious buildings and sites, 192 churches, five mosques and three sacred sites were recorded in 52 communities of the 80 surveyed communities, very few being connected to the electrical network. Only three sacred sites were identified by village headmen, all of which are located in Katansha (Northern Province). Additionally, only Chipaata village (Central Province) declared having mosques (five) on its land. There are also 61 heritage sites across 48 communities.

There are 104 production centers and machinery across 32 of the 80 surveyed communities as well as 219 water supply installations (wells, protected springs, etc.) across 36 communities. None of those are connected to the electricity network.

As mentioned previously, infrastructure presented in Table 3-19 does not represent infrastructure that will need to be relocated; they rather provide a general overview of infrastructure and services available within surveyed communities.

Table 3-19 Infrastructure and Community Buildings Available within Surveyed communities (number [% connected to the electrical network])

Type of Infrastructure		Province			Total
		Northern	Muchinga	Central	
Educational Facilities	Primary School	7 [14.3]	23 [21.7]	6 [33.3]	36 [22.2]
	Secondary School	2 [0.0]	3 [33.3]	2 [100.0]	7 [42.9]
Health Facilities	Health Center	1 [100.0]	16 [37.5]	1 [100.0]	18 [44.4]
	Hospital	0 [-]	3 [66.7]	0 [-]	3 [66.7]
Markets		1 [0.0]	4 [50.0]	2 [100.0]	7 [57.1]
Administrative Buildings		2 [0.0]	4 [0.0]	1 [0.0]	7 [0.0]
Community Buildings or Infrastructure		15 [6.7]	25 [4.0]	2 [0.0]	42 [4.8]
Religious Buildings and Sites	Mosques	0 [-]	0 [-]	5 [0.0]	5 [0.0]
	Churches	34 [0.0]	119 [7.6]	28 [3.6]	181 [5.5]
	Sacred Sites	3 [0.0]	0 [-]	0 [-]	3 [0.0]
Heritage or Cultural Site		12 [8.3]	40 [5.0]	9 [0.0]	61 [4.9]
Machinery / Production Center (Sawmill, Grain Mill, Workshop, Pottery, Honey, etc.)		11 [18.2]	41 [19.5]	52 [15.4]	104 [17.3]
Water Supply Installation		63 [0.0]	148 [0.0]	8 [0.0]	219 [0.0]
Number of respondents		18	51	11	80

Source: Community Survey, August-September 2024.

Note: Infrastructure presented in this table does not represent infrastructure that will need to be relocated; they simply provide an overview of infrastructure and services available within surveyed communities. Affected community structures and sites are discussed in Section 3.4.2.

3.6.3.2 SERVICES AND LABOR

The services offered in surveyed communities – and that could be used during Project activities – have been identified (see Table 3-20). The 12 providers of trucking services are located within six surveyed communities, all part of Muchinga Province. There are a few petroleum product sale/storage businesses (five across two surveyed communities) and heavy machinery businesses (five across three surveyed communities). None of those are owned and managed by women.

Hardware and building material sale businesses are relatively widespread across surveyed communities, with a total of 2,273 businesses spread out in 62 of the 80 surveyed communities (about 38% are owned/managed by women). Considering the very high number of businesses, some are expected to be quite small-scale businesses. Catering businesses (including restaurants) are also reported in surveyed communities (48 across eight communities, almost all of which are owned/managed by women). A total of nine lodging businesses (including hotels and lodges) are reported in only four communities, none of which are in Northern Province.

Table 3-20 Number of Businesses Reported in Surveyed communities

Type of Services	Province			Total
	Northern	Muchinga	Central	
Trucking	0	12	0	12
Gas/Petroleum Products (Sale or Storage)	0	4	1	5
Heavy Machinery	3	2	0	5
Hardware/Building Material Sales	440	1,133	700	2,273
Catering Business	20	19	9	48
Lodging	0	4	5	9
Other ¹	4	0	0	4
Number of respondents	18	51	11	80

Source: Community Survey, August-September 2024

Notes: ¹ The 'Other' category includes mobile money stalls.

In addition to the services offered, surveyed communities have a diverse workforce drawn from various sectors (see Table 3-21). These workers could, through their trades and skills, contribute, directly or indirectly, to the project during its construction. That workforce is made up of drivers (in 65 communities), carpenters (in 63 communities), masons (in 63 communities), welders (in 32 communities), mechanics (in 24 communities), electricians (in 21 communities) as well as other relevant workforce (in 10 communities).

Table 3-21 Number of surveyed communities with Available Workforce

Workforce	Province			Total
	Northern	Muchinga	Central	
Driver	15	39	11	65
Carpenter	18	37	8	63
Mason	14	39	10	63
Welder	9	16	7	32
Mechanic	7	11	6	24
Electrician	6	10	5	21
Other ¹	5	4	1	10
Number of respondents	18	51	11	80

Source: Community Survey, August-September 2024

Notes: ¹ The 'Other' category includes security personnel, blacksmith, painter and sewing professionals.

3.6.3.3 FORMAL AND INFORMAL GROUPS AND ORGANIZATIONS

Several non-governmental organizations (NGOs) work in the Project area. These include Caritas, Cooperative for Assistance and Relief Everywhere (CARE), World Vision, Young Women Christian Association (YWCA), Development Organization for People's Empowerment (DOPE) and the Red Cross. Most are working on empowering women and on gender-based violence (GBV). An assessment of GBV issues is presented in the ESIA. The next section details the results of the focus group discussions organized with women in surveyed communities, including their recollection of GBV within their communities.

3.6.4 SOCIOECONOMIC STATUS OF WOMEN

The socioeconomic status of women was assessed through focus group discussions held with women in 54 communities along the line route. The approach for those focus group discussions is detailed in Section 11.6.4.3. One of the goals of those discussions was to compile socioeconomic data at the community level regarding gender equality, GBV, and access to jobs and education for women. Key results are presented below. The number of respondents is specified as some answers may not have been answered in some communities, either due to a lack of information or refusal to answer from participants.

3.6.4.1 JOB OPPORTUNITIES AND ECONOMIC EMPOWERMENT

While 79.6% of respondents recognized during focus group discussions that relocation could bring development opportunities, women mentioned that it could potentially mean leaving behind familiar surroundings and vital community support. Many women expressed optimism about potential economic empowerment, which could enable them to support their families and cover their children’s tuition fees. However, significant concerns remain about the safety of their daughters, particularly regarding the potential risk of abuse by some male workers involved in the project.

Although there is hope for equal job opportunities, frustrations persist due to inequalities where men have been seen to disproportionately benefit from similar initiatives. Women are eager to pursue roles that align with their skills and interests and advocate for inclusivity to ensure both they and their daughters can participate in the anticipated economic growth.

Systemic barriers further complicate their efforts to secure employment. In all focus group discussions, women reported a lack of job opportunities in their community, with men predominantly seen to be taking advantage of the few that do arise. Even when opportunities exist, focus group discussions revealed that women’s salaries tend to be significantly lower than their male counterparts, which limits their economic prospects and reinforces existing inequalities (see Table 3-22).

Table 3-22 Renumeration of Local Women compared to Men (in %), by Province

Remuneration of women	Province			Total ¹
	Central	Muchinga	Northern	
Most of local women earn less than men, and the difference of wage is significant	100.0	84.6	52.4	74.1
Most of local women earn less than men, but with a very slight difference	0.0	0.0	14.3	5.6
In a few cases, local women earn the same as men	0.0	0.0	4.8	1.9
In most cases, local women earn the same as men	0.0	15.4	19.0	14.8
Do not know	0.0	0.0	9.5	3.7
Number of respondents	7	26	21	54

Source: Focus group discussions with women (see Chapter 11), August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding.

In the affected communities, decision-making regarding major household purchases and investments predominantly rests with husbands, with only a small fraction of women (5.6%) stating they make decisions independently (Table 3-23).

Table 3-23 Decision Making for Major Household Purchases (in %), by Province

Person in charge of decision-making	Province			Total ¹
	Central	Muchinga	Northern	
Women	0.0	7.4	5.0	5.6
Husband/partner	57.1	48.1	45.0	48.1
Both, jointly	28.6	44.4	45.0	42.6
Do not know	14.3	0.0	5.0	3.7
Number of respondents	7	26	21	54

Source: Focus group discussions with women (see Chapter 11), August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding.

3.6.4.2 EDUCATION

Focus group discussions have revealed that girls generally have access to education in 63% of surveyed communities (Table 3-24). However, focus group discussions indicate that girls typically leave school around the age of 14. According to focus group discussion participants, the main reasons for dropping out include financial constraints, early pregnancies, and engagements or unions.

During focus group discussions, another issue highlighted by women regarding girls dropping out of school was distance to secondary schools, which are often located far from their communities. For many girls, the long distances make daily travail unmanageable, leading them to discontinue their education.

Table 3-24 Girls' access to education according to focus group discussions, by province

Girls' access to education	Province			Total ¹
	Central	Muchinga	Northern	
Yes	42.9	65.4	66.7	63.0
No	57.1	34.6	28.6	35.2
Not answered	0.0	0.0	4.8	1.9
Number of respondents	7	26	21	54

Source: Focus group discussions with women (see Chapter 11), August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding.

3.6.4.3 GENDER-BASED VIOLENCE

PHYSICAL AND SEXUAL VIOLENCE

According to focus group discussions with women, girls and women are likely to be exposed to physical violence, including getting slapped, pushed, punched or getting their hair pulled, in 69.8% of surveyed communities (Table 3-25). In communities where women agreed that women and girls were exposed to physical violence, 80% agreed that three out of four women were likely to experience it.

Table 3-25 Exposure of women and girls to physical violence within surveyed community (in %), by province

Exposure to physical violence	Province			Total ¹
	Central	Muchinga	Northern	
Yes	100.0	61.5	70.0	69.8
No	0.0	38.5	30.0	30.2
Number of respondents	7	26	20	53

Source: Focus group discussions with women (see Chapter 11), August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding.

According to focus group discussions, sexual violence (e.g., women being forced to have sexual intercourse with their partner/husband against their will or have type of sexual relations that they do not want, etc.) is likely to be experienced by women and girls in nearly all surveyed communities. In four out of five communities where sexual violence occurs, women estimated that over three out of four girls and women were likely to experience it as it was ingrained in their cultural practices. During the focus group discussions, women explained that cultural norms and expectations often perpetuate situations where they are more vulnerable to such violence, making it a common and accepted lived experience. During focus group discussions, women also shared that, single mothers in particular were at high risk of sexual violence during fertiliser distribution.

Regarding forced marriage, focus group discussions revealed that it was not a widespread issue (only reported in six surveyed communities). Public harassment, including verbal intimidation or unwanted advances, is experienced by women and girls in about half of surveyed communities.

COMMUNITY SUPPORT AND REPORTING MECHANISMS

While women are generally aware of resources like the One Stop Centre and the Victim Support Unit (VSU) for reporting gender-based violence (GBV), several barriers deter them from seeking help. Fear of retaliation, stigma, and lack of transportation lead many to confide in trusted elders or the community headman. While they can mediate disputes, they typically lack the authority to effect real change.

Table 3-26 shows that most surveyed communities do not have local-scale initiatives to prevent GBV.

Table 3-26 Presence of initiatives to prevent GBV in surveyed communities, by province

Presence of initiatives to prevent GBV	Province			Total
	Central	Muchinga	Northern	
Yes	28.6	23.1	30.0	26.4
No	71.4	76.9	70.0	73.6
Number of respondents	7	26	20	53

Source: Focus group discussions with women (see Chapter 11), August-September 2024

Increasing awareness and encouraging the reporting of GBV incidents are crucial for creating a safer environment for girls and women. By empowering women and providing adequate support, it is likely to see a decrease in GBV cases, fostering a healthier and more equitable community.

However, a pervasive sense of pity for perpetrators complicates the decision to report abuse. Women often worry that reporting their husbands could lead to arrests, further damaging family dynamics and leaving them more vulnerable. Despite these challenges, the hope for change lies in establishing accessible support systems within the community, such as local counseling groups and educational programs on women's rights and available resources for GBV victims.

3.7 SOCIAL AND CULTURAL SITUATION OF AFFECTED HOUSEHOLDS

During the household survey, a section of the questionnaire administered to respondents (see Table 3-28 for the status of informants) was designed to provide a socioeconomic portrait of the affected households (hereafter, the socioeconomic section). It should be noted that, during the field surveys, some heads of household were absent. Despite the co-operation of other household members, neighbours and local representatives, it was not always possible to fully complete the socioeconomic section of the questionnaire. As shown in Table 3-27, of the 990 PAPs, 776 completed the socioeconomic section (78.4%). This is deemed to be a satisfactory response rate, and assuming no bias in terms of the socioeconomic categories of absentee household heads, is a sample that allows for confident extrapolation of data. The socioeconomic profile of affected households presented in this section is based on these responses.

The socioeconomic section was not always completed in full, as some questions were left unanswered, either due to a lack of information or a refusal to answer. This is why the number of respondents varies from one table to another. However, despite this fragmentary socioeconomic data, all affected assets were identified (as detailed previously in Section 3.4.1).

Table 3-27 Number of PAPs and respondents, by province

Number of respondents and questionnaires	Province			Total
	Northern	Muchinga	Central	
Total number of PAPs	340	526	124	990
Number of respondents for the socioeconomic section of the questionnaire ¹	295	385	96	776 [78.4%]

Source: Household Survey, August-September 2024

Notes: ¹ Socioeconomic data was not provided in all questionnaires, depending on the availability of a respondent.

Table 3-28 Status of informant providing answers to the socioeconomic survey, by province

Status of informant	Province			Total	Proportion (%)
	Northern	Muchinga	Central		
Head of household	241	334	90	665	85.7
Spouse	23	20	6	49	6.3
Children	17	14	0	31	4.0
Sibling	6	3	0	9	1.2
Other relative	5	5	0	10	1.3
Parents	1	6	0	7	0.9
Neighbour	2	1	0	3	0.4
Other ¹	0	2	0	2	0.3
Total	295	385	96	776	100.0

Source: Household Survey, August-September 2024

Notes: ¹ Percentages may not add up to 100% due to rounding.

² The 'Other' category includes friends and caretakers.

3.7.1 CHARACTERISTIC OF AFFECTED HEADS OF HOUSEHOLD

The characteristics of heads of household were documented as part of the census. Table 3-29 provides an overview of these characteristics by province. About 35% of affected households are headed by a woman. There is a high proportion of widowed heads of household, ranging from 12.5 and 17.7% depending on the province.

Table 3-29 Characteristics of Heads of Household (in %), by province

Characteristics		Province			Total ¹
		Central	Muchinga	Northern	
Gender	Male	67.5	61.6	55.2	63.0
	Female	31.2	36.9	42.7	35.4
	Not specified	1.4	1.6	2.1	1.5
Marital status	Married ²	75.9	78.4	65.6	75.9
	Widowed	14.2	12.5	17.7	13.8
	Divorced	4.1	5.7	9.4	5.5
	Single	5.4	3.4	4.2	4.3
	Separated	0.3	0.0	3.1	0.5
Number of respondents		295	385	96	776

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding

² Most married heads of household are monogamous (93.0% overall). Of the few polygamous marriages, nearly 80% have two wives.

Most heads of household are in the 36 to 45 (24.7%), 46 to 55 (23.9%) and 56 to 65 (16.6%) age groups (Table 3-30). There is only one head of household under 18 years of age (in Northern Province).

Table 3-30 Heads of household by age group (in %), by province

Household head age	Province			Total ¹
	Northern	Muchinga	Central	
Less than 18	0.3	0.0	0.0	0.1
Between 18 and 25	5.9	5.9	3.2	5.6
Between 26 and 35	13.9	14.7	16.0	14.6
Between 36 and 45	22.6	25.1	28.7	24.6
Between 46 and 55	25.8	23.5	20.2	23.9
Between 56 to 65	15.0	17.3	19.1	16.7
More than 65	16.4	13.6	12.8	14.6
Number of respondents	287	375	94	756

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding

As shown in Table 3-31, some heads of household have a long-term/chronic illness (8.2%) or a physical (7.5%) or mental (0.3%) disability. The proportion of heads of household with a disability is similar throughout all three provinces.

Table 3-31 Percentage disability/illness of heads of household (in %), by province

Type of invalidity	Province			Total ¹
	Northern	Muchinga	Central	
None	86.6	88.2	87.1	87.4
Long-term/chronic illness	5.7	8.6	14.1	8.2
Physical disability	9.8	6.8	3.5	7.5
Mental disability	0.4	0.3	0.0	0.3
Number of respondents	246	338	85	669

Source: Household Survey, August-September 2024

Note: ¹ Some household heads have more than one disability, which explains why the total does not add up to 100%.

As shown in Table 3-32, the majority of heads of household identify as Roman Catholic (32.4% overall), with the highest proportions in Northern (38.2%) and Muchinga (34.7%) provinces. In Central Province, however, the predominant religion among interviewed heads of household is Jehovah's Witnesses, accounting for 37.2% and the United Church of Zambia (33.0%).

Table 3-32 Religion of heads of household (in %), by province

Religion	Province			Total ¹
	Northern	Muchinga	Central	
Roman Catholic	38.2	34.7	5.3	32.4
United Church of Zambia	26.7	21.2	33.0	24.7
Pentecostal	11.1	19.8	13.8	15.8
Adventist	13.2	11.4	4.3	11.2
Jehovah's Witness	6.3	5.6	37.2	9.7
Apostolic	2.1	4.2	3.2	3.3
Other ²	2.4	3.2	3.2	2.9
Number of respondents	288	378	94	760

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding

² The 'Other' category includes Baptist, Evangelist, Reformed Church of Zambia, Islam, Atheist, African National Church and Traditional Religions.

In terms of ethnicity, the Bembas are the dominant ethnic group for heads of household, especially in Northern (89.5%) and Muchinga (72.7%) provinces (Table 3-33). In Central Province, affected heads of household are mainly Lala (76.8%).

Table 3-33 Ethnicity of heads of household (in %), by province

Ethnic group	Province			Total ¹
	Northern	Muchinga	Central	
Bemba	89.5	72.7	13.7	71.9
Lala	0.7	3.7	76.8	11.5
Bisa	0.3	13.1	0.0	6.6
Mambwe	2.4	2.6	1.1	2.3
Namwanga	2.4	2.1	1.1	2.1
Tumbuka	0.7	1.6	0.0	1.0
Other ²	4.1	4.2	7.4	4.5
Number of respondents	295	381	95	771

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding

² The 'Other' category includes Bunda, Chewa, Kaonde, Lenje, Lungu, Luvala, Ngoni, Nika, Nsenga, Nyanja, Tabwa, Tonga, and Ushi.

The most widely spoken and understood language among all heads of household is Bemba, with over 95% (Table 3-34). In Northern and Muchinga provinces, the second most spoken language is English, with 11.0% and 12.3% of respondents using it, respectively. In Central Province, Lala ranks as the second most spoken language with 51.1% of heads of household, followed by English at 11.7%.

Table 3-34 Languages spoken and/or understood by heads of household (in %), by province

Language	Province			Total ¹
	Northern	Muchinga	Central	
Bemba	98.6	96.6	78.7	95.2
English	11.0	12.3	11.7	11.7
Lala	1.0	3.7	51.1	8.5
Chinyanja	6.2	8.1	9.6	7.6
Bisa	0.0	5.5	2.1	3.0
Nanwanga	3.1	2.6	2.1	2.7
Mambwe	3.1	2.1	1.1	2.3
Other ²	3.1	3.7	7.4	3.9
Number of respondents	292	382	94	768

Source: Household Survey, August-September 2024

Note: ¹ Percentage total does not add up to 100% as it was possible for respondents to select more than one spoken/understood language.

² The 'Other' category includes Tonga, Tumbuka, Lozi, Swahili, French, Kaonde, Lenje, Lamba, Sala, Senga, Soli and Tabwa.

As shown in Table 3-35, the majority of heads of household are unilingual (73.4%). Affected heads of household in Northern Province had the highest percentage of households speaking and understanding only one language (81.2%). In contrast, more than 35% of heads of affected households in Central Province speak two languages (38.3%).

Table 3-35 Number of languages spoken and/or understood by heads of household (in %), by province

Number of languages spoken or understood	Province			Total ¹
	Northern	Muchinga	Central	
One	81.2	73.3	50.0	73.4
Two	13.0	20.2	38.3	19.7
Three	4.5	5.2	9.6	5.5
Four	1.4	1.3	2.1	1.4
Number of respondents	292	382	94	768

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding

Most heads of household among affected respondents only have a primary school level of education (see Table 3-36). In Northern and Central provinces, they represent over 60% of respondents. In Muchinga Province, the proportion is slightly lower with 53.6%. Furthermore, 28.6% of the interviewed heads of household have attained a secondary education, which is slightly lower than the national average of 44.6%⁴³.

Table 3-36 Highest level of formal education attained by head of household (in %), by province

Highest level of education	Province			Total ¹
	Northern	Muchinga	Central	
None	5.7	6.3	4.7	5.9
Pre primary	6.1	5.1	2.4	5.1
Primary	61.1	53.6	60.0	57.1
Secondary	22.5	31.8	32.9	28.6
Tertiary	3.7	2.4	0.0	2.6
Technical / professional	0.8	0.9	0.0	0.8
Number of respondents	244	336	85	665

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding

3.7.2 HOUSEHOLD MEMBERS

As shown in Table 3-37, the average size of the surveyed households is higher than the national average of 4.8⁴⁴. In Northern Province, the average affected household consists of 5.6 members, while in Muchinga Province, it is 6.0 members, and in Central Province, it reaches 6.1 members.

⁴³ Ministry of Education. 2020. *Education Statistics Bulletin 2020*. Available online: <https://www.edu.gov.zm/wp-content/uploads/2023/01/EDUCATION-STATISTICS-BULLETIN-2020.pdf> (consulted on November 6, 2024).

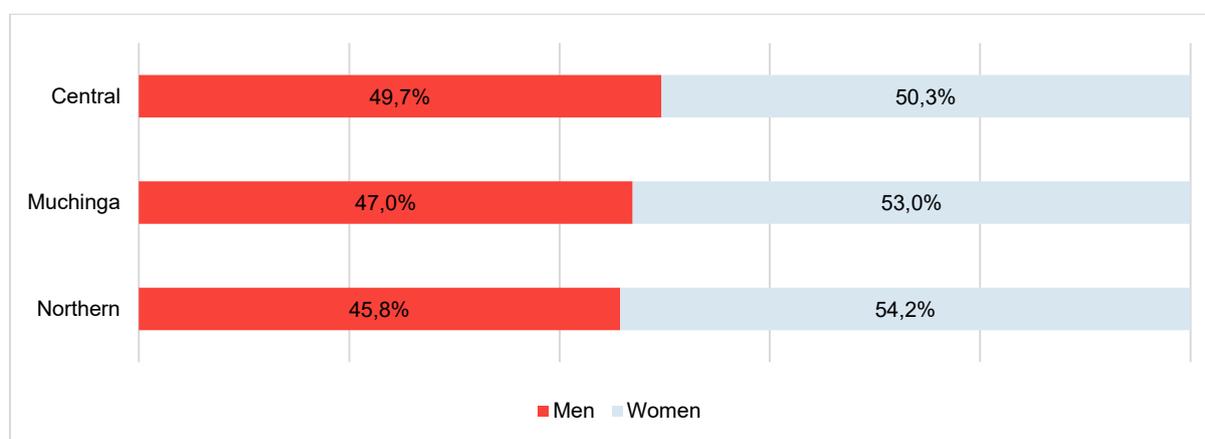
⁴⁴ Africa Geoportal. 2023. *Average Household Size in Zambia*. Available online: <https://www.africageoportal.com/maps/esri::average-household-size-in-zambia/about> (consulted on November 6, 2024).

Table 3-37 Average household size of interviewed households, by province

Household Characteristics	Province			Total
	Northern	Muchinga	Central	
Number of household members	1,665	2,317	590	4,572
Number of respondents	295	385	96	776
Average household size	5.6	6.0	6.1	5.9

Source: Household Survey, August-September 2024

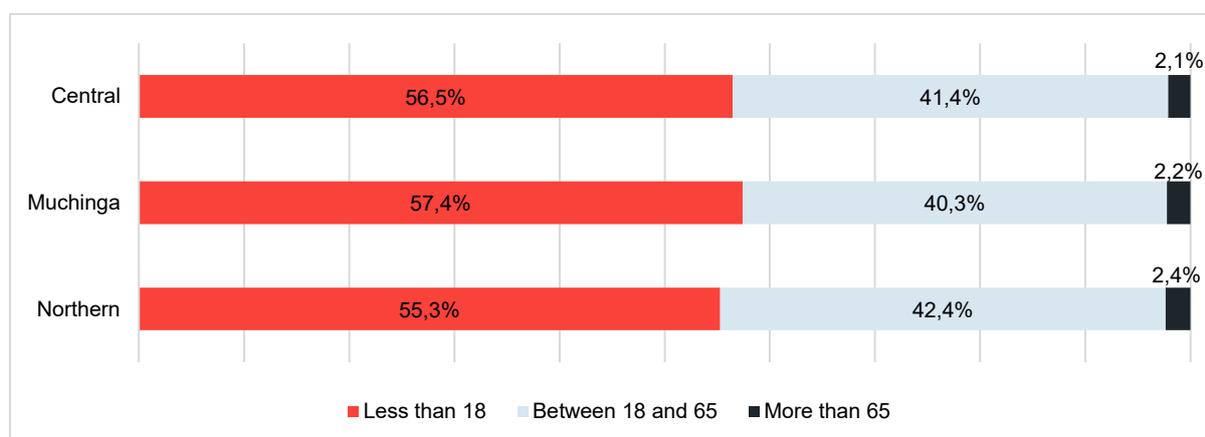
In affected households, the gender distribution is generally balanced, with slightly more women, especially in Northern Province (Figure 3-1).



Source: Household Survey, August-September 2024

Figure 3-1 Proportion of men/boys and women/girls in affected households, by province

In the affected households in Northern, Muchinga, and Central provinces, over half of the members are under 18 years old, with 55.3%, 57.4%, and 56.5% respectively (Figure 3-2). Only just over 2% of household members are older than 65.



Source: Household Survey, August-September 2024

Figure 3-2 Proportion of household members affected by age group, by province

As shown in Table 3-38, reported disabilities are not widespread amongst household members; 3.5% having physical disabilities, 3.5% having long-term/chronic illnesses, and 0.9% having mental disabilities.

Table 3-38 Invalidation of household members (excluding the household head, in %), by province

Type of invalidity	Province			Total ¹
	Northern	Muchinga	Central	
None	93.6	92.7	93.5	93.1
Physical disability	3.2	3.8	3.4	3.5
Long-term/chronic illness	3.1	3.7	3.6	3.5
Mental disability	0.9	0.8	1.1	0.9
Number of respondents	1,174	1,681	444	3,299

Source: Household Survey, August-September 2024

Note: ¹ Some household members have more than one disability, which explains why the total does not add up to 100%.

It should be noted that 86.9% of household members of school age (between 6 and 17) are reported to currently be in school. Regarding the highest level of formal education attained by adult household members, Table 3-39 shows that the majority have completed primary school (50.2%) along with a high proportion having completed secondary school (36.2%). Education levels are slightly higher among adult household members in Muchinga Province (4.1% having completed tertiary education and 39.0% having completed secondary education).

Table 3-39 Highest level of formal education attained by adult household members (excluding the household head, in %), by province

Highest level of education	Province			Total ¹
	Northern	Muchinga	Central	
None	6.5	5.4	6.0	5.9
Pre primary	4.2	3.1	1.4	3.3
Primary	51.5	47.3	57.1	50.2
Secondary	33.2	39.0	34.1	36.2
Tertiary	2.8	4.1	0.9	3.2
Technical / professional	1.8	1.1	0.5	1.3
Number of respondents	602	811	217	1,630

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding

3.7.3 HOUSEHOLD SOURCES OF LIVELIHOOD

Of the surveyed heads of household, 91.3% declared agriculture was their main occupation (Table 3-40). The proportion of heads of household whose main occupation is agriculture is highest in Central Province (96.5%) and lowest in Northern Province (87.4%), though it remains high throughout.

Table 3-40 Main occupations of heads of household (in %), by province

Main occupation	Province			Total ¹
	Northern	Muchinga	Central	
Agriculture	87.4	93.3	96.5	91.5
Trade / business owner	3.7	1.5	0.0	2.1
Livestock	0.8	0.6	0.0	0.6
None	2.8	1.5	0.0	1.8
Other ²	5.3	3.2	3.5	4.0
Number of respondents	246	342	85	673

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding.

² The 'Other' category includes gardener, government employment, government contract employment, temporary employment, private employment, private contract employment, pension retirement, retirement without pension, and student.

Most adult household members have reported that agriculture was their main occupation (61.4%). Minor household members are mostly in school or have no occupation. However, there is a small proportion of minors that help in agricultural tasks (8.5% as a main occupation and 6.3% as a secondary occupation).

The affected households primarily rely on agriculture for their livelihood, with 95.7% of households declaring agriculture as a source of income and/or food. Table 3-41 shows the various sources of livelihood declared by affected households. Aside from agriculture, other widespread sources of livelihood include livestock (70.7%), wood harvesting (57.0%), plantations (37.0%) and remittance (family transfers, either from outside the country or not) (28.5%).

Table 3-41 Sources of livelihood for affected households (in %), by province

Sources of livelihood	Province			Total ¹
	Northern	Muchinga	Central	
Agriculture	95.3	95.3	99.0	95.7
Livestock	66.1	74.8	68.8	70.7
Wood harvesting	56.9	57.4	55.2	57.0
Plantation	40.3	35.6	32.3	37.0
Remittance	33.6	25.5	25.0	28.5
Small jobs/occasional work	25.4	19.0	30.2	22.8
Charcoal production/resale	30.2	16.4	15.6	21.5
Marketeering	18.0	22.6	7.3	18.9
Business or store owned	14.6	17.4	12.5	15.7
Fishing	16.6	11.2	7.3	12.8
Rental revenue	7.1	6.0	7.3	6.6
Pension	5.1	2.9	5.2	4.0
Salary	4.1	3.1	3.1	3.5
Hunting	2.0	0.5	0.0	1.0
Other ²	1.7	2.1	3.1	2.1
Number of respondents	295	385	96	776

Source: Household Survey, August-September 2024

Note: ¹ Percentage total does not add up to 100% as it was possible for respondents to select more than one source of livelihood.

² The 'Other' category includes social welfare and gardening.

As shown in Table 3-42, agriculture is the main source of livelihood for 95.6% of households (respectively 93.0, 97.3 and 96.9% in Northern, Muchinga, and Central provinces). Livestock comes second, being the main livelihood activity for 1.2% of households (mainly in Northern Province where it is the main activity for 2.5% of households).

Table 3-42 Main source of livelihood declared by affected households (in %), by province

Sources of livelihood	Province			Total ¹
	Northern	Muchinga	Central	
Agriculture	93.0	97.3	96.9	95.6
Livestock	2.5	0.5	0.0	1.2
Business or store owned	2.5	0.0	1.0	1.1
Small jobs/occasional work	1.1	0.5	1.0	0.8
Salary	1.1	0.5	1.0	0.8
Other ²	0.0	1.1	0.0	0.5
Number of respondents	285	376	96	757

Source: Household Survey, August-September 2024

Note: ¹ Percentage total does not add up to 100% as it was possible for respondents to select more than one source of livelihood.

² The 'Other' category includes gardening, fishing, and charcoal production/resale.

For households that reported practicing agriculture, the main crops are maize (cultivated by 84.9% of households), cassava (48.2% of households), groundnut (46.4%), beans (44.8%), and sweet potatoes (34.2%). It should be noted that these are not necessarily fields cultivated within the proposed easement area. More detailed information on affected crops in the easement is presented in Section 3.4.1.4.

As shown in Table 3-41, over 70% of respondents from affected households reported livestock breeding as a livelihood activity. Among those who keep livestock, the most widely kept is poultry (Table 3-43). Affected households also own a number of goats, especially in Central Province. Most affected households own one type of animal (49.5% of respondents). Affected households in Muchinga and Central provinces typically have more livestock compared to those in Northern Province.

Table 3-43 Number of animals owned by households reporting livestock as a livelihood activity, by province

Type of animal	Province			Total
	Northern	Muchinga	Central	
Poultry	2,779	4,674	780	8,233
Goat	381	806	275	1,462
Cow	122	605	297	1,024
Pork	148	432	68	648
Ducks	27	94	5	126
Dove	0	59	0	59
Rabbits	6	27	15	48
Guinea fowls	17	22	6	45
Turkey	5	22	0	27
Other ¹	5	20	16	41

Type of animal	Province			Total
	Northern	Muchinga	Central	
Total number	3,490	6,761	1,462	11,713
Number of households owning animals	195	288	66	549
Average per household	17.9	23.5	22.2	21.3

Source: Household Survey, August-September 2024

Note: ¹ The 'Other' category includes donkeys, dogs, kalulu, and khanga.

3.7.4 HOUSEHOLD EQUIPMENT

Table 3-44 presents some of the typical assets and equipment owned by affected households. Among these, blankets are the most commonly owned items (94.8% of respondents), followed by mobile phones (83.5%).

Table 3-44 Distribution of equipment owned by affected households (in %), by province

Type of equipment	Province			Total ¹
	Northern	Muchinga	Central	
Blanket	92.7	96.0	95.8	94.8
Mobile phone	85.5	81.7	84.4	83.5
Bed	76.8	75.9	85.4	77.4
Bicycle	66.4	64.2	59.4	64.4
Table	59.5	60.2	70.8	61.3
Radio	61.2	55.2	47.9	56.6
Sofa	47.4	43.5	43.8	45.0
Television	31.1	33.7	28.1	32.0
Smart phone	15.6	20.2	19.8	18.4
Wheelbarrow	13.1	17.8	10.4	15.1
Internet	9.7	12.2	8.3	10.8
Plough	4.2	10.9	3.1	7.3
Fishing net	12.5	3.7	2.1	6.8
Refrigerator	4.8	7.7	1.0	5.8
Motor vehicle	3.1	3.7	5.2	3.7
Solar panel	0.7	4.5	5.2	3.1
Motorbike	2.1	3.4	3.1	2.9
Non-motorised boat	5.9	0.8	0.0	2.6
Grain mill	3.1	2.4	1.0	2.5
Hammer mill	2.8	2.4	2.1	2.5
Scotch cart	1.7	2.4	1.0	2.0
Generator	1.4	1.3	0.0	1.2
Landline (fixed phone)	1.7	0.3	1.0	0.9
Tractor	0.3	0.8	1.0	0.7

Type of equipment	Province			Total ¹
	Northern	Muchinga	Central	
Motorised boats	0.7	0.0	0.0	0.3
Other ²	5.5	2.9	5.2	4.2
Number of respondents	289	377	96	762

Source: Household Survey, August-September 2024

Note: ¹ Percentage total does not add up to 100% as it was possible for respondents to select more than one type of equipment.

² The 'Other' category includes axes and hoes, batteries, canter vehicles, chain saws, garden chairs, gas cookers, kitchen materials, mattresses, satellite dishes, sewing machines, shellers, and water pumps.

The structures used for primary residences of affected households predominantly feature corrugated iron roofs, accounting for 66.4%, followed by grass thatched roofs at 31.3%. The primary materials used for walls are burnt bricks (67.4%) and mud bricks (27.2%) (Table 3-45). Most houses (72.4%) do not have plaster. When plaster is used, households typically opt for cement (20.7%). In terms of flooring, compacted earth is the most common material, found in 55.8% of all primary residences of affected households (this includes primary residences that are located in and outside the wayleave).

Table 3-45 Distribution of materials used for the primary residence of affected households (in %), by province

Type of material		Province			Total ¹
		Northern	Muchinga	Central	
Roof	Corrugated iron sheets	52.2	74.0	78.3	66.4
	Thatch/palm leaf	43.9	24.6	20.5	31.3
	Wood/cardboard/timber frame	0.8	0.3	0.0	0.4
	Asbestos ²	0.4	0.3	0.0	0.3
	Tiles	0.4	0.0	0.0	0.1
	None	2.4	0.3	0.0	1.0
	Not specified	0.0	0.6	1.2	0.4
Wall	Burnt bricks	66.3	67.6	69.5	67.4
	Mud bricks	31.0	24.1	28.0	27.2
	Concrete bricks	0.4	2.4	0.0	1.3
	Stick/poles with mud	0.8	1.5	0.0	1.0
	Other ³	1.6	4.4	2.4	3.1
Plaster	Cement	17.9	21.1	27.7	20.7
	Earth	4.8	4.4	6.0	4.7
	Inside only	1.6	0.3	1.2	0.9
	None	73.0	73.7	65.1	72.4
	Not specified	1.6	0.3	0.0	0.7

Type of material		Province			Total ¹
		Northern	Muchinga	Central	
Floor	Compacted earth	53.8	58.2	51.8	55.8
	Cement	27.3	37.7	47.0	35.0
	Concrete slab/concrete screed	17.4	2.9	0.0	8.0
	Not specified	1.6	1.2	1.2	1.3
Number of respondents		253	342	83	678

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding.

² It should be noted that only one affected structure has an asbestos roof. During the destruction of that housing structure, asbestos residue will be managed according to the Residual Material and Hazardous Products Management Plan (see ESMP, stand alone report).

³ Other wall materials include sun-dried bricks, pan bricks, concrete blocks, grass, gum poles, and no walls.

As shown in Table 3-46, the main energy source used for cooking is firewood (79.2%), with the highest proportion in Central Province (90.5%). In Northern and Muchinga provinces, charcoal is also used by many affected households (respectively 18.5 and 22.3%). Regarding energy sources for lighting, Table 5-47 shows that use of solar-powered lights is most common among respondents (74.1%).

Table 3-46 Main energy sources for cooking for affected households (in %), by province

Energy source	Province			Total ¹
	Northern	Muchinga	Central	
Wood	79.4	76.1	90.5	79.2
Charcoal	18.5	22.3	6.3	18.9
Electricity (grid)	1.7	1.6	0.0	1.5
Solar	0.0	0.0	3.2	0.4
Gas	0.3	0.0	0.0	0.1
Number of respondents	286	372	95	753

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding.

Table 3-47 Main energy sources for lighting for affected households (in %), by province

Energy source	Province			Total ¹
	Northern	Muchinga	Central	
Solar	75.8	70.9	81.9	74.1
Torch	6.0	12.4	7.4	9.3
Electricity (grid)	4.2	7.8	1.1	5.6
Candle	5.6	3.8	3.2	4.4
Phone torch	2.8	2.2	2.1	2.4
Wood	1.8	1.3	1.1	1.5
Other ²	3.9	1.6	3.2	2.7
Number of respondents	285	371	94	750

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding.

² The 'Other' category includes paraffin, grass, straw and shrubs, coal, and biofuel.

As shown in Table 3-48, the primary source of drinking water for affected households varies from one province to the other in both the dry and rainy season. Overall, protected wells are used the most (29.3% during the dry season and 28.6% during the rainy season), followed by unprotected wells (28.5% in the dry season and 27.9% in the rainy season). Surface water is also widely used by households in Central Province (nearly 30% in both seasons). Very few affected households have access to piped water to their plot or housing unit.

Table 3-48 Main water sources for affected households (% in dry season / % in rainy season), by province

Water source	Province			Total ¹
	Northern	Muchinga	Central	
Protected well	43.2 / 40.9	20.7 / 20.2	21.1 / 24.2	29.3 / 28.6
Unprotected well	32.3 / 31.5	24.2 / 24.2	33.7 / 31.6	28.5 / 27.9
Surface water	7.0 / 6.6	21.8 / 20.7	29.5 / 28.4	17.2 / 16.3
Protected borehole	11.2 / 15.0	14.2 / 14.2	6.3 / 6.3	12.1 / 13.5
Communal tap	0.0 / 0.0	9.7 / 9.4	4.2 / 3.2	5.3 / 5.0
Piped water outside housing unit within plot	0.7 / 0.7	2.2 / 2.2	0.0 / 0.0	1.3 / 1.3
Unprotected borehole	2.1 / 2.1	0.5 / 0.8	1.1 / 1.1	1.2 / 1.3
Unprotected spring	1.8 / 0.7	0.5 / 0.5	2.1 / 2.1	1.2 / 0.8
Piped water into the housing unit	0.3 / 0.3	1.6 / 1.6	1.1 / 1.1	1.1 / 1.1
Other ²	1.4 / 2.1	4.6 / 6.2	1.1 / 2.1	2.9 / 4.1
Number of respondents	285	372	95	752

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding.

² The 'Other' category includes water kiosks, piped to neighbour, other taps, protected springs, tanker trucks, rainwater, and water vendors.

The socioeconomic survey also showed that most affected households get water by foot (over 95% in both the dry and rainy season). The responsibility of fetching water is either shared by all household members (for 43.7% of affected households) or by all adults (for 41.3%). In 6.7% of affected households, this responsibility is solely on women and girls. As shown in Table 3-49, most affected households (82.6%) have access to a water source close to home (less than 1 km). More affected households in Northern Province are less than 1 km away from a water source (91.1%), as opposed to Muchinga (75.6%) and Central (83.7%) provinces. Almost all affected households (98.0% during the dry season and 97.5% during the rainy season) fetch water daily.

Table 3-49 Distance of main water sources (% in dry season / % in wet season), by province

Distance	Province			Total ¹
	Northern	Muchinga	Central	
Less than 1 km	91.1	75.6	83.7	82.6
Between 1 and 2 km	5.9	21.5	11.6	14.3
More than 2 km	3.0	2.9	4.7	3.1
Number of respondents	271	349	86	706

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding.

3.7.5 HEALTH

When needing medical care, most affected households go to a clinic (52.7%), while 33.0% go to a hospital and 12.7% to a rural health post (Table 3-50). Reported use of traditional medicine is not widespread among affected households with 55.9% never using it and 35.3% using it only from time to time. In Table 3-50, it is captured under the “other” category as it is marginal in terms of being the preferred care option for affected households.

Table 3-50 Distribution of healthcare locations used by affected households, by province

Healthcare facilities	Province			Total ¹
	Northern	Muchinga	Central	
Clinic	57.2	50.1	49.0	52.7
Hospital	23.9	39.4	35.4	33.0
Rural health post or center	17.2	8.6	15.6	12.7
Other ²	1.8	1.9	0.0	1.6
Number of respondents	285	373	96	754

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding.

² The ‘Other’ category includes mobile outreach healthcare centers, traditional medicine, and mini hospitals.

Affected households face considerable travel times to access healthcare (Table 3-51). Most respondents reported needing to walk between 1 and 2 hours to reach their preferred healthcare facility (32.1% overall). Affected households in Central Province are furthest from their preferred healthcare facility with 44.8% needing to walk more than 2 hours and only 3.1% being less than 30 minutes away.

Table 3-51 Travel time (on foot) to access healthcare facilities (in %), by province

Travel time (on foot)	Province			Total ¹
	Northern	Muchinga	Central	
Less than 30 minutes	18.1	15.0	3.1	14.7
30 mins to 1 hour	26.4	32.5	14.6	27.9
1 to 2 hours	32.6	30.3	37.5	32.1
More than 2 hours	22.9	22.2	44.8	25.3
Number of respondents	288	379	96	763

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding.

As presented in Table 3-52, malaria is reported as the most prevalent illness in affected households; the highest rate being among affected households of Central Province with 75.8% having faced this illness in the year leading to the survey. Respiratory infections, including flu and colds, were faced by more than half of respondents across all provinces with higher prevalence among affected households of Central Province.

Table 3-52 Major illnesses faced by household members in the 12 months prior to the survey (in %), by province

Illness	Province			Total ¹
	Northern	Muchinga	Central	
Malaria	69.7	71.2	75.8	71.2
Respiratory infections	53.5	60.4	66.3	58.6
Diarrhea/Cholera	8.5	17.9	23.2	15.0
High blood pressure	5.6	9.2	15.8	8.7
Leg pain / issues	4.2	2.1	3.2	3.0
Headache	2.1	3.4	1.1	2.6
Eyes disease or issues	2.1	2.6	3.2	2.5
Tuberculosis (TB)	2.5	1.6	1.1	1.8
Other ²	8.8	7.4	8.4	8.0
Number of respondents	284	379	95	758

Source: Household Survey, August-September 2024

Note: ¹ Percentage total does not add up to 100% as it was possible for respondents to select more than one type of equipment.

² The 'Other' category includes diabetes, skin infections, dental issues, stomach pains, strokes, cancers, mental disorders, bilharzia, meningitis, epilepsy, asthma, and human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS), all reported in less than 2% of households.

As shown in Table 3-53, most affected households reported having not lost a family member in the year prior to the survey (84.8%). Affected households having lost a family member in the past year have lost on average 1.2 family member.

Table 3-53 Deaths in the household in the past year, by province

Illness	Province			Total ¹
	Northern	Muchinga	Central	
Yes	16.4	14.9	12.5	15.2
No	83.6	85.1	87.5	84.8
Number of respondents	286	377	96	759

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding.

3.7.6 FOOD SECURITY

Field surveys revealed that the majority of affected households (65.8%) eat two meals a day (Table 3-54). However, households in Northern and Muchinga provinces are more likely to consume three meals a day compared to those in Central Province. Weekly meat consumption varies significantly among households, with over half of respondents in every province indicating that they did not eat meat at all in the week leading to the survey (54.2%). Additionally, 23.5% of respondents reported eating meat once, while 13.3% consumed it twice.

Overall, weekly fish consumption is higher than that of meat, although there is considerable variation among affected households. In Northern and Muchinga provinces, a notable proportion of households reported consuming fish twice in the week prior to the survey (22.6% and 23.4% of respondents respectively). In Central Province, 24.5% of respondents indicated that they consumed fish three times in the week prior to the survey.

Table 3-54 Distribution of meal consumption by affected households (in %), by province

Number of meals per day	Province			Total ¹
	Northern	Muchinga	Central	
0 meal per day	0.0	1.1	2.1	0.8
1 meal per day	7.5	4.8	11.5	6.7
2 meals per day	59.8	69.0	70.8	65.8
3 meals per day	32.7	25.1	15.6	26.8
Number of respondents	281	374	96	751

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding.

The consumption of non-timber forest products, such as mushrooms, wild fruits, and resin, is common among affected households. Overall, 68.3% of respondents reported that they sometimes consume these products. Additionally, over 20% of respondents indicated that they often incorporate non-timber forest products into their diets.

In terms of food security, nearly half (43.7%) of the responding households reported that they only sometimes meet their food needs (Table 3-55). It should be noted that a significant proportion of affected households indicated that they never manage to fulfill their full food requirements, with rates of 15.9%, 10.4%, and 9.4%, respectively for Northern, Muchinga, and Central provinces.

Table 3-55 Distribution of affected households meeting their food needs (in %), by province

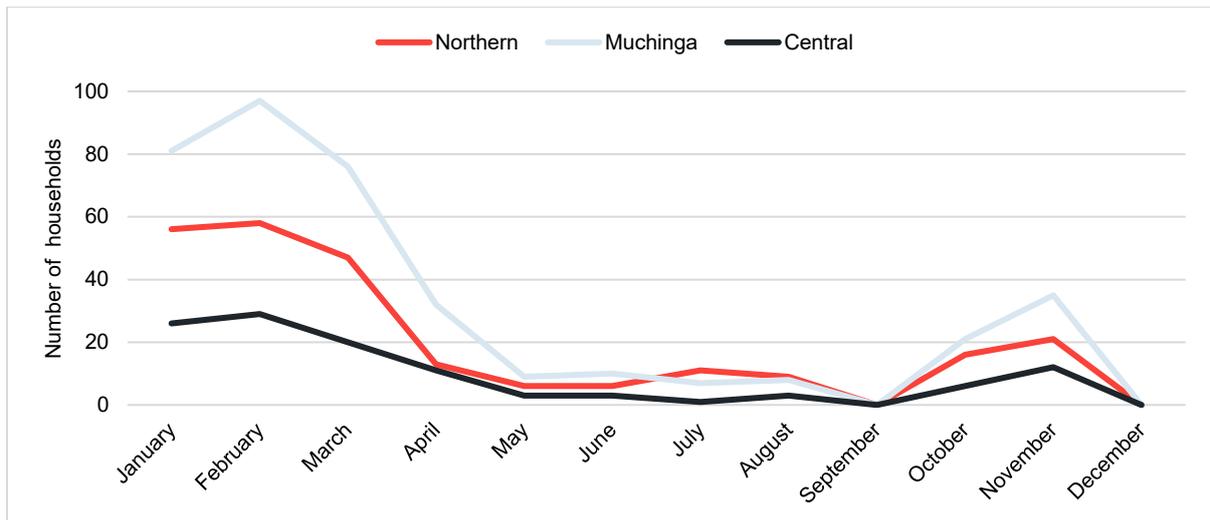
Frequency	Province			Total ¹
	Northern	Muchinga	Central	
Never	15.9	10.4	9.4	12.4
Rarely	9.9	12.0	6.3	10.5
Sometimes	36.7	47.6	49.0	43.7
Often	16.3	16.3	16.7	16.3
Always	21.2	13.6	18.8	17.1
Number of respondents	283	374	96	753

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding.

Most respondents need to purchase food to meet their dietary needs with 70.9% indicating they rely on this method rather than subsistence farming. The proportion of affected households not purchasing food is highest in Northern Province where a third of respondents indicated relying solely on farming.

Figure 3-3 highlights the periods during which surveyed households need to purchase food to meet their needs. Most food purchases take place between January and April. This is to be expected as it is the hunger period prior to harvest. It should be noted that nearly 40% of households purchasing food do it year-round (respectively 37.2, 37.1 and 37.5% in Northern, Muchinga, and Central provinces).



Source: Household Survey, August-September 2024

Figure 3-3 Period during which households need to purchase food to meet their dietary needs

This is in line with data collected for the 2021 RAP on the agricultural calendar. January and February were mentioned as the most difficult times of the year because food stocks are depleting, crops are not ready to be harvested, and fees for school need to be paid. When people are faced with hard times, they sell their garden products and certain people their goats. Others have mentioned that they receive monetary support. Conversely, June and July are harvesting months and the situation in most households is improving. Table 3-56 presents the typical agriculture calendar according to the Consultant’s social surveys.

Table 3-56 Agriculture Calendar and Main Challenges¹

	January	February	March	April	May	June	July	August	September	October	November	December
Activities (harvest, land preparation, etc.)	Planting sweet potatoes and beans Weeding maize and applying fertilizer	Planting beans Weeding maize	Weeding of maize fields	Harvesting beans planted in November Weeding and planting cassava	Harvesting pumpkin and beans Food available from field.	Harvesting maize Selling of maize crops	Harvesting maize Selling of maize crops	Preparation of new fields and Chitemene	Arrangements of buying fertilizers	Receiving fertilizers from cooperatives	Cultivation and planting of maize Harvesting caterpillars	Cultivation and planting of maize
Main challenges faced	Hunger situation. Stress over school fees	More hunger High labour demands for weeding	Hunger continues as not enough food High labour demands for weeding	More demand for labour during harvesting	More demand for labour during harvesting Paying for school fees for second term	Looking for markets to sell maize	Looking for markets to sell maize	Challenges of marketing products	Completing paying school fees Coughs	Finding matching fees to obtain fertilizers from cooperatives	Diarrhea and Malaria disease are increasing	Diarrhea and Malaria disease are increasing Less food available for family consumption
How do PAPs overcome these challenges	Find work or sell some livestock	Find work or sell some livestock	Exchange maize for help with farm work	Exchange maize for help with farm work	Borrow money from village banks	Vegetable gardening; vending in household foodstuffs	Selling crops	Selling crops	Selling crops	Selling maize to buy fertilizers	Selling caterpillars to raise cash	Finding work to buy food

Source: Surveys completed by the Consultant for the 2021 RAP.

Note: ¹ Green boxes represent the best time of the year in terms of food availability while yellow, orange, and red represent increasingly difficult times.

3.7.7 ACCESS TO LAND

As shown in Table 3-57, most households own/use only one parcel, i.e., the one that is located within the wayleave. Indeed, it is the case for 75.2% of households, with higher proportions in Central and Muchinga provinces (86.6 and 77.5% respectively). As shown in Table 3-58, affected households own/use 1.47 parcels on average (including the affected parcel). The average number of parcels owned/used is slightly higher in Northern Province where affected households own/use an average of 1.66 parcel.

Table 3-57 Number of parcels owned/used by affected households (including the affected parcel) (in %), by province

Number of parcels	Province			Total ¹
	Northern	Muchinga	Central	
One	67.3	77.5	86.6	75.2
Two	16.7	8.7	4.2	10.9
Three	10.3	9.7	6.7	9.5
Four and more	5.8	4.0	2.5	4.4
Number of respondents	312	472	119	903

Source: Household Survey, August-September 2024

Note: ¹ Percentages may not add up to 100% due to rounding.

Table 3-58 Average number of parcels owned/used by affected households and usage of parcels located outside the wayleave, by province

Access to land	Province			Total
	Northern	Muchinga	Central	
Total number of parcels owned/used	564	737	159	1,460
Number of respondent households	340	526	124	990
Average number of parcels	1.66	1.40	1.28	1.47

Source: Household Survey, August-September 2024

3.8 PROCESS FOR CONSULTATION

The Consultant met with communities and stakeholders on several occasions between 2013 and 2017, in 2019, and again in 2024. Main conclusions of public consultations are presented in Chapter 11.

The various engagements undertaken for the Project are shown in Figure 3-4.

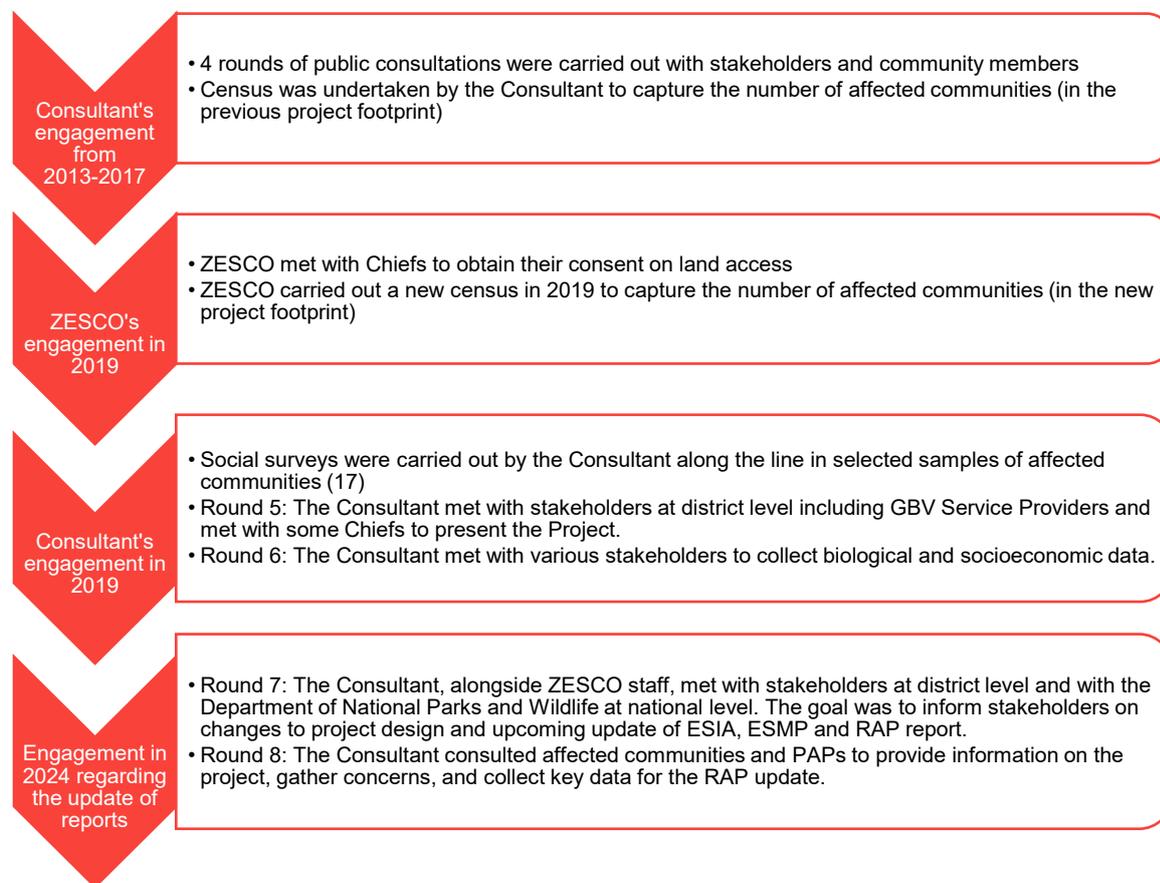


Figure 3-4 Overview of Consultation Mechanisms

3.9 NEEDS AND MECHANISMS TO CONDUCT UPDATES

A RAP is a living document. This RAP is an update of the RAP prepared in 2021, which itself was an update of the 2017 RAP. Other updates may be required over the course of the Project. For this purpose, adaptive management is proposed for the Project owner to update the RAP. Chapter 15 provides more information on this adaptive management approach.

Several situations will require adaptation to this RAP:

- Any changes or modifications to the transmission line that deviate from the current alignment as covered in this RAP;
- Outcomes from additional consultations with affected communities carried out during the RAP implementation;
- Work may also require additional land for borrow pits, access roads, camps, etc.;
- Claims, through the grievance redress mechanism, could require adaptation of the eligibility matrix and compensation package;
- Changes in people's situation such as death or inheritance could lead to changes in entitlement.

All these situations will require adaptation of the RAP and changes will need to be recorded. Furthermore, once the final pylon location is known, a RAP Addendum will be prepared with the identification and valuation of affected customary land and crops.

4 DEFINITIONS AND ELIGIBILITY CRITERIA

This chapter presents the compensation framework established to ensure fair and equitable treatment of PAPs and affected communities, while guaranteeing their physical and economic resettlement. This includes the eligibility criteria for resettlement, the process associated with the cut-off date, the types of loss anticipated and the categories of affected people. The types of compensation and assistance (entitlements) offered are described. Finally, all these elements (types of losses, categories of PAPs, and compensation measures) are presented in an entitlement matrix.

4.1 ELIGIBILITY

All individuals, households or communities affected by the relocation of assets (structures and/or trees within the wayleave), acquisition of land (titled land and customary land at the location of pylons), or by restrictions on use or access to these areas, are eligible for compensation and/or resettlement assistance, provided they occupy the wayleave at the time of the eligibility deadline (cut-off date).

As detailed in Section 3.3, these PAPs or affected communities may experience physical displacement, economic displacement or, for some, both physical and economic displacement. Moreover, the physical or economic displacements suffered may be permanent (with no right of return) or temporary (displacement limited to the duration of work or specific interventions). Types of loss are further detailed in Section 4.3. The compensation framework set out in this RAP is designed to cover all these different situations (physical/economic, permanent/temporary displacement).

Those displaced, and therefore eligible for resettlement, may have different tenure statuses within the wayleave, including:

- i. Those who have formal legal rights to the land or property they occupy or use (titled landowners);
- ii. Those who have no formal legal rights to the land or property, but have an ancestral, customary or other claim to the land which is recognized by national law or is likely to be so recognized (customary landowners); and
- iii. Those who have no legal right or claim that is likely to be recognized over the land or property they occupy or use⁴⁵.

Compensation and assistance measures are tailored to offer these different groups fair and appropriate treatment according to their tenure status. Recognizable customary rights (usufruct rights and customary custodianship) are eligible in the same way as other legal property rights derived from modern law. As for people with no legal rights or claims to the land they occupy or use, they remain eligible for assistance measures aimed at their resettlement in dignified conditions, and for compensation for the loss of any immovable equipment belonging to them.

As stated in Section 3.3, not all PAPs will be owners. Some will be users or occupants of land or structures. Where the owner will get compensation for the affected land or structure, if eligible, tenants (including caretakers) will also be entitled to assistance and will receive compensation for all affected immovable equipment belonging to them.

⁴⁵ As per the World Bank's ESS5, PAPs include those who have no recognizable legal right or claim to the land or assets they occupy or use (paragraph 10 (c)). In those cases, PAPs will be compensated for loss of assets other than land at replacement cost. Assistance will be provided to provide such persons with an opportunity to restore their livelihoods elsewhere (paragraph 34 (c)).

Those in charge of RAP implementation will need to ensure that tenants can come to an agreement with their landlords to move back into replacement housing. Should this not be possible, tenants will be supported. Those in charge of RAP implementation will ensure that discussions are held with local officials in the concerned village to find alternative housing for tenants. In all cases, tenants, like owners, will receive support in moving their assets and dealing with disturbances.

Protection will also be provided in cases where farmers borrow or lease their agricultural plot. These plots were identified during the survey and listed in the inventory database. Thus, when a tenant sees the trees on his parcel destroyed as a result of the Project, or his crops lost as a result of construction activities, those in charge of RAP implementation will monitor the process to ensure that a fair outcome is achieved, in accordance with the agreement on sharing the usufruct of production between the tenant and the owner. For example, if the agreement between the tenant and the owner stipulates that fruit production is shared equally, the Project will ensure that it is shared equally between the two parties.

4.2 CUT-OFF DATE FOR ELIGIBILITY

Eligibility for compensation and resettlement assistance measures is conditional on a person, household or community’s physical or economic presence in the wayleave at the time of the cut-off date for eligibility. For the ZTIP, this date has been set as the date on which the census of affected people and the inventory of their assets in the wayleave have been completed in each district. Table 4-1 shows the cut-off dates for each district.

Table 4-1 Cut-off Date for Eligibility for Districts Affected by the Project

District	Cut-off Date for Eligibility
Kasama	September 17, 2024
Kanchibiya	September 9, 2024
Mpika	September 13, 2024
Lavushi Manda	September 17, 2024
Chitambo	September 19, 2024
Serenje	September 19, 2024

The cut-off date was widely publicized throughout the Project area. Its objectives and implications were explained during meetings with local chiefs and representatives as part of the community survey in each village crossed. Then, the cut-off date was announced and explained to the affected populations at the numerous community assemblies organized along the entire line route as part of the stakeholder engagement strategy. In addition, during the socioeconomic survey, teams of surveyors read out to each PAP a notice on the cut-off date and its implications (see Household Survey Form in Appendix 3-1). Finally, the cut-off date was officially declared by ZESCO and publicly disclosed in each affected district in English and local languages (official statements regarding the cut-off dates are presented in Appendix 4-1).

Resettlement planning must take into account the natural growth of the population (births, coming of age, migration). For this reason, the validity of the cut-off could be compromised if a significant delay was to occur between the census and RAP implementation. This RAP has a risk and context appropriate validity period for the cut-off date, after which it will be necessary to update the RAP on the basis of a new survey and inventory of people affected by the wayleave. It should be noted that there is not a defined period as per ESS5 (or any other good practise standards) for the validity of a cut-off date. This is a risk-based assessment that is made at the time when the situation arises.

4.3 TYPE OF LOSS

People affected by the Project may face permanent or temporary losses, defined as follows:

- **Permanent loss:** A permanent loss refers to assets or rights within the Project wayleave acquired by the proponent. An expropriation as it involves a loss of rights, even with easement, is considered a permanent loss. This type of loss applies to structures (housing, commercial, and secondary structures) and assets (economic trees) located within the wayleave as well as land located under the pylons.
- **Temporary loss:** Due to certain activities planned as part of the Project (e.g., during the construction phase), PAPs may be affected by a temporary loss. This type of loss may occur if a crop is damaged due to the passage of heavy vehicles, or for shopkeepers experiencing disruption during the construction period.

Compensation and assistance measures for PAPs will vary according to the duration and type of loss incurred. Thus, for assets whose loss is temporary, the compensation and assistance offered will cover the period over which the loss is experienced. Where the loss of assets is permanent, additional measures will be offered to secure PAPs livelihood and restore their living standard.

TEMPORARY LOSSES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

All affected structures and trees within the wayleave have been identified (see Chapter 3) and formally valued (see Chapter 8), but some temporary losses associated with construction activities are expected to occur. These are dependent on final design and construction planning by the Contractor, so it was not possible to identify and value compensation amounts at this point. However, all temporary losses will need to be identified, valued, and compensated in alignment with entitlements and assistance outlined in this RAP Report. Where this is triggered, an Addendum to the RAP will be developed. All addendums will be made available to the lender and investor bodies.

When accidental damage occurs during construction activities, or if additional land is required for temporary infrastructure or for the passage of machinery, the contractor will contact ZESCO supervising staff, who will be on site for work supervision. ZESCO supervising staff will assess, with the impacted person, the extent of the damage or the surface of required land. The assessment will include measurement of the impacted surface and the type of damaged assets. Before parties agree on a price of the affected assets, an independent valuation will be done by an independent valuer (for assets, fruits, crops, etc.), as it was done for affected assets within the wayleave (see Chapter 8). Only after this will the proposed compensation amount be disclosed. The impacted person then signs a disclosure form if they agree to the compensation amount. All compensation amounts are paid by ZESCO via bank transfers to PAPs' bank accounts for security and transparency reasons before asset destruction. Contractors will be made aware of this procedure and the need for adherence. It should also be noted that the Contractor will be made aware that, to the extent possible, the sites required for temporary infrastructure should be acquired under willing-buyer, willing-seller agreements to avoid involuntary resettlement.

4.4 COMPENSATION FRAMEWORK

4.4.1 OBJECTIVES AND PRINCIPLES

The compensation framework aims to ensure that displaced people can:

- Receive fair-value compensation for lost assets and property;

- For the physically displaced, regain access to housing, collective services and a quality of life at least equivalent to their situation prevailing prior to resettlement;
- For the economically displaced, restore income levels and means of subsistence that are at least equivalent to pre-project conditions.

In addition, the definition of compensation and assistance measures is based on the following principles:

- All displaced persons, physically or economically, will receive replacement value compensation and/or resettlement assistance proportionate to the losses suffered and without discrimination as to gender or legal status.
- Displaced persons will have options as to the types of compensation and resettlement best suited to them.
- Compensation for loss of property or assets will be calculated on the basis of full replacement cost, i.e., according to the real and current value on the local market for obtaining an equivalent good, without depreciation and including all transaction costs.
- In-kind compensation options will be offered and encouraged, where possible, for vulnerable physically displaced (replacement housing structure) and farmers (replacement agricultural plot). These options will need to enable displaced people deemed vulnerable to access a replacement housing structure or plot of equal or better quality than that lost.
- PAPs whose housing structure or economic activity is to be relocated will have the opportunity, through the Project, to regularize their occupancy status and thus benefit from tenure security on the land or in the housing structure to which they have been relocated.
- Physically or economically displaced PAPs will receive adequate financial assistance to meet their needs during a period of transition and adaptation, over a period of time deemed reasonable.
- Economically displaced PAPs will receive technical, material or financial assistance to re-establish their economic activities and livelihoods after displacement.
- Compensation and resettlement assistance strategies will be sensitive to women's interests and will aim to ensure that all spouses and household members can access benefits.
- Vulnerable persons will be actively encouraged to choose compensation entitlements that place them at least risk, this is typically in-kind options.

4.4.2 COMPENSATION TYPES

To support PAPs in the involuntary resettlement process, various compensation and assistance measures will be offered. These will vary according to the PAP's eligibility status, the type of displacement and the type of loss suffered. The main measures are as follows:

- **Compensation for loss of assets or income:** All immovable assets affected by the wayleave (structures, crops, private productive trees, community assets, etc.) will be subject to a compensation in cash (at full replacement cost) or in-kind (replacement by an equivalent or superior asset) offered to their owners. Whether in cash or in-kind, compensation must include all related costs associated with replacing the lost asset and, where applicable, securing ownership and tenure rights. Transitional cash compensation is also provided for shopkeepers and their employees whose income will be temporarily or permanently suspended as a result of the Project. The methodology used to calculate the value of compensation for loss of assets or income is presented in Chapter 8. Resettlement sites are discussed in Chapter 6.

- **Assisted self-resettlement:** The preferred approach for physically displaced PAPs will be monitored assisted self-resettlement. This approach involves providing PAPs with a cash sum for the acquisition or reconstruction of a replacement housing structure on an available parcel selected by the PAP, and with security of tenure. The PAP's acquisition or reconstruction project will be approved and monitored by the RAP implementation team, which will organize the payment of compensations according to a payment plan agreed upon with the PAP. The methodology used to establish the self-resettlement budget is presented in Chapter 8.
- **Transitional assistance:** In addition to the compensation provided for loss of property or income, additional assistance is provided to support displaced PAPs in the face of the disruption inherent in resettlement and provide for their needs during a period of adaptation and transition. This includes the provision of cash allowances (disturbance allowance and vulnerability allowance) to cover moving costs and the time invested by PAPs in the resettlement process and in adapting to their new circumstances. In addition, logistical assistance will be offered by the Project during resettlement, including for those that require assistance for opening a bank account or acquiring a national registration card (NRC). Transitional arrangements are detailed in Chapter 9.
- **Livelihood restoration program:** This program aims to provide post-resettlement support to economically displaced people over a sufficient period after their resettlement to ensure that their yields or incomes are restored. Post-resettlement support will focus on training for PAPs to improve their farming or business practices. Livelihood restoration measures are described in Chapter 8.

4.4.3 NATURE OF COMPENSATION

Depending on the compensation and assistance measure, the nature of compensation could be either of the following:

- **Cash Compensation:** A cash compensation will be given to the PAP. The amount of compensation will be based on the valuation of affected assets at full replacement value.
- **In-kind Compensation:** The affected asset will be compensated with another asset of identical or greater value. This type of compensation will be made available for vulnerable PAPs whose structures and/or land are affected.

The nature of compensation for each type of loss and category of PAPs is determined by the entitlement matrix (Section 4.5).

4.4.4 VULNERABLE PEOPLE AND GENDER ISSUES

In addition to the measures provided for all PAPs, vulnerable people will be entitled to a vulnerability allowance as well as additional assistance, based on their needs. The vulnerability allowance corresponds to 10% of the compensation value for affected land and structures. This allowance is paid in cash.

The assistance will be offered by the proponent, and the nature of the compensation could be, inter alia assistance with resettlement, for example in-kind replacement structures, counselling and financial training, as appropriate. In addition, specific measures will be provided for vulnerable PAPs, particularly those headed by women (see Section 3.5 for all vulnerability criteria). Gender-specific measures will be introduced to prevent women from falling into precarious situations.

Finally, the situation of vulnerable people will be closely monitored throughout the resettlement process to ensure restoration of their livelihood and living conditions. This is detailed in Chapter 15.

4.4.5 SHARED ELIGIBILITY BETWEEN SPOUSES

Assets (buildings, plots, crops, etc.) inventoried in the name of a household will be recognized as belonging equally to the head of the household and his or her spouse(s), if any. Thus, for these assets, spouses are considered equally eligible for the compensation and assistance measures offered by the Project. Collective compensation will be disclosed and given to the spouses and assets compensated in-kind will be registered in the names of all spouses concerned. All spouses will have access to programs and assistance measures to restore their livelihoods.

4.4.6 ELIGIBILITY TRANSFER IN THE EVENT OF DEATH OR DIVORCE

In the event of the death of a PAP or head of household, eligibility for compensation and assistance measures will automatically be transferred to his or her spouse (husband or wife), after they provide an affidavit from the courts of law or any recognized institution. Where the courts are not within reach, confirmation can be obtained from established institutions such as the church or local leadership (headmen or chiefs). In the case of polygamous men, eligibility will be transferred to the spouse or spouses associated with the affected property. Any request to transfer eligibility to a third party designated by the family as being responsible for the household must be supported by a power of attorney signed by all household members. These requests will be assessed on a case-by-case basis by the RAP implementation team.

In the event of divorce within a physically displaced household occurring between the wayleave inventory and the signature of the compensation agreement, eligibility for a replacement housing structure will be awarded to the person who remains with the children of the affected household. Beneficial spouse should obtain an affidavit from the courts of law or recognized institution such as the church or local leadership as detailed above. The cash portion of the compensation or resettlement assistance will be divided between the two ex-spouses based on the court's judgement on property settlement.

Both ex-spouses retain their eligibility for other resettlement assistance measures, including activities under the livelihood restoration program.

In all cases, such transfers of eligibility are conditional on the delivery to the RAP implementation team of official administrative documents sanctioning the divorce or authenticating the death.

4.5 ENTITLEMENT MATRIX

The specific measures planned for compensation and assistance to displaced persons are presented in the entitlement matrix in Table 4-2, according to the type of loss and PAP category.

As explained in Chapter 2, this RAP, and specifically this entitlement matrix, is applicable to the Kasama-Pensulo segment of the ZTIP line (aside from the first 6-km stretch leaving Kasama Substation). PAPs that were already compensated and resettled on the Kasama-Nakonde stretch are not necessarily entitled to the full suite of compensation options based on the following entitlement matrix.

Table 4-2 Entitlement Matrix

Type of Loss	PAP Category	Compensation and Assistance Measures		Type of Compensation
Physical Displacement – Housing Structure and Residential Parcel				
Permanent loss of residential land ^{46, 47} – either under easement or pylon base	Owner of titled land	Compensation	As qualifying for those deemed vulnerable, replacement parcel, with security of tenure and in conditions that are compliant with international requirements for physical displacement, such as construction standards, security, safety and access to basic services. All related cost (permit, survey, etc.) are supported by the Project.	In-Kind
			Or cash compensation at full replacement cost for titled land parcel.	In-Cash
			<i>If the affected residential parcel area is 15% or more than the entirety of the land, the PAP can opt of its full acquisition by the Project – otherwise, compensation is only for the affected portion.</i>	
			Cash compensation at full replacement cost for affected secondary structures (annexes) and immovable equipment.	In-Cash
		Structures/equipment under construction or abandoned at the time of the survey are compensated in cash at material value only.	In-Cash	
		Additional assistance	Disturbance allowance.	In-Cash
	Vulnerability allowance for eligible PAPs.		In-Cash	
	Eligibility for training on financial management related to responsible use of cash.		In-Kind	
	Logistical assistance during resettlement.		In-Kind	
		Post-resettlement monitoring and assistance.	In-Kind	
Holder of communal land individualised with consent of traditional authority (TA)	Compensation	Where there is not sufficient space on the affected parcel to rebuild an affected structure, PAPs can choose between cash or in-kind compensation to acquire replacement residential land to build the replacement structure. When cash compensation is selected, full replacement cost will be established by an independent asset valuer. When in-kind compensation is preferred, ZESCO, in consultation with the TA, will facilitate provision of replacement land. Security of tenure to be provided as per certificate of occupancy provided for by the TA and costs to be covered by the project. It should be noted that based on census results, most residential land has sufficient space outside the wayleave to rebuild affected structures.	In-Cash or In-Kind	
		Where a pylon is sited on a customary residential parcel, the owner will be entitled to cash compensation for the permanent uptake.	In-Cash	

⁴⁶ Land is considered residential when a habitable and currently used dwelling structure is present, whether in or outside the wayleave.

⁴⁷ It should be noted that all land located within Forest Reserves is not entitled to compensation as per the Forestry Act of 2015 as encroachment is not permissible. In those cases, compensation will be granted for structures and assets, but not for the land itself.

Type of Loss	PAP Category	Compensation and Assistance Measures		Type of Compensation
		Additional assistance	Eligibility for training on financial management related to responsible use of cash.	In-Kind
			Logistical assistance during resettlement.	In-Kind
			Post-resettlement monitoring and assistance.	In-Kind
Permanent relocation of housing structures – irrespective of land tenure	Occupying owner	Compensation	Option to receive the compensation for the housing structure and immovable equipment either in cash (at full replacement cost) or in-kind (construction of an equivalent housing structure with security of tenure and adequate construction standards), based on PAP's preference.	In-Cash or In-Kind
			Cash compensation at full replacement cost for affected secondary structures (annexes) and immovable equipment.	In-Cash
			Structures/equipment under construction or abandoned at the time of the survey are compensated in cash at material value only.	In-Cash
		Additional assistance	Disturbance allowance.	In-Cash
			Vulnerability allowance for eligible PAPs.	In-Cash
			Eligibility for training on financial management related to responsible use of cash and, if structures are impacted, home maintenance.	In-Kind
			Logistical assistance during resettlement.	In-Kind
Post-resettlement monitoring and assistance.	In-Kind			

Type of Loss	PAP Category	Compensation and Assistance Measures		Type of Compensation
	Tenants (or any other form of occupancy without ownership)	Compensation	No compensation for rented housing structures.	n/a
			Cash compensation at full replacement cost for affected secondary structures (annexes) and immovable equipment owned by the renter.	In-Cash
		Additional assistance	Transitional rental allowance (rent value for three months), if applicable and if replacement accommodation is not available at the time that dwelling structure is alienated ⁴⁸ .	In-Cash
			Disturbance allowance.	In-Cash
			Vulnerability allowance for eligible PAPs.	In-Cash
			Assistance in the search for a new rental accommodation.	In-Kind
			Eligibility for training on financial management to ensure appropriate use of compensation.	In-Kind
			Logistical assistance during resettlement.	In-Kind
	Post-resettlement monitoring and assistance.	In-Kind		
	Non-occupying owners	Compensation	Option to receive the compensation for the housing structure, parcel and immovable equipment either in cash (at full replacement cost) or in-kind (construction of an equivalent housing structure with security of tenure and adequate construction standards), based on PAP's preference.	In-Cash or In-Kind
			Compensation for loss of rental revenues, if applicable (based on rent value for a period of three months) ⁴⁹ .	In-Cash
		Additional assistance	Disturbance allowance.	In-Cash
			Vulnerability allowance for eligible PAPs.	In-Cash
			Eligibility for training on financial management to ensure appropriate use of compensation.	In-Kind

⁴⁸ As construction of replacement structures before the destruction of affected structures is a requirement of this RAP, there should be limited to no interruption in the availability of the rental structure for tenants. However, if the tenant requires a transitional rental housing during resettlement (when that is the case, it should not exceed three months), a transitional rental allowance will be paid. It should also be noted that if a deposit is requested by the landlord, it shall also be covered by the transitional rental allowance.

⁴⁹ As for tenants, there should be limited interruption of rental revenue for landlords as replacement structures will be built before the destruction of affected structures. However, if an interruption in rental revenue is observed (when that is the case, it should not exceed three months), a compensation for lost rental revenues will be paid.

Type of Loss	PAP Category	Compensation and Assistance Measures		Type of Compensation
Economic Displacement – Commercial Structures				
Permanent relocation of commercial structures – either under easement or pylon base	Operating owners (titled land)	Compensation	Option to receive the compensation for the commercial structure and/or parcel either in cash (at full replacement cost) or in-kind (construction of an equivalent structure with security of tenure and commercial permits), based on PAP's preference.	In-Cash or In-Kind
			Cash compensation for lost revenues for three (3) months (monthly average based on self-declared and fieldwork verified annual revenues) where displacement causes a demonstrated disruption in ability to trade/carry out services.	In-Cash
			Cash compensation at full replacement cost for lost secondary structures (annexes) or immovable equipment.	In-Cash
			Structures/equipment under construction or abandoned at the time of the survey are compensated in cash at material value only.	In-Cash
		Additional assistance	Disturbance allowance.	In-Cash
			Vulnerability allowance for eligible PAPs.	In-Cash
			Assistance in searching for and securing adequate commercial relocation site.	In-Kind
			Eligibility for training on financial management and livelihood restoration program (including training on business development).	In-Kind
			Post-resettlement monitoring and assistance.	In-Kind
		Operating landholders in communal areas (where land is used for commercial purposes and parcel has been individualised with consent of TA)	Compensation	Option to receive the compensation for the commercial structure either in cash (at full replacement cost) or in-kind (construction of an equivalent structure with security of tenure and commercial permits), based on PAP's preference.
	Where there is not sufficient space on the affected parcel to rebuild affected structures, PAPs can choose between cash or in-kind compensation to acquire replacement land to build the replacement structure. When cash compensation is selected, full replacement cost will be established by an independent asset valuer. When in-kind compensation is preferred, ZESCO, in consultation with the TA, will facilitate provision of replacement land. Security of tenure to be provided as per certificate of occupancy provided for by the TA and costs to be covered by the project. It should be noted that based on census results, most residential land has sufficient space outside the wayleave to rebuild affected structures.			In-Cash or In-Kind
	Cash compensation for lost revenues for three (3) months (monthly average based on self-declared and fieldwork verified annual revenues) where displacement causes a demonstrated disruption in the ability to trade/carry out services.			In-Cash
	Cash compensation at full replacement cost for lost secondary structures (annexes) or immovable equipment.			In-Cash
	Structures/equipment under construction or abandoned at the time of the survey are compensated in cash at material value only.			In-Cash

Type of Loss	PAP Category	Compensation and Assistance Measures		Type of Compensation	
		Additional assistance	Disturbance allowance.	In-Cash	
			Vulnerability allowance for eligible PAPs.	In-Cash	
			Assistance in searching for and securing an adequate commercial relocation site.	In-Kind	
			Eligibility for training on financial management and livelihood restoration program (including training on business development).	In-Kind	
			Post-resettlement monitoring and assistance.	In-Kind	
	Tenants (renters, or any other form of business operation without ownership)	Compensation	No compensation for the rented structures or assets.	n/a	
			Cash compensation for lost revenues for three (3) months (monthly average based on self-declared and then field verified annual revenues) where displacement causes a demonstrated disruption in ability to trade/carry out services.	In-Cash	
			In-cash compensation for any secondary structures/annexes and immovable equipment owned by the renter.	In-Cash	
		Additional assistance	Disturbance allowance.	In-Cash	
			Vulnerability allowance for eligible PAPs.	In-Cash	
			Assistance in the search for adequate business relocation site.	In-Kind	
			Eligibility for training on financial management and livelihood restoration program (including training on business development).	In-Kind	
		Non-operating owners	Compensation	Cash compensation calculated at full replacement cost for lost structure, commercial parcel (if owned) and immovable equipment.	In-Cash
				Compensation for loss of rental revenues for three (3) months.	In-Cash
			Additional assistance	Disturbance allowance.	In-Cash ²
	Vulnerability allowance for eligible PAPs.			In-Cash	
	Assistance in the search for adequate business relocation site.			In-Kind	
	Employees	Compensation	Compensation for wage loss for three (3) months, where displacement causes a demonstrated disruption in work.	In-Cash	
			Eligibility for training on financial management and livelihood restoration program (including support in the search for an alternative job, if required).	In-Kind	
		Additional assistance	Post-resettlement monitoring and assistance.	In-Kind	

Type of Loss	PAP Category	Compensation and Assistance Measures		Type of Compensation
Temporary disruption of commercial structures – during construction	Business operators (operating owner or tenant, regardless of legal status)	Compensation	Cash compensation for lost revenues for the duration of the impact (average verified daily revenues X number of days of disruption).	In-Cash
		Additional assistance	Eligibility for training on financial management to ensure appropriate use of compensation.	In-Kind
	Employees	Compensation	Cash compensation for lost revenues for the duration of the impact (average verified daily salary X number of days of disruption). <i>Note: For temporary wage losses, compensations for employees are part of the compensation for the business owner (see above). The ZTIP PIU will facilitate agreement between business owners and their employees on the redistribution of the compensation.</i>	In-Cash
		Additional assistance	No additional measure.	n/a
Economic Displacement – Agricultural Land, Crops, and Economic Trees				
Easement over land demarcated as agricultural (permanent loss of rights)	Holder of titled agricultural land within easement	Compensation	Cash compensation proportionate to the loss of value incurred by the use restrictions applied within the easement during line operation.	In-Cash
		Additional Assistance	Disturbance allowance.	In-Cash
			Vulnerability allowance for eligible PAPs.	In-Cash
			Eligibility for training on financial management livelihood restoration program (including training on improvement of agricultural practices).	In-Kind
	Facilitation of access to replacement to cover key livelihood loss.	In-Kind		
	Holder of agricultural land within easement in communal areas with individual rights signed over by TA	Compensation	Cash compensation for agricultural land being permanently affected by pylon siting. Compensation will be valued based on the permanent uptake area.	In-Cash
		Additional assistance	Eligibility for training on financial management and livelihood restoration program (including training on improvement of agricultural practices).	In-Kind
Corporate Social Investment (CSI) Fund, aimed at funding community development programs based on a needs assessment.			In-Kind	

Type of Loss	PAP Category	Compensation and Assistance Measures		Type of Compensation
Permanent loss of agricultural plot ⁵⁰ (including fallow land) – under pylon base	Holder of titled agricultural land under pylon base	Compensation	Owners of titled land are already eligible to compensation for the entire parcel area located within the easement. As such, they are not entitled to additional compensation for the area located under the pylon base.	n/a
			In-cash compensation, at full replacement cost, for all secondary agricultural or ancillary structures and immovable equipment (shelters, walls, wells, drainage works, etc.) on the compensated area.	In-Cash
		Additional assistance	Land preparation (tilling) allowances including clearing allowance and plowing allowance (owner-farmer only).	In-Cash
			Disturbance allowance for PAPs with affected agricultural or ancillary structures.	In-Cash
			Vulnerability allowance for eligible PAPs.	In-Cash
			Eligibility for training on financial management and livelihood restoration program (including improvement of agricultural practices).	In-Kind
	Post-resettlement monitoring and assistance.	In-Kind		
	Holder of agricultural land under pylon base (in communal areas where land is used for agricultural purposes and parcel has been individualised with consent of TA) ⁵¹	Compensation	Cash compensation for agricultural land being permanently affected by pylon siting. Compensation will be valued based on the permanent uptake area.	In-Cash
			In-cash compensation, at full replacement cost, for all secondary agricultural or ancillary structures and immovable equipment (shelters, walls, wells, drainage works, etc.) on the compensated area.	In-Cash
		Additional assistance	Land preparation (tilling) allowances including clearing allowance and plowing allowance (owner-farmer only).	In-Cash
			Disturbance allowance for PAPs with affected agricultural or ancillary structures.	In-Cash
			Vulnerability allowance for eligible PAPs.	In-Cash
Eligibility for training on financial management and livelihood restoration program (including improvement of agricultural practices).			In-Kind	
Post-resettlement monitoring and assistance.	In-Kind			

⁵⁰ It should be noted that all land located within Forest Reserves is not entitled to compensation as per the Forestry Act of 2015 as encroachment is not permissible. In those cases, compensation will be granted for structures and assets, but not for the land itself.

⁵¹ This will also apply to PAPs along the Kasama-Nakonde stretch as they have not yet been compensated for loss of land (and crops) associated with the location of pylons. An estimated budget is provided (see Chapters 8 and 13).

Type of Loss	PAP Category	Compensation and Assistance Measures		Type of Compensation
	Tenant farmers ⁵²	Compensation	No compensation for land.	n/a
			In-cash compensation, at full replacement cost, for all immovable equipment owned by the tenant farmer (shelters, walls, wells, drainage works, etc.).	In-Cash
		Additional assistance	Assistance in searching for adequate agricultural replacement land.	In-Kind
			Land preparation (tilling) allowance.	In-Cash
			Disturbance allowance.	In-Cash
			Vulnerability allowance for eligible PAPs.	In-Cash
			Eligibility for training on financial management and livelihood restoration program (including improvement of agricultural practices).	In-Kind
Post-resettlement monitoring and assistance.	In-Kind			
Permanent loss of crops – either under pylon base, within wayleave or temporary infrastructure during construction ⁵³	Farmer (regardless of land ownership status)	Compensation	Cash compensation based on full market value of the lost production.	In-Cash
		Additional assistance	Eligibility for training on financial management and livelihood restoration program (including distribution of seed packages and improvement of agricultural practices).	In-Kind
Permanent loss of individualised economic trees (fruit or exotic)	Owner of the tree (regardless of land ownership status)	Compensation	Fruit trees: Cash compensation based on the market value of the lost production over the period required for the replacement tree to be productive.	In-Cash
			Exotic trees: Cash compensation based on timber value as per wood volume (for timber trees) or full replacement costs for similar age for individuals of the same species (for other types of exotic trees).	In-Cash
			Immature trees (exotic/fruit): Non-productive trees above a certain height will be eligible to cash compensation for the purchase of new seedlings, as per ZESCO's practices.	In-Cash
		Additional assistance	Eligibility to training on financial management and livelihood restoration program (including improvement of agricultural practices).	In-Kind
			Post-resettlement monitoring and assistance.	In-Kind

⁵² Transitional rental allowance was not considered for tenant farmers as the permanent uptake is limited (only the pylon footprint), which is not expected to affect rental agreements (the rest of the parcel remaining usable and rentable).

⁵³ This will also apply to PAPs along the Kasama-Nakonde stretch as they have not yet been compensated for loss of land (and crops) associated with the location of pylons. An estimated budget is provided (see Chapters 8 and 13).

Type of Loss	PAP Category	Compensation and Assistance Measures		Type of Compensation
Private Graves and Cultural Assets				
Permanent relocation of graves	Owner	Compensation	Relocation of graves by a qualified archeologist. All costs will be covered by ZESCO, including the archeologist's fees and expenses, the relocation, the acquisition of suitable alternative land, and any required rituals ⁵⁴ .	In-Kind
Communal Assets				
Permanent relocation of community structures (schools, churches, etc.)	Community	Compensation	Replacement by new and improved structure or equipment, at a location acceptable to the community and with security of tenure.	In-Kind
			Structures/equipment under construction or abandoned at the time of the survey are compensated in cash at material value only.	In-Cash
		Additional assistance	Disturbance allowance for institutions.	In-Cash
Permanent loss of association/ institution land	Association (religious groups or others) or institution owning an affected piece of land	Compensation	Replacement land will be made by the TA.	In-Kind
		Livelihood restoration support	CSI Fund, aimed at funding community development programs based on a needs assessment (see Section 8.4.2).	In-Kind
Permanent relocation of cemeteries	Community	Compensation	Relocation of graves by a qualified archeologist. All costs will be covered by ZESCO, including the archeologist's fees and expenses, the relocation, the acquisition of suitable alternative land, and any required rituals ³⁴ .	In-Kind
			If requested, a new land for the replacement or future growth of the cemetery will be provided by the Project, at a location acceptable to the community.	In-Kind
Permanent relocation of cultural and sacred sites	Community	Compensation	Relocation of by a qualified archeologist. All costs will be covered by ZESCO, including the archeologist's fees and expenses, the relocation, the acquisition of suitable alternative land, and any required rituals ³⁴ .	In-Kind
Permanent loss of indigenous natural trees of use value (fruits or timber) ⁵⁵ located on individualized parcel	Community	Livelihood restoration support	Livelihood-based reforestation program, aimed at funding plantation of replacement natural trees optimizing the use of linked natural products and ecosystem services in non-affected areas adjacent to the wayleave.	In-Kind
		Additional assistance	Post-resettlement monitoring and assistance.	In-Kind
	Users	Livelihood restoration support	Training program for livelihood development.	In-Kind

⁵⁴ Costs associated with required rituals will be covered by the Project. Ceremonial costs can include food and drink for the attendees as well as stipend payment for cultural leaders.

⁵⁵ No cash compensation to PAPs losing natural trees in accordance with the Forestry Act: *The ownership of all trees standing on, and all forest produce derived from, customary areas, National Forests, Local Forests, State Land, botanical reserves and open areas is vested in the President, on behalf of the Republic, until lawfully transferred or assigned under this Act or any other written law.*

Type of Loss	PAP Category	Compensation and Assistance Measures		Type of Compensation
Permanent loss of natural products harvesting areas and land under easement that is not individualised	Community	Livelihood restoration support	Livelihood-based reforestation program, aimed at funding plantation of replacement natural trees optimizing the use of linked natural products and ecosystem services in non-affected areas adjacent to the wayleave.	In-Kind
	Users	Livelihood restoration support	Training program for livelihood development.	In-Kind
Permanent land use restrictions over customary land under easement	Community	Livelihood restoration support	CSI Fund, aimed at funding community development programs based on a needs assessment (see Section 8.4.2).	In-Kind

5 POLICY, ORGANIZATIONAL AND INSTITUTIONAL FRAMEWORKS

5.1 REGULATORY FRAMEWORK

Table 5-1 lists regulations and policies related to resettlement, land tenure and land acquisition.

Several regulations related to town planning are not applicable to this Project since resettlement is considered minor, will take place in rural areas, will only lead to the displacement of persons over short distances, and will not require the development of a village for displaced persons. Another important feature of the Project is that ZESCO does not intend to convert customary land into titled land (convert customary rights into leasehold rights) nor acquire any land⁵⁶. In this regard, many sections of the Lands Act and the Lands Acquisition Act are not applicable to this Project.

Table 5-1 Main Regulations

Sector	Relevant Documents
Land and Resettlement	<ul style="list-style-type: none"> – Constitution of Zambia (Cap. 1); – Valuation Surveyors Act (Cap. 207); – Arbitration Act, No. 19 of 2000; – Lands Tribunal Act of 2010; – Lands Act, 1995 (Cap. 292, Cap. 289, Cap. 288) as amended by the Lands (Amendment) Act, No. 20 of 1996; – Land Acquisition Act (Cap. 189); – Agricultural Lands Act (Cap. 187); – Lands and Deeds Registry Act (Cap. 185) as amended by the Lands and Deeds Registry (Amendment) Act, 2021; – Land Survey Act (Cap. 188) as amended by the Land Survey (Amendment) Act, No. 40 of 2021; – Public Roads Act, No. 12 of 2002 as amended by the Public Roads (Amendment) Act, 2022; – Local Courts Act, 1966 (Cap. 29); – Environmental Management Act of 2011 as amended by the Environmental Management (Amendment) Act, No. 10 of 2013 and the Environmental Management (Amendment) Act, No. 8 of 2023; – Local Government Act (Cap. 281); – Urban and Regional Planning Act of 2015; – Chiefs Act, 1965 (Cap. 287) as amended by Chiefs (Amendment) Act, No. 13 of 1994.
Graves and Sacred Sites	<ul style="list-style-type: none"> – National Heritage Conservation Commission Act, No. 23 of 1989; – Zambia Police Act, No. 13 of 1994; – Public Health Act, No. 22 of 1995.
Energy	<ul style="list-style-type: none"> – Electricity Act, No. 11 of 2019; – Energy Regulation Act, 2019; – Rural Electrification Act, 2023; – Wayleave Code of Practice, 2022.
Gender	<ul style="list-style-type: none"> – Gender Equity and Equality Act, No. 22 of 2015; – Anti Gender-Based Violence Act, No. 1 of 2011.
Local Government and Traditional Authorities	<ul style="list-style-type: none"> – Local Government Act, No. 2 of 2019; – Lands (Customary Tenure) (Conversion) Regulations (Cap. 184) as amended by the Lands (Customary Tenure) (Conversion) (Amendment) Regulations, 2015 (S.I. No. 74 of 2015).
Policies	<ul style="list-style-type: none"> – National Resettlement Policy, 2015; – National Land Policy, 2021; – National Gender Policy, 2023.

⁵⁶ It should be noted that it is planned for substations' customary land to be converted into state land. However, as no new substation is planned on the Pensulo-Kasama stretch, this is not covered under this RAP.

5.1.1 LAWS AND REGULATIONS DEALING WITH VALUATION METHODOLOGY, AND PAYMENT OF COMPENSATION OR REHABILITATION ASSISTANCE

5.1.1.1 THE ZAMBIA INSTITUTE OF VALUATION SURVEYORS ACT, 2023 CAP 207

This Act provides for the registration of valuation surveyors, regulates their practice and professional conduct, continues the existence of the Valuation Surveyors Registration Board (renaming it as the Zambia Institute of Valuation Surveyors), and redefines its functions.

5.1.2 LAWS DEALING WITH RIGHTS OF AFFECTED PERSONS UNDER THE JUDICIAL PROCESS, DISPUTE RESOLUTION AND ALTERNATIVE MECHANISMS

5.1.2.1 ARBITRATION ACT, NO. 19 OF 2000

This Act provides for arbitration in cases where the landowner or occupier does not agree with the amount of compensation offered. Under Section 12 (2) of the Act, the parties subject to arbitration are free to determine the procedure for appointing the arbitrator or arbitrators. Section 12 (3) (b) states that if the parties are unable to agree on the arbitration, another arbitrator shall be appointed, upon request of a party, by an arbitral institution.

5.1.2.2 LANDS TRIBUNAL ACT OF 2010

The Lands Tribunal Act 2010 provides for the continued existence of the Lands Tribunal and provides for the powers and functions of the Tribunal. The Government establishes land courts and supports local level mediation of land disputes.

5.1.2.3 LOCAL COURTS ACT (CAP. 29)

This act details the role of local courts. Disputes over customary land can be taken to the local courts whenever they cannot be solved by traditional authorities.

5.1.3 RELEVANT LAWS RELATING TO LAND OWNERSHIP, LAND TENURE, ACQUISITION AND TRANSFER

5.1.3.1 LANDS ACT, 1995 (CAP. 292, CAP. 289, CAP. 288)

The Lands Act 1995 provides for the continuation of leaseholds and leasehold tenure as well as for the continued vesting of all lands in the President who has the power of alienation (land held under customary tenure is subject to certain conditions) (Section 3). It also provides for the statutory recognition and continuation of customary tenure (Section 7), for the conversion of customary tenure into leasehold tenure (Section 8) and establishes a Land Development Fund and Lands Tribunal (Parts III and IV). The Department of Lands administers the Land Act, 1995 (Cap. 292, Cap. 289, Cap. 288). The Department is also responsible for the administration of lands and deeds registration and land surveys and mapping.

Other than statements made in Section 7 on the recognition of customary rights, most of this act concerns land conversions from customary land rights to leasehold rights (statutory land rights).

5.1.3.2 LANDS ACQUISITION ACT (CAP. 296)

Section 3 of the Lands Acquisition Act empowers the President of the Republic to compulsorily acquire property. Sections 5 to 7 of the Act provide for the issuing of notices to show the intention to acquire, notice to yield up property and to take up possession.

Section 10 of the Act provides deals from compensation payment. Furthermore, this section deals with compensation in-kind (land for land), where the person shall receive in lieu or in addition to any compensation payable under the section, another land not exceeding the value of the land acquired.

Under the Lands Acquisition Act, the value of the property for purposes of compensation shall be the value of the amount which the property might be expected to realize if sold on the open market by a willing seller at the time of the publication of the notice to yield up possession of the property (valuation at market value). Section 11 of the Lands Acquisition Act provides for the settlement of the disputes relating to the amount of compensation in the High Court.

Part VI of the Lands Acquisition Act provides for the establishment of a Compensation Advisory Board to advise and assist the Minister in the assessment of any compensation payable under the Act. Other functions of the board, its operations and constitution are also prescribed.

This Act deals with valuation and acquisition of registered land (statutory land). Although several principles could apply to customary land such as those presented here above, this act is not intended for customary land.

5.1.3.3 AGRICULTURAL LANDS ACT (CAP. 187)

This Act provides for the establishment of the Agricultural Lands Board for tenant farming schemes. The act empowers the Minister, by statutory notice, to declare any state land and, with the consent of the registered owner, any freehold land, and to alienate any declared land in any of the following ways:

- By state grant;
- By the lease of holdings;
- By any other state lease or tenancy.

Subsection 5 of Section 21 provides that a lessee shall use his holding primarily for agricultural purposes, for purposes ancillary thereto and for the personal residence of himself and his family and necessary staff and for no other purpose.

Subsection 1 of Section 40 permits a tenant who obtains approval from the Agricultural Lands Board to make improvements to a holding at his own expense. Improvements which are permitted are those which are reasonably required for the management, improvement or development of the holding. Only improvements which are approved by the Agricultural Lands Boards qualify for compensation.

Section 43 provides that, if any dispute shall arise relating to the following, such disputes may be referred to arbitration under the provisions of the Arbitration Act:

1. The amount of any compensation, not being an ex gratia payment;
2. Any valuation for an option to purchase a holding;
3. Any valuation for a state grant.

5.1.3.4 LANDS AND DEEDS REGISTRY ACT (CAP. 185) AS AMENDED BY THE LANDS AND DEEDS REGISTRY (AMENDMENT) ACT, 2021

The Lands and Deeds Registry Act makes provision for the registration of documents relating to titled land (statutory land), the certification of title, the legal proceedings and effects of the transfer of land, and other matters relating to registration of titles in land.

The Lands and Deeds Registry (Amendment) Act 2021 amends the existing Lands and Deeds Registry Act to address specific aspects related to land registration. In Section 2 of the Act, it introduces provisions to facilitate electronic and digital signatures in land registration processes. The Act recognizes the importance of electronic signatures in modernizing land transactions. It allows for the use of electronic signatures during land registration procedures.

Section 4A of the Act provides for electronic filing and maintenance of documents with the Registrar.

Section 30 of the Act addresses the issuance and maintenance of Provisional Certificates and Certificates of Title in electronic form. These certificates play a crucial role in establishing ownership and rights over land. By incorporating electronic signatures and digital formats, the Act aims to streamline land registration processes, enhance efficiency, and reduce paperwork.

5.1.3.5 LAND SURVEY ACT (CAP. 188) AS AMENDED BY THE LAND SURVEY (AMENDMENT) ACT, 2021

The Land Survey Act makes provision for the registration and licensing of land surveyors and the carrying out of land surveys. It further provides for the establishment and powers of a Survey Control Board which will be responsible for the registration and licensing of land surveyors and for the exercise of disciplinary control over such surveyors.

The Land Survey (Amendment) Act, 2021 amends the existing Land Survey Act to address specific aspects related to land surveying by introducing provisions to facilitate electronic and digital signatures in land surveying processes as stipulated in Section 2 of the amendment Act.

The Act recognizes and amends the importance of electronic signatures in modernizing land surveying transactions (Sections 31A and 31B). It allows for the use of electronic signatures during land surveying procedures. The Act further provides for the issuance and maintenance of a diagram, general plan, and other survey records in electronic form to move toward digitization aims to enhance efficiency and accessibility as well as enables electronic transactions related to land surveying. Surveyors can also use electronic and digital signatures, streamlining administrative processes.

5.1.3.6 PUBLIC ROADS ACT, NO. 12 OF 2002 AS AMENDED BY THE PUBLIC ROADS (AMENDMENT) ACT OF 2022

The Public Roads Act No. 12 of 2002 is an Act to establish the Road Development Agency and to define its functions; to provide for the care, maintenance and construction of public roads in Zambia; to regulate maximum weights permissible for transmission on roads; and to provide for matters connected with and incidental to the foregoing.

Section 18 (3) of the Act gives authority to the envisaged Road Development Agency to enter upon any land for purposes of extraction of materials for road formation. It also provides for notification to the property/landowner before preparation for commencement of extraction of materials starts. Under Section 18 (4) of the Act, compensation should be paid to the affected landowner/occupier if such land is on title.

Section 18 (5) of the Act allows the land/owner occupier to submit some written request to the Agency for any expense or loss that may be incurred if such land is appropriated. Section 18 (6) states that in the event of failure to agree upon the amount of compensation the matter shall be decided by arbitration in accordance with the Arbitration Act. The Act under Section 18 (7) provides many conditions which shall form the basis for assessment of properties or envisaged losses that are the subject of disagreements.

The Public Roads (Amendment) Act, 2022 amends the existing Public Roads Act, 2002 to address specific aspects related to public roads and introduces provisions to revise the composition of the Board of the Agency and re-define its functions (Sections 2, 6, 7, 8, and First Schedule). Additionally, the Act provides for the protection of execution of judgments against the property of the Agency (Section 76A).

These amendments seek to enhance the governance and operational framework of the Board of Agency, ensuring better management and maintenance of public roads in Zambia.

5.1.3.7 ELECTRICITY ACT, NO. 11 OF 2019

The Electricity Act No. 11 of 2019 is an Act to regulate the generation, transmission, distribution and supply of electricity so as to enhance the security and reliability of the supply of electricity; provide for the sale and purchase of electricity within and outside the Republic; facilitate the achievement of the efficient, effective, sustainable development and operation of electricity infrastructure; provide the roles and responsibilities of various participants in the electricity sector; facilitate adequate levels of investment in the electricity sector; provide for a multi-year tariff framework; promote transparency in the identification and allocation of risks, costs and revenues within and between participants in the electricity sector; ensure the protection and safety of consumers of electricity and the public; repeal and replace the Electricity Act, 1995; and provide for matters connected with, or incidental to, the foregoing.

Part III of the Electricity Act (2019) deals with acquisition of land and rights over land for energy projects. This part is dealing with several topics:

- Acquisition of land for electricity purposes, where it stipulated that the President may, by order, authorise the acquisition by compulsion of so much land, including State Land, as the President may consider necessary for any purpose associated with the generation, transmission, distribution or supply of electricity. It is also mentioned that adequate compensation shall be paid to any person who suffers loss or damage;
- Wayleaves over land where it is stipulated that the operator may place transmission lines, either above or below ground, into, out of, or across, any land including State Land;
- Rights of entry to allow the operator to access the wayleave;
- Trees and buildings interfering with transmission lines must be demolished.

As a standard practice, and in accordance with the Electricity Act (2019) and the Energy Regulation Board “Wayleave code of Practice”, ZESCO obtains the right-of-way for the wayleave through a negotiated agreement with affected parties but does not acquire the land. PAPs continue having access to the land, however, land use and agricultural operations are restricted to growing of low height crops and animal grazing under the transmission line. Construction of buildings and planting of trees beyond 2 meters is prohibited.

It is under this Act that the need for resettlement of people and removal of all trees and structures is legally justified. This Act gives power to the valuer to carry out valuation of assets and to estimate market value for replacement of impacted houses and assets.

The Electricity (Amendment) Act, 2022 introduces several important changes to the existing Electricity Act, Cap. 145 in Zambia.

The amendment specifies circumstances under which a holder of a generation license or transmission license may supply electricity to persons other than bulk suppliers. This flexibility allows for more diverse electricity supply arrangements.

The Act introduces deterrent penalties for theft of electricity and vandalism of electrical facilities. These penalties aim to protect infrastructure and discourage illegal activities.

The amendment addresses the membership and funding of the Electricity Disputes Tribunal. The tribunal plays a crucial role in resolving disputes within the electricity sector.

5.1.3.8 GENDER EQUITY AND EQUALITY ACT, NO. 22 OF 2015

The Gender Equity and Equality Act No. 22 of 2015 is an Act to establish the Gender Equity and Equality Commission and provide for its functions and powers; provide for the taking of measures and making of strategic decisions in all spheres of life in order to ensure gender equity, equality, and integration of both sexes in society; promote gender equity and equality as a cross-cutting issue in all spheres of life and stimulate productive resources and development opportunities for both sexes; prohibit harassment, victimisation and harmful social, cultural and religious practices; provide for public awareness and training on issues of gender equity and equality; provide for the elimination of all forms of discrimination against women, empower women and achieve gender equity and equality by giving effect to the Convention on the Elimination of all Forms of Discrimination against Women, the Protocol to the African Charter on Human and People’s Rights on the Rights of Women in Africa and the SADC Protocol on Gender and Development; and provide for matters connected with, or incidental to, the foregoing.

Most sections of this Act are not directly linked to resettlement, except for part V paragraph 36. Elimination of discrimination in disposal of property. This paragraph mentions that:

1. A person who has the right to dispose of property shall not discriminate against a woman:
 - a. on the terms on which the person offers to dispose of the property to the woman;
 - b. by not disposing the property to the woman based on her sex or marital status;
 - c. in the treatment of the woman with respect to things done in relation to the disposal of the property.

5.1.3.9 LAND TENURE TYPES

Land alienation will not be part of the implementation of the Project, since ZESCO does not intend to alienate any customary lands or any titled lands.

Under the 1995 Land Act and draft constitution, all land in Zambia vests in the President. Table 5-2 outlines the tenure types that are recognized by the various acts described above.

Table 5-2 Land Tenure Types

Type of Tenure	Characteristics	Legal Basis
Customary	Obtained through the permission of the local Chief. Most of the land in Zambia (about 90%) is held under customary tenure. Under customary law, the land is held by individuals, families, clans, or communities from generation to generation, without temporal limitation. Customary tenure applies to individual plots, forest land, common land within a village, and communal grazing land. Most small-holder subsistence farmers cultivate customary land held in common ownership with the community, although the rights of farmers are individualized. The land does not have formal documentation (e.g., certificates and titles) and the landholders do not pay land tax.	Governed by customs and traditions of various ethnic groups. Sections 2 and 7 (ii) of the Lands Act.
Leaseholds of State land (statutory land)	Statutory (leasehold) tenure refers to land that is held under a lease agreement with the state. This system was established by the Lands Act of 1995, which replaced the previous freehold tenure system. Under statutory tenure, individuals or entities can lease land from the government for a maximum period of 99 years, with the possibility of renewal. The leasehold system provides a state-guaranteed right of ownership and security of tenure, allowing leaseholders to pass on the property to their designated heirs. The conversion of customary land to leaseholds requires approval of the Chief and any individual whose interests will be affected by the conversion.	Lands Act, 1995 (Cap. 292, Cap. 289, Cap. 288) Lands and Deeds Registry Act (Cap. 185) Housing (Statutory and Improvement) Act (Cap. 194)
Unregistered lease or rental	Regulated by a tenancy contract signed and witnessed by both parties which need not be a registered document. In practice, this form of agreement applies to dwelling houses.	Rent Act, 1972
Informal rights in informal illegal settlements	Informal renting and subletting based on unwritten (verbal) agreements. Illegal subdivision and occupation of land in expanding illegal settlements. Most of the population in urban areas lives in informal settlements. In areas where settlements are built on primarily public land and the structures meet building standards, residents can regularize their rights with 30-year renewable Land Occupancy licenses. In other informal settlements, the residents do not have rights to their residential land under formal law. Customary law often recognizes occupancy rights of residents, which may protect their interests against other potential occupants but offers no protection from eviction by government officials.	None

5.1.4 LAWS COVERING IMPLEMENTATION OF RESETTLEMENT ACTIVITIES

5.1.4.1 LOCAL GOVERNMENT ACT

The Local Government Act is related to the establishment of Councils in districts, the functions of local authorities and the local government system. Some of these functions relate to pollution control and the protection of the environment in general.

5.1.4.2 LANDS (CUSTOMARY TENURE) (CONVERSION) REGULATIONS (CAP. 184)

According to the National Land Policy (2017), customary land law is not codified. Customary law practice is governed by interpretations of oral traditions and customs.

The primary legal mechanism to protect the customary land rights of local communities is the Lands (Customary Tenure) (Conversion) Regulations (Cap. 184) which call on the Chief and local authority to confirm, through signed written consent that the land is not being used for other purposes, that the members of the community were consulted and that the Project proponent's interest does not conflict with the needs, interests and rights of local land users.

At the time of preparing the RAP, ZESCO had obtained the written consent of all Chiefs in the Project Area. These are presented in Appendix 11-3.

5.1.5 LAWS PROTECTING GRAVES AND HERITAGE SITES

5.1.5.1 NATIONAL HERITAGE CONSERVATION COMMISSION ACT, NO. 23 OF 1989

The National Heritage Conservation Commission (NHCC) Act, No. 23 of 1989 establishes the NHCC and provides for the conservation of ancient, cultural and natural heritage. Article 2 of the Act defines ancient heritage as burial places of any kind, individual or collective, among others. Graves and cemeteries needing to be relocated as part of the current RAP are thus protected under the NHCC Act.

Article 33 of the Act states that “no person shall alter, remove, destroy, damage, excavate or export” any ancient heritage without the written consent of the NHCC. This means that, as part of this RAP, if graves or sacred sites need to be relocated, the NHCC will need to be involved. Under Article 35 of the Act, “any person who intends to [...] remove from its original site any [...] ancient heritage shall apply to the Commission for permission”. ZESCO will work closely with the NHCC and obtain all necessary permissions before relocating the affected cemeteries (see Section 3.4.2).

Additionally, any discovery of ancient heritage during construction will need to be reported to the NHCC as per Article 42 of the Act before being relocated. The process for the discovery of ancient heritage and cultural heritage objects and sites is detailed in the ESMP (stand alone report). Entitlement for relocation of ancient heritage and cultural heritage objects and sites extends to any such sites that could be discovered during construction.

5.1.5.2 ZAMBIA POLICE ACT, NO. 13 OF 1994

The Zambia Police Act, No. 13 of 1994 outlines the structure, powers, and responsibilities of the Zambia Police Force. The Act defines the command structure and functions of the force as well as granting police officers authority to conduct searches, maintain public order, and enforce laws; establishes rules for police conduct and disciplinary measures as well as community crime prevention initiatives.

As such, the Zambia Police will be responsible to establish law and order during the process of graves relocation.

5.1.5.3 PUBLIC HEALTH ACT, NO. 22 OF 1995

The Public Health Act, No. 22 of 1995, in its Part XIII, regulates the appointment of cemeteries as well as the exhumation and removal of graves for public purposes.

Under Article 94 (paragraph 1 (a)) of the Act, the Minister shall, “for the execution of any public work or for any public, mining or industrial purpose, direct in writing under his hand the removal [...] of any body or the remains of any body from any grave, whether in an authorised cemetery or elsewhere.” Article 94 (paragraphs 2 and 3) states that an intention notice shall be posted at or near the grave or graves involved six months prior to their removal, and copies shall be sent by post to the legal personal representative or next of kin of the person buried. Article 94 (paragraph 4) indicates that “due regard shall be given to the wishes of the legal personal representative or next of kin concerning reinterment.” Under Article 94 (paragraph 5), all charges in connection with the reinterment, including proper and fitting arrangements, shall be defrayed out of the public revenue.

As part of the RAP, the removal of graves and reinterment of remains in affected cemeteries will have to comply with the requirements of this Act and all costs will be covered by ZESCO.

5.1.6 POLICIES

5.1.6.1 NATIONAL RESETTLEMENT POLICY, 2015

The Policy provides guiding principles to be considered for ensuring the development of sustainable resettlement projects, it mainly focuses on the creation of “Resettlement schemes”, where people are given a piece of customary land to carry out agriculture. One of the key principles urges that “all persons, groups and the communities have the right to suitable resettlement which includes the right to land which is safe, secure, accessible, affordable and habitable. The Policy provides essential information on which this RAP is based.

5.1.6.2 NATIONAL LANDS POLICY, 2021

The National Lands Policy, launched on May 11, 2021, aims to streamline land administration and management services in Zambia. The policy aims to improve security of tenure by enhancing land allocation mechanisms.

It seeks to increase the volume of registered properties, improve accuracy, affordability, and convenience of land registration.

The policy aims to reduce caseloads and attendant costs for clients by strengthening dispute resolution mechanisms. Decent livelihoods and socioeconomic development are facilitated through land ownership.

The policy ensures reasonable access to land for non-Zambians.

Mainstream Climate Change and Environmental Protection are also integrated into land administration for sustainable development.

The policy further ensures inclusivity for persons living with disabilities and other marginalized groups in a Gender-Sensitive and Youth-Friendly manner.

The policy also recognises that Zambia has a dual land tenure system - State and Customary land with approximately 94% of land falls under the customary land system, while 8% (both state and customary) is reserved for national parks, and about 9% for forests.

The National Lands Policy aims to make land more accessible in a systematic manner, promoting sustainable land development for the benefit of present and future generations.

5.1.6.3 NATIONAL GENDER POLICY, 2023

The policy recognises that female-headed households are poorer than the male-headed households. It has therefore called for empowerment programs targeted at women. Women constitute the greater percentage on unpaid work at home while men constitute a greater percentage paid formal and informal work.

The policy has a vision of insuring gender equity and equality in social, political, cultural, and economic development on the basis that equality is important for inclusive development. The policy has upheld human dignity and social justice, equity, equality and non-discrimination, governance, transparency and accountability, and sustainability as the key guiding principles. Among the policy objectives include:

- Increasing women participation in employment;
- Eliminating all forms of gender-based violence;
- Increasing women participation in governance and decision making; and

- Increasing access to clean and safe water, sanitation and hygiene services for women and girls.

The policy has further outlined actions necessary to achieve the policy objectives and has identified critical institutions and their roles in ensuring gender equality. Among such institutions is the ministry responsible for land and natural resources. The policy expects the Ministry to ensure gender responsiveness in the distribution, access and ownership of land between the men and women. The Ministry responsible for community development and social services to ensure that support systems for social protection and welfare services are gender responsive. It further recognises the role of traditional leaders in promoting gender equity and equality and calls for various actors to work with traditional leaders in promoting gender equity.

5.1.6.4 ZESCO RESETTLEMENT PROCEDURE

ZESCO Document No. PP.14630.SPPR.00019 Resettlement and Compensation Action Plan Procedure Version 2 (16/12/2024) (see Appendix 5-1) provides the general framework for carrying out resettlement in accordance with national regulation. This document provides definitions and general principles and guidance for compensation and assistance. It also provides a generic questionnaire to be used during the census.

Discussions with ZESCO on the census and compensation methods for this Project have allowed for the identification of certain gaps when compared to best international practices of the World Bank ESF (see Table 5-4).

Required land under the transmission lines is in fact Right-of-Ways (ROWs) where an easement is acquired and only land use restrictions are imposed on PAPs, for the most part. There is permanent and complete land acquisition for some aspects, e.g., transmission towers. The ZESCO approach has traditionally focused on not paying compensation for land under easement in accordance with the Land Acquisition Act 1995, Section 15 (1). The Act does not allow for payment for undeveloped or unused land which forms a larger portion in areas held under traditional tenure. The logic here is that the bulk of this land to be acquired is communal and is agricultural and given over to crop farming and grazing. Neither of these activities would be prohibited under the easement. Furthermore, this land is state land and managed under trust by traditional authorities. As such government held projects should not be expected to re-imburse itself for impacted land.

While there is merit in this argument the traditional authorities have embarked on a process of individualisation and monetisation of land under their trust. This means that persons within the customary land areas are increasingly paying for land parcels and a land market is being established. ZESCO, in recognition of this, has de facto amended its approach. For the purposes of the Kasama-Nakonde transmission line, ZESCO has agreed to pay compensation to person holding documents signed by traditional leaders demonstrating that they have exclusive rights to a parcel – typically used for residential purposes. The land holders pay a fee for obtaining and transferring these rights. These individualised land rights are traded in the fashion of a market.

In this context, it should be noted that ZESCO has amended its approach of no cash compensation for easement acquisition in areas under communal tenure and is currently developing a revised policy on land acquisition and compensation. The policy will clarify as to where and how the cash compensation payment as opposed to land for land will be applied. The current approach is predicated on in-kind compensation being delivered at a communal as opposed to individual level (see Appendix 8-3). Should there be a formal policy change towards more individualised compensation rather than communal then the onus on ZESCO to provide in-kind communal beneficiation would be reconsidered in terms of the calculation of amounts of beneficiation due.

Although the National Resettlement Policy of 2015 has no legal standing and focuses on the creation of farming communities (called “Resettlement Schemes”), it is used in this gap analysis since it provides overall recommendations for a standard resettlement. The Zambian Environmental Management Agency (ZEMA’s) document “Format of Resettlement Action Plan” which is used by ZEMA as a checklist to validate RAPs is also used in the gap analysis since it provides requirements for all activities that lead to the production of a RAP (see Appendix 2-4).

5.1.7 MINISTRY OF ENERGY SOCIAL SAFEGUARD FRAMEWORK

The Ministry of Energy (MoE) is committed to support public and private Developers in the development and implementation of energy infrastructure projects that are socially sustainable, and to enhance the capacity to assess and manage social risks and impacts of energy infrastructure projects. To this end, the MoE has developed social safeguard standards, designed to prevent or mitigate social risks and negative impacts of projects and to enhance opportunities and positive impacts.

The Social Safeguard Framework (SSF) has been developed to ensure that gender and social inclusion is effectively mainstreamed in all energy projects under the Integrated Resource Plan (IRP). Environmental and social safeguards refer to policies, procedures, and measures intended to prevent, reduce, and mitigate unintended negative impacts on people and the environment in development projects. Table 5-3 outlines the objectives of the SSF as expressed in Social Safeguard Standards (SSS).

The social safeguards standards and requirements presented in the sections below are targeting developers and contractors in the energy sector. The MoE's SSF and applicable SSSs are recommended to be applied to all energy infrastructure projects that require an Environmental Impact Assessment (EIA) by Zambia Environmental Management Agency (ZEMA). These have been developed so as to reflect the principal requirements of the World Bank's ESF and then linked to individual ESS as appropriate.

Table 5-3 Objectives of MoE's Social Safeguard Standards

Social Safeguard Standards	Objectives
SSS 1: Labour and Working Conditions	<ul style="list-style-type: none"> – To promote fair treatment, decent working conditions and the health and well-being of workers – To prevent the use of all forms of forced labour and child labour. – To support the principles of freedom of association and collective bargaining of Project workers – To provide Project workers with accessible means to raise workplace concerns
SSS 2: Non-discrimination and Equal opportunities	<ul style="list-style-type: none"> – To promote the fair treatment, non-discrimination, and equal opportunity of Project workers. – To create employment opportunities for Zambians and targeted citizens. – To ensure that recruitment practices are transparent and free from corruption and political interference. – To create a conducive work environment free from sexism, gender bias and harassment, – To ensure that policies and practices respond to the needs of different groups in the workplace.
SSS 3: Sexual Exploitation, Abuse and Harassment (SEAH)	<ul style="list-style-type: none"> – To identify risk of SEAH and undertake measures to prevent or minimise harm. – To be survivor-centred and evidence-based in SEAH mitigation and response. – To build on local knowledge and structures in identifying local-level risks and measures.
SSS 4: Community Protection and Empowerment	<ul style="list-style-type: none"> – To increase sustainability and maximize the positive impact of the Project on local businesses in the Project affected communities. – To anticipate and avoid adverse impacts on the health and safety of Project-affected communities. – To prevent social conflict, violation of social norms, and the undermining of trust in traditional leaders and institutions. – To avoid or minimize community exposure to HIV/AIDS and other diseases, and to prevent increased use of alcohol and drugs. – To prevent negative impacts on women and girls' sexual and reproductive health and rights, such as unwanted or unsupported pregnancies and unsafe abortions. – To avoid school dropout and child labour.

Social Safeguard Standards	Objectives
SSS 5: Resettlement	<ul style="list-style-type: none"> – To avoid forced eviction and minimise involuntary resettlement by exploring Project design alternatives. – To mitigate unavoidable adverse social and economic impacts from land acquisition or restrictions on land use by: (a) providing timely compensation for loss of assets a replacement cost and (b) assisting displaced persons in their efforts to improve or restore their livelihoods and living standards. – To ensure that resettlement schemes are economically productive, socially secure and environmentally sustainable for persons settled voluntarily or involuntarily. – To improve living conditions of persons who are physically displaced, through provision of adequate housing, access to services and facilities, and security of tenure. – To ensure that the perspectives of women, youth and persons with disabilities (PWD) are obtained and their interests factored into all aspects of resettlement planning and implementation. – To ensure that resettlement is planned and implemented after appropriate disclosure of information, meaningful consultation, and the informed participation of those affected.
SSS 6: Stakeholder Engagement and Information Disclosure	<ul style="list-style-type: none"> – To establish a systematic and inclusive approach to stakeholder engagement throughout the Project life cycle. – To take stakeholders' views on issues that could potentially affect them into account in Project design and social and gender performance. – To involve stakeholders in the community in championing the participation of women, youth and PWD and supporting the monitoring of the Project. – To ensure that appropriate Project information is disclosed to stakeholders in a timely, understandable, and accessible manner.

5.1.8 WORLD BANK GROUP ENVIRONMENTAL AND SOCIAL STANDARDS

The Environmental and Social Framework (ESF) and associated Standards (ESS) set out the requirements related to Project's identification and assessment of environmental and social risks and impacts. These standards aim to support borrowers in achieving good international practices related to environmental and social sustainability; to fulfill their national and international obligations; to enhance non-discrimination, transparency, participation, accountability and governance; and to enhance the sustainable development outcomes of projects through stakeholder engagement.

- The ESS applicable to this RAP are the following:
 - ESS1: Assessment and Management of Environmental and Social Risks and Impacts
 - ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement
 - ESS8: Cultural Heritage
 - ESS10: Stakeholder Engagement and Information Disclosure

As part of this Project, the *ESS7: Indigenous Peoples / Sub-Saharan African Historically Underserved Traditional Local Communities* is not applicable. According to the World Bank definition, there are no groups recognized as Indigenous in the Project area.

The information presented below is taken from the World Bank Environmental and Social Framework⁵⁷.

⁵⁷ The World Bank Group. 2017. The World Bank Environmental and Social Framework. 106 pages.

5.1.8.1 ESS1: ASSESSMENT AND MANAGEMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

The ESS1 applies to all projects financing by the WB. ESS1 establishes the importance of:

- The borrower’s existing environmental and social framework in addressing the risk and impacts of the Project;
- An integrated environmental and social assessment to identify the risks and impacts of the Project;
- Effective community engagement through disclosure Project-related information, consultation and effective feedback; and
- Management of environmental and social risks and impacts by the borrower throughout the Project life cycle.

The WB requires that all environmental and social risks and impacts of the Project be considered as part of the ESA conducted in accordance with ESS1.

5.1.8.2 ESS5: LAND ACQUISITION, RESTRICTIONS ON LAND USE AND INVOLUNTARY RESETTLEMENT

The ESS, and its prior incarnation in the form of OP 4.12, recognizes that Project-related land acquisition and restrictions on land use can lead to adverse impacts on communities and persons. It may cause physical displacement (relocation, loss of residential land, or loss of shelter), economic displacement (loss of land, assets, or access to assets leading to loss of income sources or other means of livelihoods) or both. The resettlement is considered involuntary when PAPs or affected communities do not have the right to refuse land acquisition or restrictions on land use that result in displacement.

The WB refers to “Land acquisition” as all methods of obtaining land for project purposes, which may include outright purchase, expropriation of property and acquisition, and restriction of access rights, such as easements or rights of way. Land acquisition may also include: (a) acquisition of unoccupied or unutilized land whether or not the landholder relies upon such land for income or livelihood purposes; (b) repossession of public land that is used or occupied by individuals or households; and (c) project impacts that result in land being submerged or otherwise rendered unusable or inaccessible. “Land” includes anything growing on or permanently affixed to land, such as crops, buildings and other improvements, and appurtenant water bodies. “Restrictions on land use” refers rather to limitations or prohibitions on the use of agricultural, residential, commercial, or other land that is directly introduced and put into effect as part of the Project.

The objectives of the ESS5 are to:

- Avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement by exploring Project design alternatives.
- Avoid forced eviction.
- Mitigate unavoidable adverse social and economic impacts from land acquisition or restrictions on land use by providing timely compensation for loss of assets at replacement cost and assisting displaced persons in their efforts to improve, or at least restore their livelihoods and living standards in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of Project implementation, whichever is higher.
- Improve living conditions of poor or vulnerable persons who are physically displaced, through provision of adequate housing, access to services and facilities, and security of tenure.

- Conceive and execute resettlement activities as sustainable development programs, providing sufficient investment resources to enable displaced persons to benefit directly from the Project, as the nature of the Project may warrant.
- Ensure that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation, and the informed participation of those affected.

The applicability of ESS5 is established during the environmental and social assessment described in ESS1. The ESS5 applies to permanent or temporary physical and economic displacement resulting from the following types of land acquisition or restrictions on land use undertaken or imposed in connection with Project implementation:

- **Land rights or land use rights acquired or restricted through expropriation or other compulsory procedures in accordance with national law.**
- Land rights or land use rights acquired or restricted through negotiated settlements with property owners or those with legal rights to the land, if failure to reach settlement would have resulted in expropriation or other compulsory procedures.
- Restrictions on land use and access to natural resources that cause a community or groups within a community to lose access to resource usage where they have traditional or customary tenure, or recognizable usage rights. This may include situations where legally designated protected areas, forests, biodiversity areas or buffer zones are established in connection with the Project.
- Relocation of people without formal, traditional or recognizable usage rights, who are occupying or utilizing land prior to a project-specific cut-off date.
- Displacement of people as a result of Project impacts that render their land unusable or inaccessible.
- Restriction on access to land or use of other resources including communal property and natural resources such as marine and aquatic resources, timber and non-timber forest products, fresh water, medicinal plants, hunting and gathering grounds, and grazing and cropping areas.
- Land rights or claims to land or resources relinquished by individuals or communities without full payment of compensation.
- Land acquisition or land use restrictions occurring prior to the Project, but which were undertaken or initiated in anticipation of, or in preparation for, the Project.

5.1.8.3 ESS8: CULTURAL HERITAGE

The ESS8 sets out general provisions on risks and impacts to cultural heritage from Project activities. Its objectives are to:

- Protect cultural heritage from the adverse impacts of Project activities and support its preservation.
- Address cultural heritage as an integral aspect of sustainable development.
- Promote meaningful consultation with stakeholders regarding cultural heritage.
- Promote the equitable sharing of benefits from the use of cultural heritage.

The term ‘cultural heritage’ encompasses tangible and intangible heritage, which may be recognized and valued at a local, regional, national or global level, as follows:

- Tangible cultural heritage, which includes movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic or other cultural significance. Tangible cultural heritage may be located in urban or rural settings, and may be above or below land or under the water.
- Intangible cultural heritage, which includes practices, representations, expressions, knowledge and skills – as well as the instruments, objects, artifacts and cultural spaces associated therewith – that communities and groups recognize as part of their cultural heritage, as transmitted from generation to generation and constantly recreated by them in response to their environment, their interaction with nature and their history.

The requirements of the ESS8 are applicable to all projects that are likely to have risks or impacts on cultural heritage. This includes a project which:

- Involves excavations, demolition, movement of earth, flooding, or other changes in the physical environment;
- Is located within a legally protected area or a legally defined buffer zone;
- Is located in, or in the vicinity of, a recognized heritage site; or
- Is specifically designed to support the conservation, management and use of cultural heritage.

5.1.8.4 ESS10: STAKEHOLDER ENGAGEMENT AND INFORMATION DISCLOSURE

This ESS recognizes the importance of open and transparent engagement between the borrower and project stakeholders as an essential element of good international practice. Effective stakeholder engagement can improve the environmental and social sustainability of projects, enhance project acceptance, and make a significant contribution to successful project design and implementation.

The objectives of the ESS10 are 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.
- Assess the level of stakeholder interest and support for the Project and to enable stakeholders’ views to be taken into account in Project design and environmental and social performance.
- 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.
- 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.
- Provide project-affected parties with accessible and inclusive means to raise issues and grievances, and allow borrowers to respond to and manage such grievances.

This ESS applies to all projects supported by the WB through Investment Project Financing. Stakeholders must be engaged as an integral part of the Project’s environmental and social assessment as well as Project design and implement, as outlined in ESS1.

Borrowers must engage with stakeholders throughout the Project life cycle, commencing such engagement as early as possible in the Project development process and in a time frame that enables meaningful consultations with stakeholders on Project design. The nature, scope and frequency of stakeholder engagement will be proportionate to the nature and scale of the Project and its potential risks and impacts.

5.2 GAP ANALYSIS

The following table presents an analysis of the gaps between the Zambian, and more specifically ZESCO's, approach to resettlement and the requirements of the World Bank ESF, MoE Social Standards and best international practice. The most generous provisions toward PAPs were selected as the ones to be applied to calculate the compensation and support measures that will be provided to PAPs (see 'Gaps Identified and Proposed Measures' column in Table 5-4).

Table 5-4 Gap Analysis between Zambian Regulations and World Bank Requirements

Critical Steps of a RAP	Zambian Approach to Resettlement as per Legislation/Policy	World Bank ESF Requirements	MoE Social Safeguard Framework	Gaps Identified and Proposed Measures
<p>Inclusive and meaningful consultations with affected communities and disclosure</p>	<p>According to the National Resettlement Policy of 2015: “The investor/promoter in consultation with the relevant Government institutions shall engage with affected communities through a process of informed consultation and participation. The views of affected communities and persons, including host communities, will be considered in decision-making processes related to resettlement and livelihood restoration, including options and alternatives where applicable”.</p> <p>ZEMA’s “Format of Resettlement Action Plan” (see Appendix 2-4) requires that all consultations that were undertaken be described in the RAP. Minutes of consultation meetings should be taken and should be attached to the report together with the attendance register and meeting photo evidence.</p>	<p>ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement</p> <ul style="list-style-type: none"> Engaging with affected communities, including host communities, through the process of stakeholder engagement is required. <p>ESS10 Stakeholder Engagement and Information Disclosure</p> <ul style="list-style-type: none"> This standard places emphasis on engaging with and providing sufficient information to stakeholders throughout the life cycle of the Project, in a manner appropriate to the nature of their interests and the potential environmental and social risks and impacts of the Project, including implementation of resettlement activities. 	<p>Stakeholder engagement is an inclusive process conducted throughout the Project life cycle. Stakeholder engagement must include two parallel governance structures – traditional leadership and the local government. The process of stakeholder engagement must include stakeholder identification and analysis, planning how engagement will take place, disclosure of information, consultation, addressing and responding to grievances and reporting to stakeholders.</p>	<p>There are no material gaps between national regulations and World Bank requirements. In addition to stakeholder engagement activities completed thus far, additional activities with affected communities will be conducted RAP implementation.</p> <p>Consultation activities were appropriately documented as required by Zambian and World Bank requirements and are detailed in Chapter 11.</p>
<p>Census and valuation of assets, PAPs, and livelihood activities</p>	<p>ZEMA document “Format of Resettlement Action Plan” provides clear recommendations on the census.</p> <p>The Land Acquisition Act Chapter 189 of the Laws of Zambia provides that land and structures must be valued at market value. The Valuation Surveyors Act demands that only a registered surveyor should be used to value assets.</p> <p>Customary land cannot be valued according to national practices since customary land is held by the traditional leader on behalf of the community as a common asset. What is valued is improvements on the lands such as fields used by the PAP and the structures. ZESCO is however amending its policy in this regard.</p>	<p>Best international practices recommend that the census and valuation cover 100% of PAPs.</p> <p>The valuation of lost assets must take into account the full replacement cost, i.e., the market value (established by an independent valuer), plus applicable transaction costs, taxes, and contingencies for inflation.</p> <p>Where functioning markets are lacking, full replacement cost can be determined by other means, such as calculating the production value of land or productive assets, or the value of substitute materials and labour for reconstruction, plus transaction costs.</p> <p>Criteria for assessing the value of land, housing, and other assets will be standardized and transparent.</p>	<p>Compensation for lost asset should be paid at replacement cost, defined as a method of valuation yielding compensation sufficient to replace assets, plus necessary transaction costs associated with asset replacement.</p>	<p>There is no gap in terms of census. A full land census was completed to identify all affected assets and PAPs. Results are presented in Chapter 3.</p> <p>In terms of valuation, there is a common agreement that full replacement cost, as assessed by an independent valuer, should be used. Asset valuation was initiated by ZESCO and conducted by an independent registered valuer at full replacement cost. A market study was also conducted by another independent valuer to compare rates applied by ZESCO’s valuer. The valuation process and results are detailed in Chapter 8.</p> <p>In the case of communal land, as Zambian regulation states that this cannot be valued, compensation will be in-kind, facilitated by traditional authorities who will grant replacement land to PAPs at no cost. The goal is for PAPs with customary land tenure to be adequately compensated as per World Bank requirements. World Bank recommends land for land as preferred option where livelihoods are land based.</p>
<p>Entitlement and compensation</p>	<p>According to the National Resettlement Policy of 2015: “Persons displaced by the investment should be compensated. Compensation shall be based on market or replacement cost whichever is higher, including transaction costs”.</p> <p>“Disclosure of all relevant information and participation of affected communities and persons will continue during the planning, implementation, monitoring and evaluation of compensation payments, livelihood restoration activities and resettlement. The information should be provided in a language suitable for affected persons”.</p> <p>“The Resettlement Policy supports compensation of persons who hold land under customary or State Land or any other tenure system that may be recognized under the Constitution or any Act of Parliament, who may be affected by displacement, or destruction of assets on a piece of land in question”.</p> <p>“Government is not obliged to compensate squatters/encroachers as these shall be dealt with in accordance with existing relevant laws”.</p> <p>Under ZESCO’s practices, a “Relocation and disturbance allowance” is paid to all person losing a structure (whether primary or secondary). ZESCO does not usually compensate for loss of land associated with the wayleave (loss of rights) and the pylons base (loss of access) for land under customary land tenure. Additionally, ZESCO does not usually compensate natural trees that need to be cut even when individualized and linked to people’s livelihoods.</p> <p>Under the Forestry Act No. 15 of 2015: “The ownership of all trees standing on, and all forest produce derived from, customary areas, National Forests, Local Forests, State Land, botanical reserves and open areas is vested in the President, on behalf of the Republic.”</p> <p>As such, compensation cannot be paid to individuals for the loss of indigenous trees, which cannot be individualized.</p>	<p>ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement</p> <ul style="list-style-type: none"> ESS5 applies to permanent or temporary physical and economic displacement resulting from land acquisition or restrictions in connection with Project implementation. A resettlement plan or resettlement framework, for which requirements and level of detail vary with the magnitude and complexity of resettlement, must be developed. These are meant to mitigate the adverse impacts of resettlement and underline development opportunities. Entitlements will be provided in a transparent, consistent, and equitable manner, paying particular attention to gender aspects and the needs of vulnerable segments of communities. ESS5 requires that compensation be paid to squatters such as persons who are occupying land without the consent of the Chiefs. In this regard, there is no gap. 	<p>Resettlement schemes should be economically productive, socially secure and environmentally sustainable for persons settled voluntarily or involuntarily.</p> <p>Timely compensation for loss of assets a replacement cost must be provided along with assistance to displaced persons in their efforts to improve or restore their livelihoods and living standards.</p> <p>PAPs’ preferences in terms of compensation mechanisms, such as replacement land or alternative access to natural resources rather than in cash, should be explored.</p>	<p>There are gaps between Zambian regulation and ZESCO’s practices and requirements of the World Bank associated with restoring livelihood and compensating all affected assets. In order to close this gaps ZESCO will ensure (and monitor) customary owners effectively receive replacement customary land allocated by Chiefs/headmen.</p> <p>The entitlement matrix (see Chapter 4) was developed to bridge all gaps and comply with the most stringent requirement. As such, compensation will be provided for lost land under pylons. For titled land, compensation will be paid in cash or in-kind to qualifying PAPs whereas for customary land, replacement land will be granted by traditional authorities at no cost. For loss of rights in the easement, titled landowners will be entitled to compensation whereas customary land will be compensated at community level through the CSI Fund.</p> <p>Additional measures are also provided to restore livelihood (see Chapter 8).</p> <p>Squatters will be compensated for any structures or immovable equipment located within the wayleave, in line with ESS5 requirement (and ZESCO’s usual practices). The same will be applied to encroachers in Forest Reserves.</p> <p>Indigenous trees cannot be individualized under Zambian laws, but are linked to livelihood activities, which must be compensated as per ESS5 requirements. As such, indigenous trees used for livelihood were inventoried and will be compensated at community level through the livelihood-based reforestation program to ensure that overall level of livelihood and ecosystem services provided by those trees are restored (see Chapter 8).</p>

Critical Steps of a RAP	Zambian Approach to Resettlement as per Legislation/Policy	World Bank ESF Requirements	MoE Social Safeguard Framework	Gaps Identified and Proposed Measures
Cut off date	According to the National Resettlement Policy of 2015: "Date of completion of census and assets inventory of Project affected persons must be publicized and persons occupying the Project area after the cut-off date are not eligible for compensation and resettlement assistance". The Project developer and the PAPs must agree to the cut-off date and date should be publicised to all PAPs and key stakeholders such as the traditional authorities and relevant government authorities.	The promoter shall set a cut-off date for eligibility for compensation and resettlement. Information regarding this deadline will be disseminated throughout the Project area at regular intervals, in written and non-written media and in the languages spoken by the populations concerned, in a culturally appropriate and accessible manner.	The MoE Social Safeguards are silent regarding the cut-off date.	There are no gaps between Zambian regulations and World Bank requirements. As such, the cut-off date, associated with the end of the census, was disseminated through affected communities and PAPs were also informed during the census (see Chapter 4). An official statement was also issued by ZESCO to publicize the cut-off date.
Compensation payment	According to the National Resettlement Policy of 2015: "Land acquisition, payment of compensation for affected people/assets and resettlement shall take place before the onset of the Project". The compensation amount all packages must be agreed upon with PAPs through the process of negotiation. Under ZESCO's practices, payment of compensation is made within 6 months after compensation sign-off is signed (the disclosure form).	Best international practices and the World Bank require that all compensation be paid before taking of lands or destruction of assets.	Compensation payments should be issued in the names of both spouses or single heads of households as relevant.	There are no gaps, unless delays occur, and work begins before compensation payment. If delays are longer than 6 months, a re-evaluation of compensation will be necessary to ensure PAPs can restore their livelihood with the compensation money. A mechanism to conduct required updates is provided in Chapter 3.
Grievance redress	According to traditional customs, land disputes are resolved by traditional authorities before going to local courts. ZEMA document "Format of Resettlement Action Plan" provides clear recommendations on the dispute resolution mechanism to be developed in the RAP. The Project developer must provide a mechanism for resolving disputes and such mechanism must be easily accessible to PAPs at no cost to themselves.	Best international practices and World Bank ESS5 and ESS10 require that an appropriate and accessible grievance mechanisms be implemented aiming at resettlement. ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement and ESS10 Stakeholder Engagement and Information Disclosure - The listed standards require that a grievance mechanism be in place as early as possible to address specific concerns about compensation, relocation or livelihood restoration measures raised by displaced persons (or others).	Project grievance redress mechanism addresses specific concerns about compensation, relocation, or livelihood restoration measures raised by displaced persons (or others) in a timely fashion. The grievance mechanism should include the following: - Different ways in which users can submit their grievances, which may include submissions in person, by phone, text message, mail, e-mail or via a website. - A log where grievances are registered in writing and maintained as a database. - Communication to the public on the grievance procedure, stipulated timelines and the decision-making process. - An appeals process (including the national judiciary) to which unsatisfied grievances may be referred when resolution of grievance has not been achieved. A GRM Committee must be established.	A Grievance Redress Mechanism (GRM) was developed by ZESCO in its Stakeholder Engagement Plan for the ZTIP. However, as detailed in Chapter 14, the customary channel of addressing grievances is often not suitable for resettlement projects and, in this regard, there is a gap. The GRM presented in Chapter 14 and based on ZESCO's GRM and bridges the gap by suggesting the mobilization of GRM Local Focal Point persons.
Monitoring of resettlement success	There is no mention of monitoring resettlement in Zambian regulations. ZEMA document "Format of Resettlement Action Plan" provides with clear recommendations on monitoring of RAPs. ZESCO Document No. PP.14630.SPPR.00019 Resettlement and Compensation Action Plan Procedure Version 2 (16/12/2024) provides some details regarding monitoring (see Appendix 5-1).	Best international practices and World Bank ESS5 and ESS10 require that monitoring be implemented by the Project implementer in consultation with PAPs. As such, the RAP should contain a coherent monitoring and evaluation plan, integrated into the overall Project management process.	The MoE Social Safeguards require that mitigation and enhancement measures be monitored using key performance indicators and clear targets. Although there is not any specific guidance for resettlement activities' monitoring, it is implied that resettlement related activities be covered under the monitoring activities required by the MoE.	Though ZESCO procedure includes monitoring, the procedure does not provide sufficient details on the method and outcomes of monitoring. The monitoring program (see Chapter 15) identifies clear indicators and processes for monitoring as well as specific guidelines regarding the expected outcomes of monitoring in order to bridge this gap.

In case of conflict between Zambia's laws and World Bank ESF, the most stringent requirement will prevail.

5.3 ORGANIZATIONAL FRAMEWORK

A dedicated unit within ZESCO, the ZTIP Project Implementation Unit (PIU), has been established to manage the implementation of the resettlement process and undertake RAP activities, which has the required capability to undertake most RAP activities as presented in the next sections. The nature of the resettlement activities as per scheduling and timing will be decided by ZESCO management and in consultation with the appointed contractors and, where required, the lenders. Scheduling could be adapted to reflect a phased approach based on agreed priorities.

Environmental and Social (E&S) staff under the ZTIP PIU have experience in conducting resettlement programs and stakeholder engagement. The ZTIP PIU's capacity may be enhanced, as required, through collaboration with ZESCO's Environmental Sustainability Department (ESD), which also has E&S staff that are experienced in implementation of RAP activities. Some staff have B.Sc. degrees in natural resource management, ecology, environment, or engineering, while others have B.A. degrees in development studies, demography, geography, sociology or other social sciences. Some of the staff also have a Masters' degree in related fields.

5.3.1 AUTHORITIES AND LEADERSHIP DIRECTLY INVOLVED IN THE RAP

Institutional Authorities with direct interest in resettlement are the affected traditional leaders, affected local authorities, Ministry of Community Development and Social Services, the Department of Resettlements under the Office of the Vice President, and the Zambia Environmental Management Agency.

Traditional authorities and local authorities are critical providing land for resettlement and ensuring that the resettlement process is conducted without disrupting the existing land uses and development trajectory for the area. The resettled people need social services which are provided by local authorities and the traditional leadership depending on the type of social service needed.

The Ministry of Community Development and Social Services has a mandate to provide social protection and promote social and economic development of the people in each district and settlement. Resettlements may disrupt already running social protection and community development programs; hence their participation is critical for them to mitigate needless disruption of existing programs.

The Department of Resettlements has the mandate to ensure that resettlement activities are carried out according to the guidelines in National Resettlement Policy and that the affected people's livelihoods are restored. ZEMA is the principal organization which has been mandated to approve and monitor resettlement action plans in consultation with other relevant government departments and other key stakeholders.

ZESCO engaged the identified stakeholders including traditional authorities in this RAP process. Traditional authorities have already provided consent for ZESCO to access land. Consent signatures from Chiefs are presented in Appendix 11-3.

5.3.2 ORGANIZATION(S) INVOLVED IN FINANCING THE RESETTLEMENT PROGRAM

Funds for compensation payments and other RAP procedures will be provided by ZESCO.

5.3.3 ORGANIZATION(S) TO CARRY OUT VALUATION, NEGOTIATION AND PAYMENT OF COMPENSATION FOR LAND AND PROPERTIES

All valuations were done specifically for this RAP through field work and were based on case-by-case assessments using several criteria. An independent market valuation exercise (see Appendix 8-4) was done as part of this RAP (see Chapter 8) to identify preliminary compensation rates for structures, trees and crops as part of the preliminary RAP. Subsequently, ZESCO initiated its own valuation exercise, detailed in the following sub-sections. The results of this valuation exercise are presented in Chapter 8 and are the basis for the RAP budget (Chapter 13).

5.3.3.1 INFRASTRUCTURE AND TITLED LAND VALUATION

Valuation of houses, structures, and titled land was undertaken by Sandridge Associates, an independent property valuer engaged by ZESCO. Each structure (whether residential or secondary) was valued according to full replacement cost. Land was valued based on the loss of value associated with land use restrictions. The detailed methodology and valuation results are presented in Chapter 8.

5.3.3.2 VALUATION OF CROPS AND FRUIT TREES

Valuation of fruit trees was done by the District Agricultural Coordinator (DACO) at district level using a field method that involves several criteria assessing the age of the tree, the annual yield, and the market value of the fruit. The detailed methodology and valuation results are presented in Chapter 8.

The DACO will also be in charge of the valuation of damaged crops based on market value for each type of crop. This assessment will be done when damages occur as specified in Section 4.3.

5.3.3.3 VALUATION OF PLANTED TIMBER TREES

Valuation of planted exotic trees (timber trees) is done by the Forestry Department at district level for each species of affected exotic trees. This method involves:

- On the field determination of tree species;
- On the field measurements of the diameter at breast height (DBH) above 5 cm;
- On the field measurements of tree heights.

The detailed methodology and valuation results are presented in Chapter 8.

5.3.3.4 COMPENSATION SIGN-OFFS

Following finalization of valuation reports for structures, agricultural crops and trees of economic value by ZESCO, and compensation amounts proposed through the independent valuation process, the ZTIP PIU will disclose the compensation amounts to PAPs (this stage is called Disclosure). Disclosure allows PAPs to verify information is correct and review the amount. Once compensation details are agreed and consensus is reached on compensation packages, the PAP signs the Disclosure form (see Chapter 8) in the presence of ZESCO. Disclosure meetings and negotiations sometimes involve the Department of Social Welfare within the Ministry of Community Development and Social Services which assist in communication⁵⁸.

⁵⁸ As stated in the RCAP Audit Report (see Appendix 2-1), it is suggested that the Disclosure Form be redrafted to be more explicit in terms of communicating detail about that is being compensated and at which rates.

Where the affected household is male headed, it will be mandatory that the wife be present during disclosure of the compensation packages and when the head of the household signs the disclaimer form (after payment). This is to encourage the couples to make informed decisions together since, as mentioned in Chapter 4, eligibility is considered to be equally shared between spouses.

5.3.4 ORGANIZATION(S) MANDATED TO RESOLVE PROBLEMS RELATING TO IRREGULAR LAND/HOUSE TITLES

Organizations mandated to resolve land disputes in Zambia are Local Authorities and the Commissioner of Lands for land under the leasehold tenure system. Local Chiefs with support of their headmen resolve disputes for land which is under the customary land tenure system. Where these institutions fail to resolve the matter, the aggrieved party is free to seek legal redress through the courts. The Lands Tribunal Act, 2010 gives authority the lands tribunal to also resolve land disputes for both land under the customary and leasehold tenure system. ZESCO's previous census had not identified irregular land or house titles. If such titles were to be encountered during the census, local Chiefs will be adequately involved. There is also provision made for these issues to be logged via a Grievance Mechanism, and this is discussed in detail in Chapter 14.

5.3.5 ORGANIZATION(S) TO COMMUNICATE AND COORDINATE WITH AFFECTED PEOPLE, LOCAL AUTHORITIES, NGOS AND OTHER ORGANIZATIONS

Communication and engagement activities to be conducted by the ZTIP PIU are overseen by the Stakeholder Engagement Plan (SEP), as described in the ESIA and ESMP. The SEP will allow ZESCO to engage in meaningful communication and information disclosure with communities and includes:

- Disclosing RAP implementation calendars and progress in each community;
- Discussing land pre-entry/exit procedures and agreements with landowners and users for the commencement of construction activities and during maintenance;
- Disclosing work calendars in each community;
- Advertising the Grievance Redress Mechanism (GRM) and follow-up on grievances (see Chapter 14 for more information on the GRM).

The ZTIP PIU oversees all engagement activities that will take place during RAP implementation. The GRM will be managed by ZESCO, as the developer. This will be done via its Project Implementation Unit (PIU). The ZTIP PIU will have an active and dedicated officer responsible for the management of the GRM. However, the central feature of the GRM is the "Local Focal Point" (LFP) persons who will liaise with ZESCO's Project Implementation Unit (PIU) and other stakeholders to address grievances related to all RAP and other activities. The involved local focal point persons will ensure the GRM is accessible to community members.

5.3.6 ORGANIZATION(S) MANDATED TO DEAL WITH COMPLAINTS AND ARBITRATION

ZESCO will ensure all eligible PAPs are compensated as per agreements. The overall ZTIP GRM will be rolled out to ensure communities are aware of the process for the management of grievances. PAPs are also able to take cases to the court whenever the conflict cannot be solved by the GRM.

GRM Local Focal Point persons will be elected and trained to act as the primary entity to receive and log grievances, as detailed in Chapter 14.

5.3.7 ORGANIZATION(S) TO CARRY OUT MONITORING AND EVALUATION

Monitoring will be done by the ZTIP PIU.

Monitoring indicators will be established as well as a timeline. An evaluation and completion audit will be carried out by an external qualified consultant. This process is detailed in Chapter 15.

5.3.8 DESCRIPTION OF THE PROJECT RESETTLEMENT COMMITTEE

The ZTIP PIU will oversee most RAP activities from compensation negotiations to payment of compensations and monitoring.

5.3.9 CAPACITY BUILDING FOR PROJECT IMPLEMENTATION UNIT

Effective RAP implementation and GRM may require capacity building for the ZTIP PIU.

A capacity building and training program was developed as part of the ESMP (stand alone report). The ZTIP PIU will be trained on various aspects of environmental and social management, including mitigation of sexual exploitation and abuse and sexual harassment risks, and grievance management and resolution process through workshops and seminars. Case studies of similar Projects will also help build capacity regarding the World Bank ESF and associated ESSs, including ESS5 on Land Acquisition, Restrictions on Land Use and Involuntary Resettlement. Relevant training will be provided to the ZTIP PIU, alongside personnel from ZESCO's ESD where required, to enhance capacity.

5.4 COORDINATION OF RESETTLEMENT OVER THE VARIOUS JURISDICTIONS

ZESCO is the main promoter and operator of electricity generation, transmission, and distribution projects in Zambia. ZESCO is responsible for all activities related to the ESIA and RAP studies within its juristic mandate. ZEMA is responsible for issuing licenses and authorising projects that involve environmental and social impacts such as displacement. Through the authorisation process, ZEMA can set conditions for the development of displacement mitigation and the implementation process to be followed. ZEMA is also responsible for monitoring the implementation of the RAP through inspections and audits.

The ZTIP PIU will oversee resettlement in all districts. Meetings with district level agencies may also take place during the resettlement process. For example, each DACO will be involved in the valuation of damaged crops, the Ministry of Community Development and Social Services may be involved in communication and addressing issues of vulnerable persons. Lastly, ZESCO has obtained the consent of Chiefs to access land.

The Lands Department from the Ministry of Lands and Natural Resources may be involved where titled land is affected. Land demarcation will not change, and easement compensation is completed through negotiations with the title owner. The Lands Department may be involved if there is a need for arbitration between ZESCO and title owners. In those cases, the District Councils and the Department of Resettlement under the Vice President Office are also involved.

The Ministry of Energy could provide advice on the ESIA and RAP at the request of ZEMA.

Contractors that undertake civil works will be involved in accessing land that has been compensated and is “handed over” ad free of third-party interest. Land would only be made accessible once all relevant resettlement obligations are in place. Contracts are also envisaged as requiring land for various purposes. These would be for temporary laydown areas and access. They may also be for more permanent access roads or borrow pits. In all cases the nature of the land acquisition and asset compensation must be fully aligned with this RAP.

The contractor will be provided with the RAP and expected to develop their own management plans that reflect their approach to land acquisition and compensation and detail how these are aligned with the RAP. The management plans must also set out their exit strategies for land required for temporary purposes and define how rehabilitation and restoration will take place. The ZTIP PIU along with the Owners Engineer will be required to approve the management plans. The ZTIP PIU will monitor the contractors’ activities through the Owners Engineer, who will implement any actions required where deviation from the approved management plans is observed.

6 RESETTLEMENT SITES

As stated in Chapter 3, the resettlement process will lead to physical impacts on 548 PAPs (81 being only physically impacted and 467 being both physically and economically impacted) which are spread over the Pensulo-Kasama section of the ZTIP. The resettlement process presented in this chapter applies only to those with physical impacts.

For 384 of 548 PAPs, physical impacts are limited to land use restrictions on residential land (either titled or customary). Based on the independent asset valuation conducted, structures belonging to 164 PAPs will need to be relocated outside the wayleave due to safety concerns. These PAPs will, in most cases, not need to move a great distance since the wayleaves are small and there is available space to re-build the structures elsewhere on the parcel, outside the wayleave. Based on census results, over 70% of structure owners stated that there was sufficient space to rebuild on their existing parcel. Rebuilding on the same parcel is not possible in the case of 30 residential lands (due to limited space or unfit terrain). In these cases, compensation will be provided in cash or in-kind based on the PAPs' preference. When cash compensation is chosen, valuation of the entire residential parcel at full replacement cost will be conducted by an independent valuer and included in a RAP Addendum. When in-kind compensation is preferred, ZESCO, in consultation with traditional authorities (TAs) will facilitate provision of replacement land of equivalent size and quality. Access to replacement land is not expected to be constrained within the context of the transmission line as density of land occupation is low.

Based on the experience encountered on the Kasama-Nakonde section, a limited number of people self-relocated some distance from the wayleave. The audit for this section of the line, as appended, sets out a review of the process of physical resettlement, which has been adopted in this RAP (see Appendix 2-1). PAPs are therefore expected to relocate outside the wayleave but within their affected land parcels, except if they choose to move further, owing to the fact that PAPs sometimes use the opportunity of compensation payments to move closer to their families or closer to town centers.

The customary practice when a person searches for land is that the village headman identifies available land for displaced PAPs within the same village and the PAPs "simply" move to a new location on available land. Population density is low in the Project area, which means that, in most villages, there is no material issue regarding land availability either for replacement homestead plots or agricultural plots. The only area where there may be some land shortage is immediately adjacent to some of the substations, especially Kasama. When people move, they will not do it at the expense of another person or household, they typically take a piece of unoccupied land within the village. If the PAP wishes to move out of the village, it is the Chief (or relevant headman) who identifies available land and gives consent for the PAP to move to this new location. ZESCO is not involved in identifying replacement land or allocating customary lands to those displaced. However, ZESCO will be responsible for ensuring that PAPs are either able to obtain replacement land with the cash compensation paid or are provided with replacement customary land as in-kind compensation. The monitoring program described in Chapter 15 is adapted to reflect this requirement.

Though there is no need for ZESCO to implement a widespread search for resettlement sites, with respect to design of houses and tender for housing construction contractors, ZESCO will have to collaborate with TAs for the allocation of customary land for those who require it and opt for in-kind replacement and will need to provide replacement housing structures to PAPs who opt for in-kind compensation⁵⁹. As per Section 15 ZESCO will be

⁵⁹ It should be noted that ZESCO's discussions with physically displaced PAPs during disclosure (see Section 8.6) show that all but one prefer cash compensation.

required to act proactively in this regard and to ensure that land allocated to PAPs is satisfactory in terms of accessibility, quality and size.

However, when the allocated land requires leveling or clearing trees, this RAP has included an allowance for this activity (i.e., the “Land Preparation Allowance” detailed in Section 8.2.2).

For compensation of agricultural land under the pylon base, PAPs will receive cash compensation as the affected area is expected to be limited and to represent a small proportion of the PAP’s land. In the case of livelihood activities that will be restricted within the wayleave (trees more specifically), it should be possible, in most cases, to plant replacement trees outside of the wayleave, or cultivate affected crops on the unaffected portion of the parcel, so PAPs’ livelihood activities are not likely to be moved far away. If the area outside the wayleave is too small to replant those trees and replacement land is required, the process will be facilitated by ZESCO, in consultation with the Traditional Authorities, in an adequate manner and in compliance with the “land for land” principle. Land for land implies that a person receives in exchange of the lost surface of land a land of same size and similar characteristics so that the person is not disadvantaged by resettlement. ESS5 states that: “Whenever replacement land is offered, resettlers are provided with land for which a combination of productive potential, locational advantages, and other factors is at least equivalent to the advantages of the land taken”.

When a PAP moves within the same community, the PAP can only move to an area that has been identified by the Traditional Authority within the village of the chiefdom. There is no formal procedure for moving to a new piece of land within the village and the process is based on an implicit agreement, this process is recognized by the members of the community. In a case where a PAP decides to move to another chiefdom, the Chief does not grant any consent for land. Some PAPs could also move to another piece of family land, inherited from family members.

The following instruments and measures are developed as part of this RAP to facilitate access to replacement land for physically resettled PAPs:

- Cash compensation at full replacement cost for titled land parcel. See details in the Entitlement Matrix in Chapter 4.
- In-kind compensation for customary residential land parcels or titled lands for vulnerable PAPs. See details in the Entitlement Matrix in Chapter 4.
- Disturbance allowance and vulnerability allowance for eligible PAPs, paid in cash. See details in Chapter 8.
- The Grievance Redress Mechanism (GRM) which is detailed in Chapter 14.
- The Gender-Based Violence Management Plan which is detailed in the ESMP and addresses the risk of land grabbing for which women are at risk.
- Monitoring of resettlement which is detailed in Chapter 15. During monitoring, ZESCO will monitor PAPs to ensure those who were physically resettled received a new piece of traditional land.

7 CONSIDERATION OF ALTERNATIVES

7.1 ALTERNATIVE TO CASH COMPENSATION

The Project will involve few physical displacements of people along the line, and those that will be displaced will possibly only move a few meters from the wayleave. Given the large study area and the low number of houses, hiring a construction Contractor to build new houses would be difficult and may lead to long delays. In this framework, there is little justification to provide “house for house” compensation, except to vulnerable persons that cannot re-build their house, this situation would be dealt with on a case-by-case approach with vulnerable people.

7.2 ALTERNATIVE TO LINE ALIGNMENT

Since 2013, ZESCO has considered several corridor alternatives and has selected the current proposed transmission line route to avoid and reduce environmental and social impacts. Many stakeholders were consulted on different route alternatives and during the refinement of the Project design (see Chapter 11). Corridor alternatives considered for interconnecting the Tanzanian and Zambian national electricity transmission systems were jointly developed by AECOM (as Feasibility Consultants) and WSP. These corridor alternatives were developed at various stages of the feasibility and E&S studies that have been conducted for the Project. The corridor alternatives have been optimized where possible to reduce impacts and in consideration of technical elements (i.e., reducing the number of angle towers along the centreline). Environmental and social constraints within the Project area are numerous, due in part to the extent of the Project footprint, in which protected areas, wetlands, and human activity are common.

These corridors were the subject of rounds of meetings with stakeholders to gather opinions and take note of local sensitivities. The 2017 alignment passed through a farm block created by the Government of the Republic of Zambia and encroached on Lavushi Manda Town Council planned Town Development Land. These areas presented challenges to ZESCO in obtaining the right-of-way from the affected properties, thereby contributing to the justification for alignment refinement. This alternatives analysis and alignment refinement resulted in the selection of an alignment optimizing technical, environmental and social considerations, including presence of urban/peri-urban and built environment as well as presence of titled lands and dense traditional agricultural areas (see Chapter 4 of the ESIA).

Alternatives selection has also considered the combination of the ZTIP with existing or planned transmission lines in order to reduce the associated impacts and the fragmentation of the habitats.

- There were two proposals for the Kasama-Nakonde stretch running parallel, the previously funded ICBC Project and the ZTIP Phase II Project. The contract previously under the ICBC funding was cancelled in 2022 and it was therefore proposed that the ZTIP shall use the wayleave for the Kasama-Nakonde single circuit 330kV line previously under ICBC funding. The ZTIP shall have both lines as a double circuit 330kV line on single structure. This allows to avoid the need for additional wayleave to host the ZTIP. As stated in Chapter 2, this portion of the line is not covered by this RAP.

- For the Pensulo-Kasama section, the current ZTIP alignment parallels the existing Pensulo-Kasama 330kV transmission line for 294.4 km of its total length (386 km). In some areas, this results in the possibility to share a part of the wayleave from the existing line, reducing the need for additional wayleave and area affected by resettlement and land use restrictions. As a result, the wayleave was designed at 35 m instead of 50 m for a total of 193.8 km, as detailed in Section 2.1.6. In other areas, a 66kV transmission line is located between the ZTIP and the existing 330kV line, rendering it impossible to share wayleaves. In those stretches, the wayleave width remains 50 m.

8 COMPENSATION AND ASSISTANCE

The following chapter describes compensation and assistance that will be provided to PAPs. Compensations are implemented to replace direct and irreversible impacts (such as losing a house or land) while assistance can be described as additional support to address impacts from the resettlement process.

Table 8-1 presents the estimates of likely compensation and assistance values based on the census and the formal valuation process undertaken for this report.

While compensation is cumulative for each category, assistance is not. In other words, a PAP can be included in several categories of PAPs and receive several types of compensation (e.g., compensation for lost tree(s), lost crop(s), or lost dwelling and structures) but cannot receive the same assistance twice⁶⁰.

In addition, ZESCO has foreseen a Corporate Social Investment (CSI) Fund to compensate for project impacts at the community level for each impacted community, this fund is detailed in Section 8.4.2.

All foreseen compensation and assistance payments are one-time payments.

Table 8-1 Overview of Compensation and Assistance

Type of Impact	Categories of PAPs	Compensation and Assistance
Physical Displacement		
Permanent loss of residential land – either under easement or pylon base	Owner of titled land	Compensation at full replacement cost (inclusive of transaction costs), valued at 953,170 Kwacha. Disturbance and vulnerability (where eligible) allowances.
	Holder of communal land	Where there is not sufficient space on the affected parcel to rebuild an affected structure, PAPs can choose between cash or in-kind compensation to acquire replacement residential land to build the replacement structure. When cash compensation is selected, full replacement cost will be established by an independent asset valuer for the entire residential customary land. When in-kind compensation is preferred, ZESCO, in consultation with the Traditional Authority (TA) will facilitate provision of replacement land. Security of tenure to be provided as per certificate of occupancy provided for by the TA and costs to be covered by the Project. Based on census results, that is the case for 30 residential lands held by 30 PAPs for a total of 35.15 ha with an estimated replacement value of 425,367 Kwacha ⁶¹ . Additionally, where a pylon is sited on a customary residential parcel, the owner will be entitled to cash compensation for the permanent uptake. Affected land will be identified and valued once the final precise location of pylons is known and will be included in an Addendum to the current RAP. A budget estimate is provided in Chapter 8 and included in the RAP budget.
Permanent relocation of housing structure	Owner of housing structure (regardless of tenure type)	Compensation at full replacement cost, valued at 5,244,752 Kwacha. Disturbance and vulnerability (where eligible) allowances.

⁶⁰ For example, a person cannot participate in livelihood restoration more than once even if this person is eligible to livelihood restoration in several categories.

⁶¹ For budgetary purposes, it was assumed that all PAPs would opt for cash compensation.

Type of Impact	Categories of PAPs	Compensation and Assistance
		Where requested by PAPs, in-kind compensation for the lost house will be offered (house for house). Costs are included in the full replacement cost and this type of compensation will be offered to all PAPs.
	Tenant	Transitional rental allowance for three (3) months of rent to be paid, separately, to the tenant and the owner (tenancy rate), where applicable. Tenants allowance, which includes a month deposit, amounts to 5,800 Kwacha while landlords' allowance is estimated at 4,350 Kwacha.
Permanent relocation of secondary structures and immovable equipment	Owner of structure/ equipment (regardless of tenure type)	Compensation at full replacement cost, valued at 1,723,354 Kwacha. Disturbance and vulnerability (where eligible) allowances.
Economic Displacement – Commercial Structures		
Permanent relocation of commercial structures – either under easement or pylon base	Owner of commercial structure and parcel (titled landowners or communal landowners)	Commercial structure compensated at full replacement cost, valued at 49,070 Kwacha. Compensation for lost revenues for three (3) months estimated at 13,500 Kwacha. Disturbance and vulnerability (where eligible) allowances.
	Tenant	Compensation for lost revenues for three (3) months, where applicable. Disturbance and vulnerability (where eligible) allowances. None were identified.
	Employee	Compensation for wage loss for three (3) months. This is estimated at 17,844 Kwacha for all four affected employees.
Temporary disruption of commercial structures during construction	Operator	Compensation for lost revenues for the duration of the impact. Associated costs are included in the contingency.
	Employee	Compensation for wage loss for the duration of the impact. Associated costs are included in the contingency.
Economic Displacement – Agricultural Land, Crops, and Economic Trees		
Easement over agricultural land (permanent loss of rights)	Titled landowners	Cash compensation proportionate to the loss of value incurred by the use restrictions valued at 346,540 Kwacha.
	Communal landowners	Traditional authorities (TAs) will facilitate access to replacement land, at no cost, to cover loss of livelihood due to loss of rights within the easement. As stated above, it should be noted that access to replacement land is not constrained within the context of the transmission line.
Permanent loss of agricultural plot under pylon base	Owner of land or land use rights (titled)	Owners of titled land are already eligible for compensation for the entire parcel area located within the easement. As such, they are not entitled to additional compensation for the area located under the pylon base. Land preparation allowance.
	Owner of land or land use rights under customary tenure	Cash compensation for agricultural land being permanently affected by pylon siting. Affected land will be identified and valued once the final precise location of pylons is known and will be included in an Addendum to the current RAP. A budget estimate is provided in Chapter 8 and included in the RAP budget.
	Occupier without legal rights or claims	Land preparation allowance and other additional assistance aimed at their resettlement in dignified conditions.
	Tenant	Assistance in searching for adequate agricultural replacement land. Land preparation allowance.
Permanent loss of crops	Farmer (regardless of tenure type)	Compensation at market value, estimated at 27,136 Kwacha.

Type of Impact	Categories of PAPs	Compensation and Assistance
		<p>Compensation for loss of crops under pylons for the Kasama-Nakonde stretch is estimated at 47,087 Kwacha for 1.14 ha. Land preparation allowance will also be paid.</p> <p>Compensation will only be paid for crops that are destroyed during works. Official valuation will be completed by the DACO. Market study rates were used to provide a budget estimate.</p>
Permanent loss of individualised exotic/fruit economic trees	Owner of the tree (regardless of tenure type)	<p>Compensation at full replacement cost valued at 8,264,840 Kwacha by DACO.</p> <p>Compensation at full replacement cost valued at 158,675 Kwacha by the Forestry Department.</p>
Private Graves and Cultural Assets		
Permanent relocation of graves	Owner (regardless of tenure type)	<p>Relocation by a qualified archeologist. All costs will be covered by ZESCO. There are no private graves or cultural assets located in the wayleave. However, with the continuous implementation of ZESCO Chance Find Procedure, graves or cultural assets may be identified during construction.</p>
Community Assets		
Permanent relocation of community structure	Owner of structure or community	<p>Compensation at full replacement cost, valued at 141,620 Kwacha for all eight (8) affected community structures.</p> <p>Disturbance allowance for the four owners of those structures.</p>
Permanent loss of association/ institution land	Association (religious groups or others) or institution losing a piece of land	<p>The actual land, where impacted, will be made available and replaced by the TA. Further an in-kind compensation package has been designated by ZESCO to compensate the ten (10) associations/institutions whose land is crossed by the line route. The aim is to compensate communities for land repurposing and land use restriction.</p>
Permanent relocation of cemeteries	Community	<p>Relocation of graves by a qualified archeologist. All costs will be covered by ZESCO including ceremonial costs that include food and drink for the attendees as well as stipend payment for cultural leaders.</p>
Permanent relocation of cultural and sacred sites	Community	<p>Relocation by a qualified archeologist, all costs covered by ZESCO. There are no community cultural or sacred sites located in the wayleave. However, with the continuous implementation of ZESCO Chance Find Procedure, such sites may be identified during construction.</p>
Permanent loss of indigenous natural trees of use value located on individualised parcels	Community	<p>Livelihood-based reforestation program for the replacement of indigenous trees used for natural products and ecosystem services, estimated at 12,264,348 Kwacha, to cover the productive value of affected indigenous trees.</p>
Permanent loss of natural products harvesting areas and land under easement	Community	<p>An in-kind compensation package has been designated by ZESCO. The aim is to compensate communities for land repurposing and land use restriction. Lost trees in 22 community forest, fallow and grazing land, and bush will be compensated through the livelihood-based reforestation program, estimated at 12,264,348 Kwacha (as stated above).</p>
Permanent land use restrictions over customary land under easement	Community	<p>An in-kind compensation package has been designated by ZESCO. The aim is to compensate communities for land repurposing and land use restriction.</p>

8.1 VALUATION

8.1.1 FORMAL VALUATION PROCESS

Following the preparation of the preliminary RAP Report, ZESCO initiated the formal valuation process, which included asset valuation by a certified valuer as well as tree valuation by the DACO for fruit trees and by the Forestry Department for exotic trees. The valuation methodology is detailed below. Valuation results are presented in the following sections.

8.1.1.1 ASSET VALUATION

Asset (titled land, structure and improvements) valuation was conducted in early 2025 by registered valuation surveyors on behalf of Sandridge Associates in accordance with the Zambia Institute of Valuation Surveyors Act, No. 9 of 2023. Based on the census results (August and September 2024), field inspections and surveys were conducted in February and March 2025 to inspect each affected property, take note of physical details including construction, condition and services on each property, and confirm the asset location, ownership, and status of occupation. As discussed in Section 8.1.2 below, the results of the asset valuation study undertaken by Sandridge Associates was benchmarked against the earlier market study undertaken to validate rates as full replacement. This was to ensure that all methods used by the valuation team were ultimately consistent with the principles of ESS5 as per full replacement value. As such, two separate valuation studies, a preliminary as well as a formal development of the compensation schedule, were undertaken, so as to generate a high confidence outcome.

Following field inspections, data was compiled and analysed, and assets were valued as follows, according to the methodology detailed in the valuation reports (Appendix 8-1):

- For affected titled land: the comparable sales method has been adopted for valuing the affected titled land. This is based on the open market comparison of the land to be valued with what other similar parcels of land are currently selling for in the area taking into account the difference between them on a willing seller willing purchaser basis. As indicated by the valuer, the market-comparison method is ideal for establishing values of real estate and other goods in a competitive economy. The most critical aspect of the comparative sales method is what constitutes comparability. This is usually in respect of properties, comparability of transactions and market conditions. Each of these aspects has to be thoroughly analysed to obtain an ideal rate. However non-homogeneity of real estate, the imperfections in its market structure, inadequate sales data and falsified data on the recorded sale transactions, and "change of directors" when a sale transaction has occurred are some of the principal factors which limit the application of the method. Where part of the property is acquired, the valuer has also considered damage to the remainder of the property. This is in cases where the physical taking of a part of the land might reduce the value of the remainder by making it less convenient for some particular purpose.
- For affected structures and improvements: the current replacement cost or probable cost of acquiring similar structures or improvements including professional fees and completed to a standard as existing at the valuation date was used. Specifically, this is the amount it would cost to search for a supplier of the construction material, the cost to purchase, transport the materials to the site, and the costs of erection of the premises.
- Boreholes: the replacement cost approach where depreciation has not been taken into account was applied. It is expected the project will set aside funds as per the valuation to drill the borehole in a location convenient to the affected community and in consultations with the relevant professionals in the Water Resources Management Authority of Zambia in order to restore flow of water to the community without any major disruptions.

- The valuation process has also considered losses not directly based on the value of interest on the land. Such losses normally arise because of the service of the notice to acquire the land and such loss must be capable of assessment at the date of the notice of intention to acquire the land. These losses include cost of removal of loose assets, expenses incidental to removal of loose asset, and fixtures.

The asset valuation reports are available in Appendix 8-1. Compensation amounts, as valued in those reports, are detailed in Section 8.2 and were the basis for developing the RAP budget (Chapter 13).

8.1.1.2 TREE VALUATION

Tree valuation was conducted in early 2025 by the DACO for fruit trees and by the Forestry Department for exotic trees. In both cases, census results were shared with the relevant district-level offices and field inspections were conducted to validate the number and types of affected trees and value their replacement cost.

FRUIT TREES

As stated, valuation of fruit trees was completed by the DACO in each affected district along the Pensulo-Kasama stretch. Field activities were conducted in April 2025. The approach used during valuation is the cost and benefit approach, looking at tree age, value and benefit, average prevailing market unit price, and estimates of annual and/or seasonal tree production, to estimate the financial loss associated with cutting the tree over the period required for the replacement tree to be productive.

The DACO Fruit Tree Valuation Reports are available in Appendix 8-2. Compensation amounts, as valued in those reports, are detailed in Section 8.3.1.1 and were the basis for developing the RAP budget (Chapter 13).

EXOTIC TREES

Valuation of exotic trees was completed by the Forestry Department in each affected district where exotic trees had been identified within the wayleave, i.e., Mpika and Kasama. A few exotic trees were identified in Kanchibiya, near the border with Mpika District and those trees were valued by Mpika Forestry Department. Field work was conducted in April 2025 to confirm the number and type of trees and assess their diameter at breast height (DBH), height, purpose and condition.

Data collected by the Forestry Department was used to establish the compensation amount, either based on the replacement cost (for ornamental trees) or the market value (for timber trees). Replacement cost for ornamental trees includes seedling price at local markets along with transportation, land preparation, and management costs. Market value for timber tree considers tree value at maturity in local markets.

The Forestry Department Exotic Tree Valuation Reports are available in Appendix 8-3. Compensation amounts, as valued in those reports, are detailed in Section 8.3.1.1 and were the basis for developing the RAP budget (Chapter 13).

8.1.2 MARKET STUDY

A market study was also conducted by a trained valuer of AaronSHAW Property Consultants, as part of the preliminary RAP Report to determine compensation rates that were applied to develop a preliminary budget estimate for compensation of losses associated with Project infrastructure and activities.

The market study rates for crops are used in the final RAP budget to estimate compensation figures for affected crops. The methodology for establishing those rates is detailed below. It should be noted that market study rates were also used to analyse valuation results and ensure that formal valuation figures were aligned with full replacement value.

The market study report is presented in Appendix 8-4 and the rates applied for crop compensation are provided in Appendix 8-5.

The market study was conducted through interviews and focus group discussions with key informants, including individual traders and relevant officers from the Department of Agriculture, the Department of Livestock and Fisheries, as well as local authorities. Markets were also visited to identify the market prices of goods, including staple foods and agrarian products. In districts where there are urban areas, markets were visited in both urban and rural areas. Markets visited are presented in Table 8-2.

Table 8-2 Markets Visited as part of the Market Study

District	Market Name	Market Description
Kasama	Location market	Biggest market in Kasama District. Traders from other markets order things from this market for resale in other much smaller markets in the district. It stocks a variety of grocery items and agrarian products as well as construction materials.
	TAZARA Market	Small market which mostly stocks foodstuffs and agrarian products.
Kanchibiya	Mpepo market	Mpepo Market mostly stocks agrarian products. Other than cement and roofing sheets, no other construction materials were found in this market.
	Chambeshi market	Considerably smaller than the Mpepo Market. It stocks a very limited range of agrarian products.
Mpika	Musanje market	Biggest market in Mpika District and stocks a variety of construction materials, agrarian products and other essential household goods and farm inputs.
	TAZARA Market	Away from the central business district. It mainly stocks a variety of agricultural produce but mainly caters for people in TAZARA compound and the surrounding areas.
Lavushi Manda	Mfuwe market	Only market in Lavushi Manda District and mostly stocks agrarian products.
Chitambo	Mukando market	Main market in Chitambo District. The market stocks a limited range of construction materials.
	Chitambo market	Relatively small compared to the Mukando market. The market stocks agrarian products, timber and cement.
Serenje	Serenje market	Biggest market and stocks a variety of agrarian products, household goods and construction materials
	New market	Much smaller than Serenje market and stocks mostly agrarian products

A trained surveyor collected current rates on the date of the survey, the recent highest recorded price and the recent lowest recorded price were collected by interviewing stall owners. The prices were collected from at least one urban market and one rural market from each of the selected districts. Focus group discussions were held to determine the causes of significant price variations, seasonal variations in the availability of goods, and the price flux. The District Market Development Officer and Crops Officer from the Ministry of Agriculture and Cooperatives in each affected district were interviewed to get compensation rates for crops. For more information, see the full market study report provided in Appendix 8-4.

As indicated above, the core purpose for the market study was to generate a preliminary costing of the asset restoration process and then to be able to benchmark values against the formal valuation study undertaken for the generation of the compensation schedule.

8.2 ASSET RESTORATION

Asset restoration aims at compensating the loss of structures through compensation and additional assistance, as detailed below.

8.2.1 COMPENSATION

ZESCO's method for compensation for loss of physical assets is based on cash compensation at full replacement cost including any labour costs involved in reconstruction. This is often referred to as the contractor's costing method. Most of the impacts on assets relates to houses or secondary structures such as latrines and kitchens. All impacted structures will be permanently relocated.

As highlighted in Chapter 6, Traditional Authorities (village headmen or Chiefs) allocate land to customary owners so that they can rebuild a house and secondary structures on a new land. In the case of titled residential land, cash compensation will be provided to acquire replacement residential land.

Compensation values for land, residential structures, and secondary structures are detailed below.

8.2.1.1 LAND

The inventory identified 1,019 parcels located partially or completely within the wayleave, including 544 residential parcels and 475 agricultural parcels. As indicated above, residential parcels were defined as having at least one dwelling structure associated with the plot, either in the wayleave or not. It should be noted that all five businesses are located on residential parcels.

TITLED LAND

In accordance with the eligibility criteria established in Chapter 4, titled land will be compensated in cash based on an independent valuation. The costs associated with replacing titled parcels are estimated at 1,299,709 Kwacha as detailed in Table 8-3. There are 30 PAPs with titled land (22 residential and 8 agricultural). They are entitled to choose either cash compensation or in-kind as per the entitlement matrix. From disclosure undertaken by ZESCO it appears as if only one PAP currently opted for in-kind compensation, all others opting cash compensation.

Table 8-3 Compensation amounts for titled lands

Type of Titled Land	Number of PAPs	Affected Area (ha)	Compensation Amount (Kwacha)	Average Compensation Rate ² (Kwacha/ha)
Residential ¹	22	95.94	953,170	9,935
Agricultural	8	39.14	346,539	8,854
Total	30	135.08	1,299,709	9,622

Source: Asset Valuation Reports (see Appendix 8-1).

Notes: ¹ As previously stated, all land where a residential structure is built (either inside or outside the wayleave) is considered residential.

² This is the total value divided by the extent of land impacted per category of titled land.

CUSTOMARY LAND

In accordance with the eligibility criteria established in Chapter 4, customary land will be compensated if it is demarcated as residential and there is not sufficient space for rebuilding the affected structures and for the permanent uptake associated with the pylon base.

RESIDENTIAL CUSTOMARY LAND

For those in customary land areas, it is expected that most PAPs will usually be moved a few meters outside the wayleave, affected structures being rebuilt on the unaffected portion of the parcel. Where this is not possible due to limited space or unfit terrain, compensation will be provided in cash or in-kind based on the PAPs' preference for the entire residential land and associated structures. When cash compensation is chosen, valuation at full replacement cost will be conducted by an independent valuer and included in a RAP Addendum. Where in-kind compensation is preferred, ZESCO, in consultation with traditional authorities (TAs) will facilitate provision of replacement land of equivalent size and quality.

Based on census results, there are 30 residential parcels where PAPs have indicated that rebuilding affected structures outside the wayleave would be impossible due to insufficient space and/or unfit terrain (waterlogged areas, etc.). For budgetary purposes, it was considered that all PAPs would opt for cash compensation⁶². These 30 parcels represent a total area of 35.15 ha (including the affected and unaffected area) that will be compensated at full replacement cost, including a 10% disturbance allowance, based on independent valuation. It is estimated that this will represent 425,367 Kwacha if all PAPs opt for cash compensation. This estimate is based on full replacement cost rates for residential land used by the independent valuer (see Appendix 8-1). Formal valuation results will be disclosed through a RAP Addendum.

PERMANENT UPTAKE ASSOCIATED WITH THE PYLON BASE

Permanent uptake of customary land associated with the pylon base will be compensated in cash as the affected area is quite small⁶³. Indeed, it would be impractical for TAs and PAPs alike to compensate for the permanent uptake of land at the pylon base by providing small patches of replacement land. Cash compensation will be paid to affected customary landowners. As the precise location of pylons is not final at this stage, a budgetary estimate is provided in Chapter 12 for these cash compensation. This estimate is based on the distribution of land within the wayleave and market study rates for customary land (see Appendix 8-4). Cash compensation of customary land at the pylon base is estimated at 18,533 Kwacha.

Affected land will be formally identified and compensation amounts will be valued once the pylon location is final. This will be included in an Addendum to the current RAP.

Compensation for customary land under pylons on the Kasama-Nakonde stretch

As mentioned in the Entitlement Matrix (see Section 4.5), provisions are made in the current RAP to compensate PAPs on the Kasama-Nakonde stretch for loss of land and crops associated with the location of pylons. Indeed, these assets were not compensated as part of the RCAP and will be compensated as part of the current RAP. Formal identification and valuation will be conducted and included in the Addendum, but an estimate is included in the budget (see Chapter 12) based on the expected footprint of pylons of that stretch as well as land and crop distribution as established during detailed surveys on the Pensulo-Kasama stretch (see Chapter 3).

It is estimated that 71% of the 5.71 ha footprint of pylons between Kasama and Nakonde will be customary land. Applying the market study rates for customary land as above, it is estimated that compensation of customary land under pylons on that stretch will cost approximately 29,234 Kwacha.

⁶² This assumption allows for a conservative budget estimate.

⁶³ As detailed in Table 2-3 (see Section 2.2.3), the average footprint for pylons between Pensulo and Kasama is 34.2 m².

8.2.1.2 RESIDENTIAL STRUCTURES

In total, 172 residential structures are located within the Project area. The compensation costs associated with these structures, detailed in Table 8-3, are estimated at 5,244,752 Kwacha.

Compensation costs were determined by the certified valuation surveyor during the formal valuation process following the methodology detailed in Section 8.1.1.1. Average compensation costs at district-level vary based on the standard of housing, as well as materials used for residential structures.

For houses that were under construction or abandoned/in ruins at the time of the census, compensation costs were determined based on materials value only in compliance with the entitlement matrix (see Section 4.5). It should also be noted that some structures were abandoned at the time of the census, but owners/occupants declared that the house was functional at the time of the last census, conducted by ZESCO in 2019. They stated that they either destroyed and moved the house or stopped working on it, which explains its current state. In those cases, ZESCO will pay compensation based on the state of the house at the time of the last census.

Table 8-4 Compensation for Residential Structures

District	Number of PAPs	Number of Structures	Compensation Cost (ZMW)	Average Compensation Cost per Structure (ZMW)
Kasama	83	109	3,493,060.00	32,046.42
Kanchibiya	9	11	339,080.00	30,825.45
Mpika	36	43	1,179,399.50	27,427.90
Lavishu Manda	2	2	74,670.00	37,335.00
Chitambo	5	6	139,042.50	23,173.75
Serenje	1	1	19,500.00	19,500.00
Total	136	172	5,244,752.00	30,492.74

Source: Asset Valuation Reports (see Appendix 8-1).

8.2.1.3 SECONDARY STRUCTURES

In total, 172 secondary structures⁶⁴ are located within the Project area (see Section 3.4.1.2). The compensation costs associated with these structures, detailed in Table 8-5, are estimated at 1,723,353.50 Kwacha. Compensation costs were determined by the certified valuation surveyor during the formal valuation process following the methodology detailed in Section 8.1.1.1 and the average compensation cost at district-level varies based on the type and standard of secondary structure.

As for residential structures, when secondary structures or equipment were under construction or abandoned/in ruins at the time of the census, compensation costs were determined based on materials value. Some structures were declared to have been functional at the time of the last census conducted by ZESCO. Those were considered as fully functional structures and are compensated as such.

⁶⁴ Secondary structures in this context are separate to primary dwelling structures (those used exclusively for sleeping and multipurpose used for activities that including sleeping) and are typically standalone latrines, kitchens or storage facilities. Section 3.4.1.2 details the types of affected secondary structures that were inventoried within the wayleave.

Table 8-5 Compensation for Secondary Structures

District	Number of PAPs	Number of Structures	Compensation Cost (ZMW)	Average Compensation Cost per Structure (ZMW)
Kasama	82	270	1,186,081.50	4,392.89
Kanchibiya	8	30	137,305.00	4,576.83
Mpika	36	79	288,382.50	3,650.41
Lavishu Manda	2	5	10,805.00	2,161.00
Chitambo	10	21	91,124.50	4,339.26
Serenje	1	4	9,655.00	2,413.75
Total	139	409	1,723,353.50	4,213.58

Source: Asset Valuation Reports (see Appendix 8-1).

8.2.1.4 COMMERCIAL STRUCTURES

As presented in Chapter 3, there are five (5) businesses within the wayleave, three of which include structures to be relocated. Three (3) businesses are retail made up of small-scale informal shops and the other two are a cleared areas used for block making and storage as well as a sport field rented to community members (see Section 3.4.1.2). Compensation rates for commercial structures were determined by the independent valuer. The total compensation amount for all three (3) commercial structures is 49,070.00 Kwacha. Each of these has been separately valued as per the valuation reports.

Compensation for lost commercial revenue for a period of three (3) months is estimated at 13,500 Kwacha for all five (5) businesses and compensation for lost salary (also for three months) is estimated at 17,844 Kwacha for the four (4) affected employees, all employed in the block making business. Compensation for lost revenue is based on declarations made by business owners during the census. Compensation for lost salary is based on Zambia’s minimum wage for general workers⁶⁵ as declarations made during surveys established that salaries were lower than the minimum wage. As to avoid replicating wage inequalities, it was decided to apply the minimum wage to establish salary compensation as part of the current RAP.

As structures will be displaced before construction begins, there should not be a disruption in the ability to trade and/or carry out services. If such disruption can be demonstrated, then the compensation will be paid for a period of three months. The estimated compensation amounts for lost commercial revenue and salary are calculated based on a worst-case scenario.

8.2.2 ASSISTANCE

Assistance will include the following packages for entitled PAPs:

- **Possibility for all PAPs to opt for in-kind replacement of affected housing:** ZESCO will pay a local contractor to rebuild a house for the person in lieu of the compensation, upon request from said person. Though this option is offered to all PAPs, vulnerable PAPs may be more numerous to opt for in-kind replacement due to limited capacities for some to rebuild their house themselves⁶⁶. When that is requested by PAPs, ZESCO will hire local contractors to rebuild affected houses.

⁶⁵ Zambia does not have a single national minimum wage. Based on the Employment Code (Minimum Wages and Conditions of Employment) (General) Order, 2023, the minimum wage in Zambia for general workers of category I (including general workers in construction, handy persons, and general workers not elsewhere specified) is 7.15 Kwacha per hour or 1,487 Kwacha per month.

⁶⁶ Where those deemed vulnerable select a cash compensation, ZESCO will need to undertake dedicated monitoring to ensure vulnerable persons have a rebuilt house prior to project construction.

- **Disturbance allowance** will be paid to help PAPs move their assets. This allowance represents 10% of compensation costs and covers:
 - Clearing land: PAPs may need to clear land to establish the new house.
 - Moving personal belongings: PAPs will need to move their personal belongings to their new residential site within the local community.
 - Fees to open a bank account: to ensure PAPs do not lose money when withdrawing their compensation payment.
 - Preparation of replacement land (removal of trees, plowing, etc.).

The disturbance allowance for eligible PAPs (188 PAPs⁶⁷) is budgeted at 831,688 Kwacha. This is 10% of the total compensation amount calculated for assets as per footnote 67.
- **Vulnerability allowance:** representing 10% of compensation costs, this allowance will be paid to PAPs considered vulnerable based on vulnerability criteria detailed in Section 3.5. The allowance aims to cover additional expenses or challenges that could be encountered by vulnerable PAPs. The vulnerability allowance for eligible PAPs (84 PAPs⁶⁸) is budgeted at 335,400 Kwacha.
- **Transitional rental allowance:** tenants or renters that occupy a house to be demolished will receive an allowance to allow temporarily renting another place if replacement accommodation is not available at time that dwelling structure is alienated. The allowance will cover rent for three (3) months and will include a month's deposit for tenants who may be required to pay it. The transitional rental allowance concerns tenants and landlords. It allows for a worst-case scenario and covers three (3) months of rent based on costs declared during detailed surveys for a total of 5,800 Kwacha for tenants (three tenants) and 4,350 Kwacha for landlords (three landlords).
- **Land preparation allowance:** for all owners of agricultural land affected by permanent uptake at the pylon base, an allowance will be paid to account for the preparation (removal of trees, plowing, etc.) of the replacement land. As detailed in Section 8.2.1.1, compensation for this permanent land uptake will be paid in cash only as the magnitude of impact is very limited⁶⁹. PAPs may choose to cultivate a different portion of their land or acquire replacement land with the compensation amount, and a land preparation allowance is provided to clear the land and plow as necessary before cultivation. The land preparation allowance will be paid to agricultural landowners affected by the pylons' location. The allowance is valued at 1,000 USD/hectare (22,950 Kwacha/hectare⁷⁰) for a total of 24,252 Kwacha.
- **Training on financial management and home maintenance:** to ensure cash compensation is used sensibly by eligible PAPs, training on financial management will be offered to PAPs receiving cash compensation for land and/or structures, and PAPs whose housing structure is affected will also be eligible for training on home maintenance. Trainings will be provided by the Ministry of Community Development and Social Services.

While compensation is cumulative for each category, assistance is not. This means that a PAP can be included in several categories and receive several compensations (compensation for lost trees, lost crops and lost house) but cannot receive the same assistance twice.

⁶⁷ As set out in the entitlement matrix, PAPs who own a titled land, residential structure, secondary structure and/or commercial structure are entitled to the disturbance allowance.

⁶⁸ As set out in the entitlement matrix, PAPs who own a titled land, residential structure, secondary structure and/or commercial structure and correspond to one or many vulnerability criteria (as detailed in Section 3.5) are entitled to the vulnerability allowance. A total of 84 PAPs with affected titled land or structures were identified as vulnerable and are thus eligible to the vulnerability allowance.

⁶⁹ As detailed in Table 2-3 (see Section 2.2.3), the average footprint for pylons between Pensulo and Kasama is 34.2 m².

⁷⁰ The rate considered is 1 USD = 22.9503 ZMW, as of December 5, 2025 (Oanda).

8.3 INCOME AND LIVELIHOOD RESTORATION

Income and livelihood restoration aims to compensate for impacts on livelihood activities. This is done through compensation for lost sources of livelihood such as economic trees (fruit and exotic), crops, and agricultural land (Section 8.3.1) as well as through assistance/livelihood restoration program (Section 8.3.2).

8.3.1 COMPENSATION

8.3.1.1 INDIVIDUALISED ECONOMIC TREES

All exotic/fruit trees, defined as trees of economic value, and located on privatized land (regardless of tenure type) used by PAPs for livelihood (either for fruit or timber) will be compensated at full replacement value based on valuation amounts provided by the DACO for fruit trees and by the Forestry Department for exotic trees. As detailed in Section 8.1.1.2, the rates include full replacement value of timber at maturity or of fruits for value of produce for a period as long as required to restore tree productivity. It is noted that as per the Forestry Act of 2015, those trees designated as indigenous cannot be owned. Although they may appear on individual parcels, the trees are the property of the State and while their products may be harvested by communities, the productive value cannot be individualised. In effect, even though a tree may be on an individual parcel of land within a customary area, the individual cannot prevent other members of communities from harvesting associated resources⁷¹. It is recognized that there is still a livelihood loss associated with these trees even though compensation cannot be at an individual level. Indigenous trees located on individual parcels will be compensated through a livelihood-based reforestation program, detailed in Section 8.4.3, as well as training sessions for livelihood development (Section 8.3.2).

As detailed in Chapter 3, there are a total of 5,133 exotic/fruit trees eligible for individualised compensation within the wayleave. Compensation at full replacement cost is estimated at 8,423,515 Kwacha based on assessments by the DACO and Forestry Department. This is paid to affected tree owner in cash.

8.3.1.2 CROPS UNDER PYLONS

The crops located under the pylons will be compensated as they will be permanently lost. As detailed in Chapter 3, areas under cultivation represent 20% of the total wayleave area. As such, it is estimated that 20% of the pylons' footprint will be under cultivation. This represents 0.66 ha. Compensation was estimated based on the distribution of crops inventoried within the wayleave. Full replacement cost of those crops is estimated at 27,136 Kwacha and will be paid in cash to affected PAPs.

It should be noted that this is an estimate, as compensation for crops will only be paid based on crops that are present and destroyed at the time of construction. A formal assessment will be conducted by the DACO when the precise location of affected crops is known. When construction activities require the clearing of crops, ZESCO will be notified by the Contractor. ZESCO will then mobilize the DACO to proceed with formal identification and valuation of affected crops. Compensation will be paid before crops are destroyed and construction activities can proceed. This process will be ongoing throughout the pre-construction and construction phase and will apply to all activities that may cause the destruction of crops, including detailed surveys and geotechnical surveys, bush clearing, tower foundation work, as well as tower erection and stringing. In all cases, compensation payments will be completed before the destruction of crops.

⁷¹ This point was emphasised by ZESCO as per their experience with the Department of Forestry.

Although the location of pylons is not yet final, the current RAP Report provides an estimated budget for compensation of crops under the pylons, based on rates established during the market study (see Section 8.1.2). This budget is however indicative as DACO's formal valuation figures will prevail. The DACO's methodology for crop assessment and valuation includes measurement of the affected area, calculation of the expected total yield, assessment of the management levels for each crop, and valuation based on the annual market prices. Extension support, including the distribution of seed packages, and advice to persons whose crop land is affected by pylons will be provided in collaboration with the DACO to ensure that livelihood impacts are mitigated. When the formal identification and valuation of losses will be completed, an Addendum will be prepared.

Furthermore, the budget for any incidental impact to crops not associated with the pylons' locations will be compensated through the contingency.

Training sessions for livelihood development will be offered to all crop farmers in land plots impacted by pylons and conducted by the Community Development Department. Training sessions will be organised in all affected communities, with multiple sessions possible in communities where there are many persons losing cultivated/cropped land to pylons.

COMPENSATION FOR CROPS UNDER PYLONS ON THE KASAMA-NAKONDE STRETCH

As stated in Chapter 4, some entitlements are applicable to PAPs on the Kasama-Nakonde stretch where resettlement has already been completed by ZESCO to address some gaps identified during the RCAP Audit. In this context, PAPs growing crops under the pylon base will be eligible to the entitlements detailed in Chapter 4 for such losses. As detailed in Chapter 3, the estimated area of pylons along that stretch is 5.71 ha.

Based on the distribution of crops observed on the Pensulo-Kasama stretch, it is estimated that 20% of this area will be cultivated (1.14 ha). If applying the average rate for crops (as per the Market Study) and same crop distribution as for the Pensulo-Kasama stretch, the budget for compensation is estimated at 47,087 Kwacha will be required to compensate for those crops.

8.3.1.3 CROPS UNDER THE WAYLEAVE

In compliance with ZESCO policy, all crops damaged during construction or maintenance will be compensated at local market value. This is budgeted as part of contingency as the location and extent of those damages are not yet known. The procedure for identifying and compensating those damages is detailed in Chapter 4.

8.3.2 ASSISTANCE

Aside from compensation detailed in Section 8.3.1, the livelihood restoration program includes assistance for economically affected PAPs in order to facilitate the restoration or improvement of their livelihoods. The following activities are planned as part of the livelihood restoration program:

- **Training for the improvement of agricultural practices and livelihood development:** Owners of crops or users of trees (whether fruit, exotic, or indigenous) located under the pylon base, within the wayleave or in the footprint of temporary infrastructure required during construction will experience disruption of their livelihood activities, whether temporarily (for affected crops in the wayleave or in the footprint of temporary infrastructure) or permanently (for affected crops at the pylon base or trees within the wayleave). Training will be offered to these PAPs by the Ministry of Agriculture to improve agricultural practices and yields. Training sessions will be organised in all affected communities, with multiple sessions possible in communities where there are many eligible PAPs.

- **Distribution of seed packages:** Owners of affected crops will be offered seed packages to facilitate the restoration of their livelihoods. These packages may include improved seeds or fertilizers as necessary.
- **Training on commercial development:** Affected business operators will also be eligible to livelihood restoration measures.
- **Employment search:** Affected employees will be assisted in their search for a new job where necessary.

Based on the socioeconomic survey, 839 PAPs are eligible to livelihood restoration assistance, either because they farm, exploit economic trees, or operate a business within the wayleave. A budget is provided for these livelihood restoration measures (see Chapter 13).

It should be noted that livelihood restoration measures developed as part of the current RAP are proportional to the extent of expected impacts on livelihoods. Specific livelihood activities will be agreed upon with the PAPs during stakeholder engagement prior to implementation of the livelihood restoration program. As agricultural activities will be permitted within the wayleave during the operation phase, most affected activities will be restored in their original location. Where livelihoods are significantly impacted by land use restrictions within the wayleave (for PAPs whose livelihoods depended mostly on trees for instance), PAPs will be granted replacement land by the TA as outlined in the entitlement matrix.

PAPs will usually only be moved a few meters outside of the wayleave and the distance between the house and the field will not be significantly impacted. There are exceptions, as evidenced by the audit carried out for the Kasama-Nakonde section. Some of those who moved from the wayleave self-relocated to a position that was some distance from their affected asset. Some of these individuals indicated that they could no longer service their farm holdings. It should be noted that these individual self-relocated and chose to move a distance from their original homesteads largely as they wanted to be located within more developed settlement. They continue to have access to their farmlands even though they do not use them. However, they will be identified via monitoring protocols, continue to be monitored and if there is demonstrable loss of livelihood then they will be entitled to additional assistance as above. This would include facilitation of location of replacement land via the Chief/headman as well as the land preparation allowance.

It should be noted that PAPs that will be temporarily impacted by the worker camps and access roads will be provided with a land restoration allowance so they can plough the compacted land and resume agricultural activities following the construction phase. The land restoration allowance will be determined based on a case-by-case approach, whenever there is an impact on land due to worker camps and access roads.

8.4 COMPENSATION FOR COMMUNITIES

8.4.1 DISPLACEMENT OF STRUCTURES USED BY ASSOCIATIONS

As detailed in Chapter 3, several community assets will need to be relocated including three graveyards and seven community structures owned by religious associations, cooperatives, or affected villages. Those will be compensated based on full replacement value, as for private structure.

Structures were valued as part of the formal valuation process (Section 8.1.1.1) and compensation is established at 128,745 Kwacha. A disturbance allowance representing 10% of the compensation value for community structures will also be paid, for a total of 12,875 Kwacha. Six (6) mango trees were also inventoried on a community land (owned by St-Kalolo Lwanga Catholic Church in Chanda Mukulu). Those were valued at 24,000 Kwacha by DACO.

The total compensation for displacing communal structures is 165,620 Kwacha.

Community land repurposed due to the transmission line will be compensated under the CSI Fund detailed in the next section.

8.4.2 CORPORATE SOCIAL INVESTMENT FUND FOR AFFECTED COMMUNITIES

Under the RAP, a Corporate Social Investment (CSI) Fund will be set up to fund projects in communities where land use will be affected by the Project. The CSI Fund should be set up by ZESCO to compensate for the imposition of a wayleave over the community's land resulting in loss of access to land and restrictions on land use. In its memo on Corporate Social Investment benefits for impacts on communal customary land, ZESCO commits to implementing such a program (see Appendix 8-6). The budget for these community activities is tentatively estimated at 1% of the total Project costs, in line with good practice on similar projects, and will be revised as more details become clear during consultations with communities and ZESCO Corporate Executive Team. This budget is considered external to the RAP implementation budget presented in Chapter 13.

This will potentially be used for community development projects, such as the following, that were suggested from communities during stakeholder consultations:

- Electrification of homes through installation of solar panels;
- Building basic schools or clinics;
- Construction of access roads;
- Drilling of boreholes.

The approach will be adopted to accommodate viable community requests and identify development projects to be funded in affected communities. ZESCO will engage in consultations with affected communities in the districts where the transmission line will cross to conduct follow-up socioeconomic surveys, and identify community needs, and reach consensus on the prioritization of these needs.

The consultations will adopt a participatory approach that ensures active participation of men, women, youths and traditional leaders to ensure the needs of various groups are taken into consideration. Based on standard practice, separate sessions will be held with various groups including women, to ensure they can express their opinions freely and without fear of retaliation or consequences. Consultations with local leadership (traditional leaders and council officials) will also be necessary. These will be conducted separately from community consultations at the point of entry to a community and at the end of community consultations to inform them of agreements reached with communities and to seek their support in enforcing agreements. The approach will be undertaken with transparency to avoid grievances/complaints, but also to provide an opportunity for feedback to assist ZESCO with redesigning options where necessary. As such, information on Project activities and possible benefits will be shared widely within the communities in a form and language that is acceptable.

It is envisioned that a list of potential projects will be further proposed and a process for identifying those that can be supported under the RAP will need to be identified in the initial stages of consultations. Parameters that could determine this may include consideration of a number of beneficiaries as well as alignment with other development activities in the area (including any local development plans). Agreements will need to be reached with affected communities. The number of activities to be implemented in a given area will largely depend on the population of affected communities and the feasibility of desired needs and whether these actions can be achieved using available financial resources for in-kind compensation.

It is also expected that there will be certain activities that will not be eligible for financing under the RAP (such as investments related to religious or political activities, activities with negative environmental impacts, and activities with benefits to individuals rather than communities). The specific list will be finalized prior to the commencement of consultations. A proposed implementation schedule for the CSI Fund is provided in Chapter 12.

8.4.3 LIVELIHOOD-BASED REFORESTATION PROGRAM

As stated previously, indigenous trees cannot be individualized and, as such, no compensation can be granted at the PAP level. However, many indigenous trees used for livelihood exist and were inventoried on individual parcels as well as on community land.

A total of 28,930 indigenous trees used for fruit or timber, including 16,160 mature and 12,770 immature trees, were recorded on individual parcels (see Section 3.4.1.3). Additionally, community surveys have identified 22 natural communal areas in the wayleave, covering a total area of 117.92 ha, where indigenous trees are used by communities for livelihood (see Section 3.4.2). Based on an estimated density of 213 stems/ha provided in the ESMP (stand alone report), this should represent about 25,117 trees.

As per the Forestry Act of 2015, indigenous trees cannot be individualized as ownership of such trees is vested in the President (article 3), so cash compensation cannot be paid to individuals for their loss. However, as they are linked to livelihoods and ecosystem services, they must be restored to mitigate the impacts of the Project on local communities.

A livelihood-based reforestation program will be set up as part of the implementation of the RAP to ensure that individual and community livelihoods associated with the loss of indigenous trees are restored. This will be implemented in close collaboration with affected communities to identify areas for plantation. Those areas should be accessible to affected community members. Indigenous trees will be planted, and their growth will be monitored to ensure equitable restoration of livelihoods associated with natural forest resources. The implementation of the livelihood-based reforestation program is the ZTIP PIU's responsibility.

The cost of the livelihood-based reforestation program is provisionally estimated at 12,264,348 Kwacha and was estimated based on the replacement cost of indigenous trees, as determined during the market study. Administrative fees of 10% are included for the management of the program as well as associated activities, such as consultation of communities and selection of plantation sites.

8.5 LOCAL CONTENT

Priority for local employment will, when possible, be given to members of resettled households during the labour recruitment process, including women. This applies to the following employment and contract opportunities: clearing of the wayleave path, portage of construction materials to transmission pylon development and other sites, construction of access roads and construction camps, provision of services and goods to the workers (food), administration of the compensation program, monitoring activities, etc.

Furthermore, all PAPs and affected communities will be given all the wood that is cut close to their village for their own use, sale or charcoal production. The salvaged materials from the affected structures (houses, latrines, etc.) will also be left to PAPs.

All goods and services (sand, cement, food, etc.) will be bought locally whenever possible. This applies to all contractors and specific provisions to that effect will be included in the construction Terms of Reference.

8.6 NEGOTIATION PROCEDURES

Given the nature of the impact, all compensations are set to be paid in cash. In kind compensation is not proposed as an alternative (except on a case-by-case basis and for vulnerable PAPs).

After the valuation of assets, ZESCO procedures for compensation payments and negotiations are a two-step process: Consent for Compensation/Disclosure and the signature of a Disclaimer. Whenever there are negotiations and questions from the PAPs, ZESCO's approach is that this negotiation is done individually at these two stages.

STEP 1: Consent for Compensation/Disclosure

ZESCO's procedure indicates that once the valuation report is produced, the values for compensation and allowances are copied into a document called the "Consent for Compensation" as presented in Appendix 1 (Form 1.2) of the "ZESCO Document No: PP.14630.SPPR.00019 Resettlement and Compensation Action Plan Procedure Version 2 (16/12/2024)" ready for signature by the PAP (Figure 8-1). The PAP is met at his/her place and asked to verify the information and the amount of money and sign the document. At this stage, PAPs are also asked for their preference between cash and in-kind compensation, when relevant.

As recommended by the Kasama Nakonde RCAP Audit thought must be given developing a more detailed and explicit disclosure form. The key recommendation here was that the consent forms were to be redesigned to be more explicit in describing what is being compensated. They were to also make explicit provision for being witnessed by the spouse where he/she is not the asset owner. The consent forms have been redesigned based on those recommendations and will be used for the purposes of disclosure.

STEP 2: Disclaimer

Once the PAP has received the compensation money, he/she is met again and asked to sign a 'Disclaimer' form stating that they have received compensation for impacts accrued due to the Project. This form does not limit the PAP's right to use the GRM.

	Planning and Projects Consent for Compensation	Doc Number: PP.14630.FORM.00012 Version: 3 PAP Coordinate:
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Project Name.....

I, _____ of _____ in _____ village/Township in _____ District hereby agree to vacate my premises, demolish my infrastructure, and remove affected plants or crops to facilitate the implementation of the PROJECT by ZESCO Limited.

This agreement is made on the condition that ZESCO Limited will compensate me for the affected;

Tick	Impact	Amount	Sign
	Land		
	Structures		
	Fruit Trees		
	Crops		
	Exotic Trees		
	Others		
TOTAL COMPENSATION TO BE PAID			

As detailed in the valuation report prepared by;

Tick	Impact	Valuer
	Structures/Land	
	Fruit Trees/Crops	
	Exotic Trees	

I acknowledge the risks associated with energy infrastructure and understand that I am required to move away from the designated danger zone;

Tick	Impact	Extent
	Powerline	
	Project site	

NAME:..... **NRC:**.....

SIGNED: **CONTACT:**

VILLAGE:..... **CHIEF:**

TOWN:..... **DATE:**.....

WITNESS **NRC:**

RELATIONSHIP: **SIGNED**

Bank	Account Number	Branch	Branch Code	Sort Code

In the presence of (ZESCO Representative)

NAME:..... **SIGNATURE:**

TITLE:

ADDRESS: C/O ZESCO Limited
 Head Office
 P. O. Box 33304
 LUSAKA

Figure 8-1 Disclosure Form

9 TRANSITIONAL ARRANGEMENTS

As mentioned in Chapter 6 and Chapter 8, resettled PAPs will typically be required to move a few meters away from the wayleave, and the timing of the alienation of crops will be adjusted, when possible, to the agricultural cycle so that they can be harvested. In addition, people will be allowed to continue agricultural activities during and after construction.

The Project will involve physical displacements of people along the line, and those that will be displaced will typically move a few meters from the wayleave, most often on their existing parcel. All PAPs will be offered the option of in-kind or cash compensation for affected housing structures. Based on past ZESCO Projects and given the short distance between the original residence and replacement structure, most PAPs are expected to choose cash compensation and build their replacement house themselves. This was made evident in the disclosure meetings that ZESCO has held to date⁷². However, in-kind compensation will be made available to all PAPs who request it. When PAPs decide to rebuild their housing structure themselves, ZESCO will oversee monitoring to ensure the replacement structure is equivalent to the affected structure in terms of size and quality (see Chapter 15).

As mentioned in Chapter 8, eligible PAPs will be provided with a compensation package that includes compensation at full replacement cost for affected structures and a disturbance allowance to cover the various disturbances and expenses of moving out of the house, rebuilding and moving into the new house. In addition, all crops damaged during construction will be compensated.

Impacted businesses will be eligible for allowances covering the loss of revenue for a period of three months. Eligibility will be triggered in instances where there is a hiatus in the ability to trade for a period linked with the requirement to move business premises from within the wayleave. Affected employees will also benefit from wage compensation for the same period. All five permanently affected businesses will be eligible for this allowance. The budget is based on an allowance of three months, though resettlement of affected structures will be completed before the destruction of structures within the wayleave, which should considerably reduce (or eliminate) the duration of commercial activity interruption. A worst-case scenario has been assumed.

The Project does not foresee any significant payment for legal costs such as regularization of titles. Although titled lands will be impacted, outright land acquisition will not occur. The only exception may be where pylons are placed on titled land and the deed for that portion of land may be required. Where costs are incurred, they will be covered by the developer.

Typically, when a person is resettled and there is a need for land, village headmen identify the land within the village. If the PAP wishes to move out of the village, it is the Chief who identifies available land and provides consent for the PAP to move to this new location. In a case where a PAP decides to move to another chiefdom, the Chief doesn't grant any consent for land.

Land entry and exit arrangements will be determined along with affected communities prior to work, and will involve the following:

- A schedule of work will be disclosed to communities;
- A schedule for house demolition will be discussed with PAPs so they have sufficient time to rebuild a new house;
- Opinions of people will be considered and responses to questions provided;
- Village headmen and Chiefs will be consulted and informed.

⁷² Based on preliminary disclosure results, only one PAP has opted for in-kind compensation.

10 SOCIAL AND ENVIRONMENTAL IMPACTS OF THE RESETTLEMENT PROGRAM

Given that PAPs requiring Project induced resettlement will typically only move a short distance from their original house, there is less probability of these following impacts to occur:

- Impacts of resettled population on local services (e.g., health and schooling) and access to local resources;
- Impacts of resettled population on the host population since PAPs will be moved within their community;
- Potential public health issues;
- Large scale deforestation or clearance of natural habitats for building new residential areas.

However, agricultural activities being restricted within the wayleave, there may be small-scale deforestation and soil erosion associated with land preparation for replacement agricultural areas.

10.1 RISKS RELATED TO THE PROJECT

Resettlement is known to introduce several risks not only to those being resettled but also to the Project and potential host communities. The main risks associated to the components of the Project covered by this RAP are as follows:

- Risk of confusion between ZESCO projects and different ZTIP sections. There is a risk of confusion between compensation processes that have been implemented for the existing 330kV Pensulo-Kasama transmission line, for other sections of the ZTIP and for the Pensulo-Kasama section of the ZTIP covered by this RAP. Some PAPs may have received compensation under another set of eligibility criteria, which may lead to confusion or frustration. Indeed, the Kasama-Nakonde section of the ZTIP has already been compensated under another set of eligibility criteria and different compensation rates. This context may create confusion among PAPs, which may lead to more grievances being submitted. It will be important that all communities receive correct and consistent messaging regarding resettlement. As far as possible, a common approach for compensation and resettlement should be applied for all ZESCO projects.
- Risk that vulnerable PAPs will choose cash compensation for replacement housing and not be able to adequately replace their homestead situation. The ZTIP PIU must closely assess the capacity of those deemed vulnerable to adequately be able to effect replacement of structures and counsel those who are at risk from choosing the cash options over the replacement dwelling structure option. Relying on the Ministry of Community Development and Social Services to provide this assistance should not be taken for granted. Monitoring of replacement housing is a critical mitigation measure in terms of controlling this risk.
- Risk that Traditional Authorities do not have the capacity or interest in ensuring that replacement land is made available for both residential and agricultural purposes as required. This is a critical risk given the Project approach and reliance on the TAs. In its monitoring activities, the ZTIP PIU must give this aspect priority attention. Furthermore, it is recommended that the ZTIP PIU obtain written commitment from Chiefs to provide residential and/or agricultural land for PAPs.

- Risk of men absconding with the compensation money or mis-using funds. This situation is relatively common for Projects involving cash compensation. To address this risk, ZESCO resettlement policy “Resettlement and Compensation Action Plan” requires that wives be present during counselling, disclosure of the compensation packages, and when making compensation payments. This is done to encourage couples to make informed decisions together.
- Risk of family conflicts associated compensation payment especially for inherited land and/or property. Family members could argue, and conflict could arise due to the payment of compensation for family land. Conflict could also arise between neighbours where the limit of each others’ parcels is unclear. Clear and transparent communication at all steps of the compensation process will help mitigate this risk, as well as the availability of the GRM (as detailed in Chapter 14).
- Risk of delays in grievance resolution. The usual channels of conveying community grievances for Projects involves several intermediaries before the grievance reaches the respective ZESCO Offices overseeing the Project. Grievances will require rapid decisions and actions from ZESCO. As such, a GRM will be developed to mitigate this impact (as detailed in Chapter 14).
- Risks of reduced access to community areas used for livelihood activities. In areas where land use restrictions are already applied because of the presence of other powerlines, forest reserve and protected areas, the repurposing of community land and additional land uses restrictions from the ZTIP wayleave may reduce access to natural resources for community members and impact their livelihood. A CSI Fund is also in place and will benefit communities impacted by the Project due to repurposing of community land (as detailed in Chapter 8).
- ZESCO is embarking on a process of early (immediate) disclosure of compensation entitlements. Early disclosure means that the asset inventory and valuation are accompanied by an individual compensation calculation and then immediately disclosed to PAPs. While it gives immediate insight into the compensation entitlement and removes a degree of anxiety for PAPs, there are however some risks associated with this that need to be taken into account. These risks may result in some non-compliance with the agreed eligibility criteria (full replacement costs for compensated assets or eligible assets), reduce the possibility for the consideration of inflation rates, or may generate errors on assets ownership. Usually, a staggered process does allow time to review compensation figures, to fix any uncertainties on assets eligibility and ownership as well as to ensure consistency in terms of use of rates and ensure all mechanisms and involved organizations are in place for an optimal RAP implementation, notably in regards to support to vulnerable PAPs and grievance redress mechanism.

10.2 PERCEIVED RISKS

In parallel to the Consultant’s socio-economic surveys, focus group discussions with women and community assemblies with community members allowed for perceived risks to be captured. Regardless of whether these perceived risks will materialise, special consideration by ZESCO will be provided at the time of compensation payment and during engagement with communities and will be examined in the process of monitoring.

Perceived risks from women due to resettlement are:

- Increased distance by women to draw water;
- Increased distance to health services and schools;
- Loss of family relations or social circles because of distance and starting of new life in new places;
- Lack food because some fields will remain behind after moving (e.g., cassava);
- Loss of ancestral land and fear of not securing land to inherit for children;

- Resettlement for women who occupy plots purchased in the past may be more difficult because they will have to look for another plot and may be disadvantaged by Traditional Authorities in comparison to men;
- Family members may use the resettlement as an opportunity to seize a house or plot or take money from women because they helped them build the house in the past.

Given the relatively short distance of physical resettlement that is expected, these perceived risks may not take place. To prevent these risks, ZESCO will meet with village headmen to discuss the availability of land within the same community, to guarantee that resettlement will only take place over a short distance and that women headed households will not be disadvantaged when looking for replacement land. This will be documented in results of engagement meetings as well as in monitoring reports. These perceived risks further highlight the need to implement an efficient Grievance Redress Mechanism (GRM), GBV Management Plan and Stakeholder Engagement Plan as detailed in the ESMP.

Women expressed the following perceived risks associated to cash compensation:

- If compensation is paid in cash, some men may run away with money or misuse it. There may be family break-ups. Some husbands may look for other women because they have moved to another place where they will join a new community.
- Fear of being left without a house if the money is misused by the spouse.

Participants mentioned that awareness programs shall be provided by ZESCO at the time of compensation sign-off to mitigate the abovementioned perceived risks.

Elders or orphans expressed the following perceived risks during the Consultant’s surveys. For older people starting afresh is a big challenge due to their physical conditions, despite receiving compensation.

Typically, family members build a house for elderly parents, and orphans are also kept under the care of the family. According to ZESCO, each case will be assessed, and some vulnerable persons may be helped by a Contractor to build a house if their physical abilities do not allow them to do so. Vulnerable PAPs will also be entitled to a vulnerability allowance to support their resettlement and, as other PAPs, will be offered the option for in-kind compensation. Because of the risk to vulnerable people of having limited capacity to rebuild their house, in-kind compensation will be encouraged for vulnerable PAPs, with the support of the Ministry of Community Development and Social Services. Where those deemed vulnerable select cash compensation, ZESCO will need to undertake dedicated monitoring to ensure vulnerable persons have a rebuilt house (of equivalent size and quality) prior to project construction.

10.3 POSITIVE OUTCOMES FROM RESETTLEMENT AND CASH COMPENSATION

During stakeholder engagement and social surveys, certain PAPs highlighted the benefit of cash compensation. Some mentioned that cash compensation will help them improve their house to higher standards, improving their overall quality of life. In some cases, women headed households mentioned that cash compensation will help them move to a new coveted locations near their family or employment opportunities.

11 PUBLIC CONSULTATIONS

Public consultations were organized at all stages of the Project and are aligned with the different ESIA, ESMP, and RAP updates. As such, public consultations were carried out between 2013 and 2017 in the context of the first ESIA and RAP. In 2019, two additional rounds were organized related to the 2021 update of those documents. In 2024, another two rounds were conducted related to the 2024 update of reports.

11.1 PUBLIC CONSULTATIONS CARRIED OUT FROM 2013 TO 2017

These public consultations took place against the framework of the 2017 ESIA and RAP. At that time, the Project alignment was slightly different than the current Project.

From 2017, ZESCO decided that the ZTIP line will follow the existing lines for which resettlement and compensation had already taken place. This leads to a significant reduction of the wayleave which, in turn, leads to a reduction in the number of identified PAPs.

The following paragraphs are a recap of previous public consultations that were carried out from 2013 to 2017. The list of attendees and a summary of the main conclusions and recommendations for each round is provided in Appendix 11-1. It should be noted that, in addition to rounds presented below, round 1a and 2a were conducted in December 2013 and February-March 2014 respectively between Kasama and the Tanzanian border. The objectives of these rounds are the same as rounds 1b and 2b, but the specific results of those rounds are not presented as they pertain to the Kasama-Nakonde section, which is not subject to this RAP and they did not address the RAP and resettlement issues specifically. A summary of those rounds is still available in Appendix 11-1.

11.1.1 ROUND 1B KASAMA – PENSULO SECTION

A new series of initial consultation meetings was performed between July and August 2014 as part of the revised scoping exercise for the Project’s extension to Pensulo. Consultations involved a number of ministerial authorities and other key informants at the local and national levels.

11.1.2 ROUND 3 ADDITIONAL STAKEHOLDER MEETINGS

Additional stakeholder meetings were held from February to March 2015 to “touch base” with concerned authorities at central and district levels, as well as other key stakeholders, and provide them with up-to-date information regarding the Project and the status of the ESIA process. During this round of consultations, the focus was on those stakeholders that were still unaware of the Project’s extension to Pensulo. This was also seen as an opportunity to document any additional concerns or expectations raised by participants.

11.1.3 ROUND 2B KASAMA – MPIKA PENSULO SECTIONS

Informative and consultative meetings pertaining to corridor options were held in September 2015 with concerned ministerial and administrative authorities at national, provincial, and district levels, NGOs, industrial stakeholders and technical services from the study area. Consultations were performed through individual meetings with national stakeholders and through group meetings with concerned authorities and key technical staff at the provincial and district levels. Meetings were held with representatives from the three provinces concerned, and with seven of the eleven districts involved for these sections of the Project.

11.1.4 ROUND 4 PUBLIC CONSULTATIONS

A fourth round of informative and consultative meetings with Project stakeholders took place in September 2017, to disclose and consult stakeholders on key findings and recommendations from the draft final reports (2017 ESIA and RAP), including the most critical social and environmental management measures and compensation / resettlement strategies. Target groups for this consultation effort included representatives from the districts and communities affected by the revised line route, now extending from Nakonde to the Pensulo Substation, and passing through Kasama. Therefore, all the districts from Central (except for Serenje and Chitambo) and Muchinga (except for Nakonde) provinces that were engaged in the previous consultation rounds were no longer targeted at this point.

The activities performed during consultations Round 4 included:

- work sessions with officials (councillors and technical officers) and local NGOs in all affected districts;
- community assemblies in all affected districts.

All meetings began with a presentation of the Project, the proposed line route, and the key findings of the ESIA and RAP studies. The consultation team, composed of ZESCO and Consultant representatives, answered questions regarding the Project and facilitated a discussion around the main concerns raised and most critical findings from the preliminary 2017 ESIA and RAP reports.

Provincial and district meetings were planned as two-hour work sessions and benefited from the participation of officers from the different technical sectors concerned directly or indirectly with the Project. Local NGOs were also invited to attend these meetings (a total of eight local NGOs participated in district meetings). These sessions allowed for a full presentation of the Project supported by a PowerPoint presentation, including maps and pictures of the proposed Project components. Printed copies of the Project background information document, including a map of the line route, were distributed to participants. Discussions following the presentation focused on the validation, or formulation of counterpropositions, of the proposed environmental and social management measures.

A total of five community assemblies were held, reaching out to representatives from 16 different villages from Kasama, Mungwi, Nakonde, Mpika, Serenje and Chitambo districts. In Mungwi, the community assembly took the form of a focus group discussion with women representatives from Chibaba and James East villages. A description of the Project's components was first provided, supported by maps and pictures. Community representatives who had participated to the survey of the line route in August 2017 (as part of 2017 RAP development) were invited to explain where the alignment passes in their own words. This was followed by an open discussion where participants could ask questions and raise concerns. The assemblies were assisted by local translators who translated to Bemba.

11.2 PUBLIC CONSULTATIONS CARRIED OUT IN 2019

These public consultations took place in the framework of the 2021 review of the ESIA and RAP, needed due to changes in Project design, including a modified line route. The following sections offer an overview of stakeholder engagement activities that were carried out in 2019 as part of the ESIA and RAP review. A summary of the key concerns gathered during round five and six is provided in Appendix 11-2.

11.2.1 ROUND 5 CONSULTATIONS WITH CHIEFS AND DISTRICT COMMISSIONERS

Due to the changes in line route alignment in certain areas, additional meetings with Chiefs and District Commissioners were necessary to present the update to Project design and obtain the Chiefs' consent for the new alignment. Several activities were carried out either by ZESCO or the Consultant. The following sections present these additional engagement activities.

In addition to these meetings, NGOs were met to discuss ESIA subjects such as Gender-Based Violence (GBV) and the Grievance Redress Mechanism (GRM). Minutes of meetings conducted as part of round five are presented in Appendix 11-2.

11.2.1.1 MEETINGS WITH CHIEFS

The following table presents the Chiefs that were met along the new transmission line, it presents the engagement activities that ZESCO had carried out before the Consultant's mandate began and those completed by the Consultant. Meetings with Chiefs were courtesy visits since Chiefs were already aware of the Project. Topics such as ways to address grievances, resettlement issues, and gender-based violence (GBV) were discussed.

During ZESCO's 2019 census, no additional public consultations were carried out with communities since they were already met over the course of the ICBC RAP or 2017 RAP consultations. However, several Chiefs were met by ZESCO to obtain their consent for the Project. The following table presents the Chiefs that were met by ZESCO or the Consultant. Signed consents are presented in Appendix 11-3.

Table 11-1 Chiefs Met over the Course of the Project

Chiefs in the Project Area	Met to Obtain Consent (ZESCO)
Paramount Chief Chitimukulu	In the absence of the paramount Chief, the Consultant met the acting Chief (October 2, 2019).
Senior Chief Mwamba	Chief Mwamba recently died. At the time of the mission, there was no new appointed Chief.
Senior Chieftainess Nawaitwika	ZESCO met the Chieftainess to obtain her consent for access to land. The Consultant met with the Chieftainess (October 4, 2019).
Chiefs Nkolemfumu	ZESCO met the Chief to obtain his consent for access to land.
Chief Mpumba	ZESCO met the Chief to obtain his consent for access to land.
Chieftainess Chanda Mukulu	ZESCO met the Chieftainess to obtain her consent for access to land.
Chief Chikwanda	ZESCO met the Chief to obtain his consent for access to land. The Consultant met with the Chief (October 5, 2019).
Chief Mailo	ZESCO met the Chief to obtain his consent for access to land.
Chief Kabamba	ZESCO met the Chief to obtain his consent for access to land.
Chief Mpepo	ZESCO met the Chief to obtain his consent for access to land. The Consultant met with the Chief (October 2, 2019).
Chief Makasa	ZESCO met the Chief to obtain his consent for access to land.

11.2.1.2 MEETINGS WITH DISTRICT COMMISSIONERS

Meetings with District Commissioners (DC) or District Administrator Officers (DAO) took place in October 2019 in addition to meetings carried out from 2013 to 2017. Table 11-2 outlines the DCs that were met and the date the meetings took place. Discussions were related to GBV and the GRM. Other government departments took part in these meetings as well as many NGOs.

Table 11-2 District Level Meetings that were Held in 2019

District Level Meetings	Meeting with the Consultant and Date
Serenje	September 30, 2019
Chitambo	September 30, 2019
Mpika	October 1, 2019
Lavushi Manda	Unfortunately, the DC attended a funeral and was not met.
Kanchibiya	Unfortunately, the DC attended a funeral and was not met.
Kasama	October 2, 2019
Mungwi	October 3, 2019
Senga Hill	Unfortunately, the DC was unavailable due to a visit from the President in the area.
Nakonde	October 4, 2010

11.2.1.3 ENGAGEMENT WITH AFFECTED COMMUNITIES

The Consultant carried out a series of rapid social surveys in 2019 with a selected sample of 17 affected communities to further discuss the risk of GBV and to collect perceived risks due to resettlement. Communities were selected in all affected districts. The method involved focus group discussions with women to address perceived risks to women and vulnerable persons such as widows and elderly persons. Meetings were facilitated by ZESCO's Environmental Sustainability Department (ESD) and staff involved in the census accompanied the consultant during these social surveys.

11.2.2 ROUND 6 CONSULTATIONS ON PROJECT UPDATE AND EIA & RAP DATA COLLECTION

A sixth round of consultations involved the completion of two separate missions aimed at providing Project design updates and collecting supplementary information regarding the biological (September 5 to 17, 2019) and socioeconomic (September 23 to October 13, 2019) environments, details of which are provided below. The list of stakeholders reached and key takeaways are presented in Appendix 11-2.

The following consultations and engagement related to resettlement activities were completed:

- Meetings with NGOs at their headquarters in Lusaka and on the field where they conduct anti-GBV programs.
- Meetings with ZESCO to obtain their new 2019 census data on PAPs and to discuss the various compensation and resettlement methods (e.g., eligibility, assistance, etc.) since the scope of resettlement has changed because of the new alignment.
- Meetings with district level agencies working in many sectors, with a focus on GBV and possible ways of implementing a Grievance Redress Mechanism (GRM).
- Meetings with Chiefs to discuss resettlement, GRM, and GBV.
- Focus group meetings with community members from a selected sample of 17 villages to discuss GBV and resettlement risks.

11.3 ROUND 7 CONSULTATIONS ON LATEST PROJECT UPDATE AND ASSOCIATED RAP AND ESIA UPDATE

This section summarizes the activities conducted as part of the seventh round of public consultations under the latest Project and RAP/ESIA update, and the key concerns and recommendations expressed by stakeholders. Detailed minutes of all meetings held are provided in Appendix 11-4.

11.3.1 ACTIVITIES PERFORMED

A seventh round of informative and consultative meetings with Project stakeholders occurred from April to May 2024. The aim was to disclose the changes to the original line route, provide updates on the ESIA, ESMP and RAP, identify key concerns related to Project implementation, collect available socioeconomic and biodiversity data and support the RCAP audit for the Kasama-Nakonde section. The target groups for this consultation effort were representatives from the districts and municipalities affected by the revised line route, such as local authorities and district officials.

The activities performed during consultations round seven include:

- Meetings with affected district authorities (councillors and technical officers) along meetings with affected towns council and municipal councils;
- Meeting with the Department of National Parks and Wildlife at national level.

Specific meetings were held in April to discuss RCAP implementation along the Kasama-Nakonde section in order to support the associated implementation audit.

The meetings held with district officials in May 2024 aimed to receive updates on the proposed and future projects to come to the districts, general concerns and recommendations associated with the Project, land planning, socioeconomic data, biodiversity data and discuss Project corridor encroachments with forest reserves and planned mitigation measures.

11.3.2 STAKEHOLDERS REACHED

Table 11-3 summarizes all the meetings held during stakeholders' consultations round seven, along with the date, location, and participants for each meeting.

Table 11-3 List of Stakeholders Met during Consultations Round 7

Date (2024)	Location	Stakeholder Organization or Group	Description of Participants
April 12	Lusaka	ZESCO head office	ZESCO social and technical Team and WSP
April 15	Kasama	Kasama Department of Agriculture	6 participants, including 4 representatives from ZESCO, 1 from WSP and 1 District Agricultural Officer
		ZESCO (North Region)	6 participants, including 4 representatives from ZESCO, 1 from WSP and Senior Regional Manager - Northern Region, ZESCO
		ZESCO (Kasama Regional)	6 participants, including 4 representatives from ZESCO, 1 from WSP and ZESCO Northern Region Director
		Kasama Lands Department	6 participants, including 4 representatives from ZESCO, 1 from WSP and 1 District Lands Officer
		Resettlement Office Kasama	ZESCO Social and Technical Team, WSP, Resettlement Office - Junior Officer
		Kasama Department Social Welfare	6 participants, including 4 representatives from ZESCO, 1 from WSP and 1 Kasama Chief Social Welfare Officer

Date (2024)	Location	Stakeholder Organization or Group	Description of Participants
April 16	Mungwi	Mungwi District Commissioner	13 participants, including 4 representatives from ZESCO, 1 from WSP, 1 from District Commissioner (DC), 1 from District Administrative Officer (DAO), 1 from Dept Agriculture, 1 from Town Council, 1 from Lands Department, 1 from Resettlement – Vice presidents Office, 1 from Social Welfare, 1 from Forestry Department
April 17	Nakonde	Nakonde District Commissioner	12 participants, including 4 representatives from ZESCO, 1 from WSP and 1 from District Commissioner (DC), 1 from District Administrative Officer (DAO), 1 from Dept Agriculture, 1 from En Town Council, 1 Kamweka Public Infrastructure and also representing Lands, 1 from Social Welfare, 1 from Forestry Department
May 20	Nakonde	Nakonde Town Council	24 participants, including 4 representatives from ZESCO, 2 from AMC and 17 from the Nakonde Council and 1 from the Department of Heritage Services
May 21	Senga Hill	Senga Hill City Council	15 participants, including 2 from AMC and 13 from the Senga Hill Town Council
May 22	Kasama	Kasama Municipal Council	23 participants, including 4 representatives from ZESCO, 2 from AMC and 17 from the Kasama Municipal Council
	Kasama	Provincial Forest Officer	7 participants, including 4 representatives from ZESCO, 2 from AMC and 1 from the Kasama Forestry Department
May 23	Mungwi	Mungwi Forestry Department	10 participants, including 4 representatives from ZESCO, 2 from AMC and 4 from the Mungwi Forestry Department
	Mungwi	Mungwi Municipal Council	12 participants, including 4 representatives from ZESCO, 2 from AMC and 6 from the Mungwi Town Council
May 24	Mpika	Mpika Town Council	12 participants, including 4 representatives from ZESCO, 2 from AMC and 6 from the Mpika Town Council
May 25	Chitambo	Chitambo District Forestry Officer	7 participants, including 4 representatives from ZESCO, 2 from AMC and 1 from the Chitambo Forestry Department
	Kanchibiya	Kanchibiya Town Council	9 participants, including 4 representatives from ZESCO, 2 from AMC and 3 from the Kanchibiya Town Council
May 27	Lavushi Manda	Lavushi Manda Town Council	15 participants, including 4 representatives from ZESCO, 2 from AMC and 9 from the Lavushi Manda Town Council
May 28	Serenje	Chitambo District Forestry Officer	7 participants, including 4 representatives from ZESCO, 2 from AMC and 1 from the Chitambo Forestry Department
		Serenje Town Council and the Serenje District Forestry Department	13 participants, including 5 representatives from ZESCO, 2 from AMC and 6 from the Serenje Council

11.3.3 KEY CONCERNS, EXPECTATIONS, AND ISSUES RAISED BY STAKEHOLDERS

During consultations, stakeholders raised the Project’s issues, concerns, and expectations. Table 11-4 presents the key items related to resettlement raised during round seven of consultations. Questions were answered during consultation meetings, but Table 11-4 outlines how concerns were taken into consideration in the update of studies. For a full assessment of concerns raised during round seven, see Chapter 7 of the ESIA (stand alone report).

Table 11-4 Concerns Raised during Round 7 and Response

Theme	Concerns, Expectations, and Issues	Response and Consideration in Studies
Resettlement and compensation	<ul style="list-style-type: none"> — The Kasama Lands Department indicated that ZESCO was not registering the land they had compensated and that this was a risk. — The Kasama DC stated that other than a single complaint, no other PAP had been in contact asking for compensation-related assistance. — The Kasama Department of Social Welfare in the Ministry of Community Development and Social Services has worked with PAPs, mainly around Kasama, to offer guidance as to spending compensations properly. — Issues about bank accounts being closed due to delays in compensation payments on the stretch from the Kasama Substation to Mpika Road. — It was requested by the Resettlement Offices to involve the Forestry Department to assist in the valuation of timber trees and use a market-based approach based on the value of timber, particularly within forest reserves. — More insights on the resettlement process were asked, such as who will need to be resettled and if displaced people will be compensated. 	<p>Concerns regarding resettlement and compensation are addressed in the RCAP Audit (stand-alone report) for the Kasama-Nakonde stretch and in the Chapter 4 for the Kasama-Pensulo stretch.</p> <p>Regarding the issue of closed bank accounts for the stretch between Kasama Substation and Mpika Road, it has been resolved in July 2024 when compensation was paid. Issues had been raised speculatively by PAPs that feared their accounts would be closed prior to receiving compensation⁷³.</p> <p>A market study to value affected assets, including trees, was conducted (see Chapter 3).</p>

11.4 ROUND 8 COMMUNITY AND PAP CONSULTATIONS ON LATEST PROJECT UPDATE AND RAP UPDATE

This section summarizes the activities conducted as part of the eighth round of public consultations targeting affected communities and PAPs as part of the RAP update. Detailed minutes of all meetings held are provided in Appendix 11-5.

11.4.1 ACTIVITIES PERFORMED

The eighth round of informative and consultative meetings was targeting affected communities and took place in August and September 2024. These consultations aimed to present the Project to affected communities and PAPs, inform them about compensation eligibility, and identify key issues, concerns, and expectations related to the selected line route and resettlement aspects. Additionally, these meetings were conducted alongside socioeconomic surveys to gather baseline socioeconomic data at the community and household level (see Chapter 3). The target groups for this round included affected communities and PAPs. Additionally, focus groups were conducted with women from affected communities to gather their specific concerns and collect data on the situation of women.

Activities conducted during this round of consultations included:

- Assembly meetings with affected communities, where all community members were invited.
- Focus groups with women from affected communities.

⁷³ This was confirmed as part of the RCAP Audit (see Appendix 2-1).

- Census at community and household level, which was also used as an opportunity to present the Project and gather stakeholders’ concerns. Detailed information on the census is presented in Chapter 3, but concerns gathered during this activity are presented below, alongside concerns expressed during assembly meetings.

This round was also used as an opportunity to get updated consents from Chiefs where necessary (see Appendix 11-3).

11.4.2 STAKEHOLDERS REACHED

Table 11-5 summarizes all the meetings held during stakeholders’ consultations round 8, along with the date, location, and participants for each meeting. A total of 56 community assemblies were organized, reaching a total of 92 communities, with smaller communities’ headmen and members attending assemblies in neighboring communities, as indicated in Table 11-5. Through those assemblies, 2,485 community members learned further about the Project and were given the opportunity to express concerns and ask questions.

Table 11-5 List of Stakeholders Met during Consultations Round 8

Date (2024)	District	Community	Other Communities in Attendance	Number of Participants
Aug. 16		Chaiwila		57
		Demo Daily		30
Aug. 19		Chibuta		39
		Chilesa Mwamba		113
		Kabole		38
Aug. 20		Mulenga Mulaka		54
		Sweba		36
Aug. 21	Kasama	Bwabwata	Kantasha, Nkolemfumu	106
		Sani		33
Aug. 22		Chintandu		58
		Kabwe Mukulu		27
		Kafushi		39
		Makonko		33
Aug. 23		Chanda Mukulu	Kabansa, Munganga, Safwa Turnoff	131
		Mukomba	Mukanga	115
	Kanchibiya	Chushi	Chipembele, Laison	24
		Kanakashi		64
Aug. 24	Kanchibiya	Mwaba Malama		51
		Mikulungu	Ntambamo	46
		Bwalya Wasontwa		12
Aug. 26	Kasama	Mpepo D	Mpepo C, Mulamba	38
		Kasunga		21
Aug. 26	Kanchibiya	Mwaushi		26
		Chisengo		45
		Katubila		10
Aug. 27		Katumba		57
		Kamuchanga		23
		Waini		16

Date (2024)	District	Community	Other Communities in Attendance	Number of Participants
Aug. 28	Mpika	Chibaye		17
		Mulila		34
		Ngobesha		38
Aug. 29		Chailo	Leo, Matuku	21
Aug. 30		Malambwa	Kanika, Kalamu Kabuswe	78
		Makumbi	Chalipilwa, Komboni	43
		Nshitima		35
Aug. 31		Chituntama	Munamala	52
		Mpandafishala		25
Sept. 2		Chilosha	Polito, Kabutula, Shikasoka, Chifwetu	68
		Kapata		54
		Kasenga		29
		Lubanga		21
	Masanta		7	
Sept. 3	Mukonteka	Nkuka, Chibeka Nkuka	20	
	Chaiwa		6	
Sept. 4	Lavushi Manda	Kawama		17
		Kapwanya		25
		Mwelalala	Zebron, Kalonje	67
Sept. 5	Chilomba	Kapoto	23	
Sept. 6	Nakasongo	Ngoma, Mutati	28	
Sept. 7	Chitambo	Chipaata	Katoba, Bwacha	42
		Kaipate		23
Lusiwasi		Sam Ngosa, Paul Chibuye	98	
Sept. 9		Ngalande	Kanona	94
Sept. 11	Serenje	Tito Koy	Fimenye	76
		Chankalumu		41
Sept. 12	Mukando Turnoff	Pensulo	61	
Total Number of Assemblies		56	Total Number of Participants	2,485

It should be noted that eight communities were also reached through the community survey, although they did not attend an official community assembly. Those communities were able to receive information and voice their concerns about the Project⁷⁴.

Focus group discussions were organized with women representatives after community assemblies. Only women were allowed to participate to those discussions, which were facilitated by a female gender specialist. The questionnaire used is provided in Appendix 11-6. The goal was to provide a safe space where women would be comfortable to share their insights and concerns about the collective experience of women and girls within the community.

⁷⁴ Communities reached through community surveys include Stephano Mwaba, Luckson, Chibuye Chibuye, Eneya (and Machiko/Mapulanga), Mpumba, Kamanango and Yosefe. Those communities were too small for a community assembly to be organized, as agreed with the Headmen.

Confidentiality was a central concept for those discussions. As such, the data collected is presented in Chapter 3 in an aggregated manner, to avoid identifying communities or women who voiced some of the concerns. A total of 54 focus group discussions were organised, with one discussion in every community listed in Table 11-5, except for Masanta and Bwalya Wasontwa. A total of 1,101 women participated in those focus group discussions. The signature sheets, with names dully shaded out to ensure confidentiality and protection of personal data, are provided in Appendix 11-5. The main concerns and takeaways from those focus group discussions are discussed below in Section 11.4.3.2.

11.4.3 KEY CONCERNS, EXPECTATIONS, AND ISSUES RAISED BY STAKEHOLDERS

11.4.3.1 COMMUNITY ASSEMBLIES

During consultations, stakeholders raised some concerns and expectations related to the Project, and resettlement aspects more specifically. Table 11-6 presents the key concerns raised during round 8 of consultations. Questions were answered during consultation meetings, but Table 11-6 outlines how concerns were taken into consideration in the updated RAP.

Table 11-6 Concerns Raised during Consultation with Affected Communities and PAPs, and Response

Theme	Concerns, Expectations, and Questions	Response and Consideration in RAP
Relocation	<ul style="list-style-type: none"> — Local residents expressed apprehensions about potential loss of homes and access to vital resources due to land clearing and relocation. — Finding replacement land for those needing to relocate emerged as a significant concern, with community members noting that all land is owned by someone, complicating the search for suitable new plots. — Elderly individuals voiced worries about their ability to rebuild homes and sustain livelihoods after being moved, highlighting physical challenges. 	<p>A full land survey was conducted to identify all affected assets and provide specific measures for their compensation (see Chapters 3 and 8). In most cases, affected structures will be relocated on the same parcel, outside the wayleave. In cases where replacement land is needed, the process is detailed in Chapter 6. Assistance measures are provided (Chapter 8) to help vulnerable PAPs (including the elderly) throughout the resettlement process.</p>
Agricultural Practices	<ul style="list-style-type: none"> — Farmers pointed out that while they hold land permits from the chief, they do not cultivate their entire plots, focusing on fallow land and structures, which could disadvantage them due to land use restrictions within the wayleave. 	<p>Agricultural activities will be permitted within the wayleave after construction, with disruption of agricultural activities limited to the construction period. Any destruction of crops association with construction activities will be compensated as detailed in Chapter 4.</p>
Women Concerns	<ul style="list-style-type: none"> — Women raised alarms about the risk of exploitation by outside workers, emphasizing that the influx of laborers could disrupt social norms, lead to sexual exploitation and abuse and sexual harassment, and increase instances of early pregnancies and marital breakdowns. — Women expressed eagerness to be included in job opportunities, highlighting their critical role in supporting families. 	<p>Those concerns were addressed in the ESIA and ESMP, with specific management measures provided to foster job opportunities for women and specific management plans developed to address those issues, including the Community Health and Safety Management Plan and GBV Management Plan. A Grievance Redress Mechanism to receive and solve any grievances related to Project activities is being implemented (see Chapter 14).</p>
Compensation	<ul style="list-style-type: none"> — The community expressed concerns about inadequate compensation for lost assets such as structures, fruit trees, and water wells, significantly impacting income and food sources. — Delays in the compensation process were criticized, leading to uncertainty about payment timelines. — Concerns about fair compensation for lost crops and fields to maintain livelihoods were raised. 	<p>Clear eligibility criteria were defined (see Chapter 4) and compensation for all lost assets is planned for (see Chapter 8). The RAP schedule (see Chapter 12) identifies the payment timeline.</p>

Theme	Concerns, Expectations, and Questions	Response and Consideration in RAP
Employment Opportunities	<ul style="list-style-type: none"> – The community emphasized the need for local employment opportunities, ensuring recruitment is transparent and prioritized for residents. – Youth expressed the need for meaningful employment opportunities and voiced concerns about job accessibility. 	Those concerns were addressed in the ESIA and ESMP, with specific management measures provided to foster job opportunities for local communities.
Safety Concerns	<ul style="list-style-type: none"> – Concerns were raised about the risks associated with the power line, including potential electrocution during farming activities and safety issues related to noise. 	Those concerns are addressed in the ESMP, more specifically in the Community Health and Safety Management Plan.
Transparency and Fairness	<ul style="list-style-type: none"> – The compensation process should be transparent, ensuring that all affected assets are documented and compensated fairly. 	Transparency and fairness are key concepts for this RAP. A Grievance Redress Mechanism will also be set up to receive and solve any grievances related to Project activities (see Chapter 14).
Local Development Initiatives	<ul style="list-style-type: none"> – To ensure the community benefits from the Project, ZESCO should consider additional initiatives that contribute to local development and monitor contractors to prioritize local labor. – Provisions for training on financial management for those receiving compensation were suggested, along with initiatives for planting new trees. 	Several measures for asset restoration and livelihood restoration are suggested in the RAP (see Chapter 8). Those include training and other non-monetary initiatives. An in-kind community fund for affected communities is also planned for.

11.4.3.2 FOCUS GROUP DISCUSSION

During focus group discussions, 31.5% of participating women expressed significant concerns about the situation of women and girls in relation to resettlement and compensation. While many view resettlement as an opportunity to build better homes, improve livelihoods, and foster development, substantial worries remain.

A primary concern is the reliability of compensation. Many women fear that the funds allocated for resettlement may not be used for their intended purposes. This anxiety is exacerbated by experiences where husbands prioritize leisure over responsibility, often returning home intoxicated after spending their earnings on alcohol. This leaves women feeling uncertain about their ability to secure their families' futures.

A majority of the women interviewed (75.9%) do not believe that resettlement will impact their social networks or community support systems. In fact, some noted that compensation from ZESCO could lead to improved living conditions and a better quality of life. However, a minority expressed concerns about potential disruptions to their community ties. The fear of being relocated far from friends, schools, and clinics raises worries about losing established connections, which could complicate their lives.

The prospect of moving raises questions about the availability of adequate land for both cultivation and housing. Many women expressed anxiety about whether they will have access to fertile land, which is vital for their agricultural livelihoods.

The nature of the easement was explained to address some of those concerns. Indeed, it was clarified that affected structures that needed to be relocated would, in most cases, be moved on the same parcel and access to land will remain, albeit with some restrictions including limited crop height. Socioeconomic data collected during focus group discussions is presented in Chapter 3.

11.4.4 ADDITIONAL CONSULTATION ON SACRED ASSETS LOCATED WITHIN THE WAYLEAVE

In August and September 2024, the census was conducted to inventory sacred assets within the wayleave between Kasama and Pensulo (see Chapter 3). Three villages – Mwaba Malama, Ngobesha, and Kamuchanga – were identified as potentially having sacred burial sites within the Project’s wayleave. In October 2024, representatives from these villages were contacted by phone to explain the situation and gather their preferences regarding the resettlement of those graves and sacred assets. They were asked whether they would prefer to leave the grave or sacred asset in its current location, acknowledging that trees would be cut down, or relocate the asset outside the wayleave, and if so, what ceremonies or rituals would be required.

The findings focus on burial sites in the three villages regarding the necessary tree removal for power lines:

- 1. Mwaba Malama:** Two graves are located in a forested area, potentially outside the wayleave. The village representative expressed a preference for leaving the graves in place after tree removal but is open to relocation if maintenance becomes challenging, provided that ZESCO covers compensation and conducts the necessary traditional rituals.
- 2. Ngobesha:** A few graves without tombstones are located within the wayleave. The village representative favors cutting the trees while leaving the graves intact, emphasizing that relocating graves is complicated and unfamiliar to the community. The headman plans to consult with affected individuals to gather their opinions and revert for any changes to the stated position.
- 3. Kamuchanga:** This graveyard is also situated within the wayleave. The village representative firmly advocates for keeping the graves undisturbed after tree removal, arguing that relocating them would be distressing and similar to conducting a new funeral. He stressed that ZESCO must ensure the pylons do not interfere with the graves.

The minutes of those meetings are presented in Appendix 11-5.

12 SCHEDULE

Some key milestones have already been completed regarding RAP preparation. The census and socioeconomic surveys took place between August and September 2024. This included a preliminary inventory of assets (see Chapter 3). The cut-off date was declared after the census in September 2024 (see Chapter 4). A market study was completed to develop the estimated RAP budget and the formal valuation exercise will be carried out by ZESCO in early 2025 (see Chapter 8).

Since precise dates for RAP implementation activities are unknown, the schedule in Table 12-1 shows the typical stages of a RAP and its implementation and the suggested timeline for each stage. It is expected that all PAPs will receive their compensation payment before the end of the sixth month after disclosure⁷⁵, in accordance with ZESCO procedures. It should be noted that though the project construction schedule is divided into five packages, resettlement is expected to be implemented on the entire line length after clearance from the World Bank, starting from Pensulo with the ZTIP PIU implementation team moving towards Nakonde. Resettlement, and all obligations as per ESS5, will be completed and compensation will be fully paid before land and assets alienation. Furthermore, affected communities and persons will be informed of the progress of RAP implementation throughout the progress for increase transparency.

The monitoring and evaluation program, detailed in Chapter 15, requires that monitoring take place every three months, starting six months after disclosure until the second year, when a completion audit will be conducted. As highlighted in the RAP, and as required by international best practices, work will only begin once all compensations are paid to PAPs.

An indicative schedule of activities as part of the CSI Fund described in Section 8.4.2 is presented in Table 12-2. The exact timeline of these activities regarding the overall RAP process is yet to be determined as the implementation of proposed schedule is subject to RAP approval. Timelines will be revised accordingly.

⁷⁵ Under ZESCO's procedures, 'disclosure' refers to the compensation sign-off process with PAPs.

Table 12-1 Resettlement Action Plan Indicative Schedule

Activity	Completed Activities	Valuation	Disclosure	Disclosure + 6 Months	Disclosure + 9 Months	Beginning of Work	Disclosure + 11 Months	Disclosure + 12 Months	Disclosure + 13 Months	Disclosure + 14 Months	Disclosure + 2 Years
RAP Preparation											
Census of PAPs	Completed										
Initial asset inventory of crops, trees, land, and structures	Completed										
Declaration of the cut-off date	Completed										
RAP Implementation (Resettlement)											
Formal Asset Inventory and development of Valuation and Compensation Schedule		Completed									
Grievance Redress Mechanism (until the end of the resettlement process)		Ongoing ⁷⁶									
Compensation sign-off (Disclosure)		Ongoing									
Compensation payment to all PAPs				Maximum delay							
Disclaimer											
Physical and economical displacement of PAPs											
Beginning of work											
Identification and compensation of additional land requirements associated with temporary infrastructure during construction ⁷⁷						When additional land requirements are identified, throughout construction					
Identification, valuation, and compensation of affected crops (under pylon base and associated to construction activities)			Before construction for crops associated with the pylon base and temporary infrastructure. Throughout construction for crops affected by construction activities.								
Monitoring (every 3 months) and external evaluation (two years after disclosure)				1 st monitoring event							Every 3 months until the 2 nd year

⁷⁶ Roll out has begun with package 1 (Pensulo-Mpika) and will continue for the next packages in the fourth quarter of 2025.

⁷⁷ Identification and compensation of additional land requirements will be aligned with the current RAP entitlement and compensation approach.

Table 12-2 Proposed Implementation Schedule for the Corporate Social Investment Fund for Compensation of Impacts on Communal Land

Activity	June 2026	July 2026	Aug. 2026	Sep. 2026	Oct. 2026	Nov. 2026	Dec. 2026	2027 to 2029
Prepare ToRs and contract consultant to undertake rapid population assessment to consult and identify priority needs								
Conduct rapid assessment on population distribution along transmission line								
Engage with respective traditional leaders								
Conduct initial community consultations to identify community needs								
Consult with other key stakeholders in the districts								
Hold second round of community consultations to get consensus on priority lists and develop beneficiation plan for use of CSI Fund								
Secure management approval to proceed with proposed activity lists								
Coordinate with procurement and legal department to procure services of contractors								
Prepare progress report								Twice per year

Note: This schedule is for the implementation of the CSI Fund for community development detailed in Section 8.4.2.

13 COSTS AND BUDGET FOR RAP IMPLEMENTATION

The final cost and budget for implementation of the RAP with regards to compensation and assistance to PAPs was determined following the valuation of PAPs assets conducted by Sandridge Associates, an independent valuer engaged by ZESCO. As detailed in Table 13-1, compensation, assistance and RAP implementation will cost an estimated amount of 44,322,766 Kwacha (1,881,250 USD). This sum includes compensation for lost structures (primary and secondary or community structures owned by associations or religious groups), a disturbance allowance for all titled land and structure owners, compensation for all individualized exotic/fruit trees, compensation for all impacted land and for crops located under the pylon base, and a livelihood-based reforestation program, as explained in Chapter 8. A CSI Fund for impact on community lands is also provided with a tentative budget of 65,408,355 Kwacha (2,850,000 USD) additional to the RAP budget.

A contingency sum of 15% is recommended to be added to the compensation and assistance budget to cover the following:

- Compensation for the destruction of crops (or other assets) associated with temporary construction facilities and activities (work camps, access roads, circulation of machinery, etc.).
- Temporary disruption of commercial activities due to temporary construction facilities and activities.
- Compensation for land claimed unviable by PAPs, assessed on a case-by-base basis, and eligible to full acquisition (i.e., land that is more than 15% affected).
- Land restoration allowance to be paid to all landowners temporarily affected by worker camps or access roads during construction.
- Additional PAPs who may have been overlooked in the asset inventory exercise.
- Inflation in the period from the date of valuation to final payment.

The budget also includes implementation costs (associated with compensation signoffs, monitoring activities, and potential RAP updates by ZESCO), and costs for the evaluation and final audit of the RAP by an external expert. Those costs were taken from the 2021 RAP and adjusted to inflation⁷⁸. The CSI Fund is considered external to the RAP budget but is recommended to compensate for impacts on community lands and constraints to community development resulting from the Project. It is recommended that this fund represent 1% of construction costs and be expended throughout the Project in affected communities (see Section 8.4.2).

The Grievance Redress Mechanism, the Gender-Based Violence Management Plan, training program and other crosscutting action plans between the RAP and ESMP, are already budgeted in the ESMP (stand alone report).

⁷⁸ Cumulative inflation in Zambia between July 2021 and July 2024 was estimated at 45%, as per the Bank of Zambia.

Table 13-1 Overview of RAP Budget⁷⁹

Item	Cost (ZMW)	Cost (USD)	% of Overall Budget
Exchange Rate ⁸⁰	22.9503	1	-
Compensation	17,523,611	763,546	39.5
Compensation for titled land	1,299,709	56,631	2.9
Compensation for customary residential land without sufficient space for rebuilding affected structures	425,367	18,534	1.0
Compensation for crops under pylon base	27,136	1,182	0.1
Compensation for customary land under pylon base	18,533	808	Negligible
Compensation for fruit trees	8,264,840	360,119	18.6
Compensation for exotic trees	158,675	6,914	0.4
Compensation for housing structures	5,244,752	228,527	11.8
Compensation for secondary structures and immovable equipment	1,723,354	75,091	3.9
Compensation for commercial structures	49,070	2,138	0.1
Compensation for loss of commercial revenue	13,500	588	Negligible
Compensation for loss of salary	17,844	778	Negligible
Compensation for collective assets	165,620	7,216	0.4
Compensation for pylon base (customary land and crops) for the Kasama-Nakonde Section	115,211	5,020	0.3
Additional Assistance	3,421,932	149,102	7.7
Disturbance allowance	831,688	36,239	1.9
Vulnerability allowance	335,400	14,614	0.8
Livelihood restoration program	962,765	41,950	2.2
Logistical assistance during resettlement	1,257,676	54,800	2.8
Transitional rental allowance for tenants	5,800	253	Negligible
Transitional rental allowance for landlords	4,350	190	Negligible
Land preparation allowance	24,252	1,057	0.1
Subtotal of RAP Compensation and Additional Assistance	20,945,543	912,648	47.3
Contingency (15%)	3,141,831	136,897	7.1
Livelihood-based reforestation program	12,264,348	534,387	27.7
RAP implementation	5,330,882	232,279	12.0
RAP evaluation and completion audit	1,492,647	65,038	3.4
GRM Management	1,147,515	50,000	2.6
Total RAP Budget	44,322,766	1,881,250	100.0
Corporate Social Investment (CSI) Fund (1% of construction costs)	65,408,355	2,850,000	-

⁷⁹ All items are detailed in Chapter 8, including the rates and rationale used to estimate costs.

⁸⁰ The rate considered is 1 USD = 22.9503 ZMW, as of December 5, 2025 (Oanda).

14 GRIEVANCE REDRESS MECHANISM

The Grievance Redress Mechanism (GRM) covers both Project preparation (before and during resettlement) and Project construction and is a cross-cutting mechanism that concerns both the ESMP and the RAP. The ZTIP Stakeholder Engagement Plan, developed by ZESCO in April 2024, outlines the structure and processes of the GRM, on which the current chapter is based. It should be noted that the scope of the GRM is extended to all affected parties, whether directly or indirectly impacted by Project activities.

The GRM will be managed by ZESCO, as the developer. This will be done via its Project Implementation Unit (PIU). The ZTIP PIU has an active and dedicated officer responsible for the management of the GRM. However, the central feature of the GRM are the “Local Focal Point” (LFP) persons who will liaise with ZESCO’s Project Implementation Unit (PIU) and other stakeholders to address grievances related to all RAP and other activities.

14.1 INVOLVEMENT OF LOCAL FOCAL POINT PERSONS

Local Focal Point persons are the primary staff component dealing with grievances from PAPs. They will be elected among local communities and are expected to be accessible to PAPs on a regular basis during core aspects of Project preparation, resettlement implementation and throughout the construction phase.

To enhance transparency and trust from PAPs, as well as to facilitate grievance reception, two LFP persons will be elected, one male and one female. The selection of LFP persons through an election process at community-level aims at naming LFPs who will be recognized, credible, and experienced persons trusted by community members.

Once appointed the GRM and the LFP persons will be presented to communities (and traditional authorities) as part of the RAP implementation process. The process of making the GRM and LFP people known will be advertised in the affected villages. Although this will include written notices placed in appropriate areas, there will be public meetings in the communities where the LFP persons will be present.

It is expected that each pair of LFP persons should cover a 5-km radius, so that they are easily accessible to PAPs and other stakeholders so that people do not need to travel long distances to convey their grievances.

Focal Point persons may not be accustomed to a formal GRM where grievances need to be recorded in a database and where procedures need to be put in place. For this purpose, training and capacity building will be provided for the LFP persons as detailed in Section 14.3, and resources will be allocated to ensure proper functioning of the GRM.

International practices recommend that all grievances be recorded in a formal manner, usually a database. Tracking grievances is key to the success of the mechanism and traditional authorities are accustomed to verbal exchanges and do not usually consider themselves accountable to the Project owner. Other points to note about having LFP persons include:

- PAPs who fear discussing certain subjects with Chiefs or village headmen shall be allowed to file a complaint anonymously through the LFP persons without fear of social stigma.
- Ease of accessibility by women, children, and other vulnerable groups to lodge in grievances (hence the appointment of one male and one female LFP persons per community).

- Reduction in the number of intermediaries between lodging of a grievance and its resolution, as the LFP person will directly contact ZESCO or the respective service provider in case of GBV/SEAH cases.
- LFPs will understand the local context of eligibility for claims of usufruct rights and interests where ownership of assets and/or resources (notably land and tree products) is not formally recorded and sometimes disputed.

It encourages inclusivity and impartiality regarding management of grievances from all stakeholders. While the LFP process is designed as the primary point of contact, the traditional leadership will not be marginalised. In some cases, such as conflict resolution, it may be necessary to involve traditional leadership in the GRM process. Once the grievance is logged the process of resolution, as set out in the section that follows, will include all relevant actors.

However, they may not be accustomed to a formal GRM where grievances need to be recorded in a database and where procedures for logging all complaints need to be put in place. For this purpose, it is important that capacity building be provided for the LFP persons and that resources are allocated for its proper functioning.

Selection should be done through an election at the community-level. LFP persons shall be from the affected areas.

Key roles and responsibilities of the LFPs include the following:

- LFP persons shall meet with relevant stakeholders and the PIU on a regular basis.
- LFP persons shall assist the PIU in seeking resolution to grievances and participate in dialogues with affected communities.
- LFP persons shall understand the GRM and be able to present it to affected communities in a language they understand.
- LFP persons' role will span throughout Project preparation and construction phases as the GRM covers all project aspects including resettlement.
- LFP persons will be trained on the concepts of confidentiality and ensuring that this is respected.
- LFP persons will be cognisant of the need to ensure that their approach and accessibility is tailored so that community members, including women and vulnerable people, do not face obstacles when using the mechanism. The PIU will emphasize this during training and, as a result of monitoring being undertaken, will assist the LFP in amending their approach where deemed necessary.

To ensure that they are familiar with, and equipped to carry out their responsibilities, LFP persons will be trained. Training will specifically concentrate on the scope of potential issues that may be brought up, such as gender-based violence (GBV Management is detailed in the ESMP) and land disputes. Training will be detailed and carried out by the PIU or a competent agency appointed by the PIU. Details on the training program of LFP persons, as well as the training budget, are provided in the ESMP (stand alone report).

14.2 GRIEVANCE REDRESS MECHANISM

During RAP implementation, the LFP persons may convey grievances to several Project actors:

- The PIU, since many decisions regarding compensation and resettlement will be taken by them and they oversee the GRM.
- Traditional leadership for conflict resolution, especially those related to land and trees.

When a PAP lodges a complaint to the LFP person, the following applies:

- The LFP person will explain the mechanism to the PAP and determine whether the complaint/grievance from the PAP is scoped in or scoped out.
- Some complaints are requests for information or assistance or issues that are not related to the Project entirely. These will be scoped out as not requiring a grievance process to be triggered. Where complaints are scoped out, the LFP person will still log the approach and explain in written form the answer that was given to the PAP.
- Where the matter is scoped in, the LFP person will write down the complaint with the PAP. The LFP person should have a template form to fill where people can lodge a question, grievance, or complaint. However, experience has shown that most grievances are orally transmitted or written on pieces of paper, therefore, the GRM needs to be flexible (submissions in person, by phone, or text message). The LFP person will transcript grievances and record them in a database and communicate the answers in a reasonable and timely manner. The LFP person shall have an “open house” attitude.
- The LFP person will ask the PAP if she/he wishes to remain anonymous, and if it is the case, the phone number, name, and identification information must not be transmitted.
- The LFP person meets with the concerned response party which can be the PIU or the traditional leadership (or both) to discuss possible answers and actions. An answer is then provided to the complainant. If the answer requires a specific activity or decision such as re-evaluating assets or compensation, the complainant will need to either accept or reject the proposed activity or decision. In cases of land disputes, the LFP person must arrange for negotiations between complainants and involve traditional authorities. This process shall be done within two weeks.
- As a potential last resort, the LFP person will provide guidance on available legal remedies for ownership claims, claims on asset valuations, or family disputes.

The LFP person will close the case when a decision is taken and must keep records of all decisions

This process is illustrated on Figure 14-1. The timeline between the recording of the grievance and the answer shall not, if possible, exceed two weeks. This time frame cannot be guaranteed as some grievances require escalation that involves delays. LFP persons will keep the PAP informed of any delays.

LFP persons will update the PIU Social officer on at least a monthly basis of all progress with grievances. This will be done through the ZESCO GRM Coordinators operating out of ZESCO’s local offices in the Project area. The PIU Social Officer will, on a regular basis, engage the LFP person to obtain updates on the progress of the GRM and any challenges in its implementation.

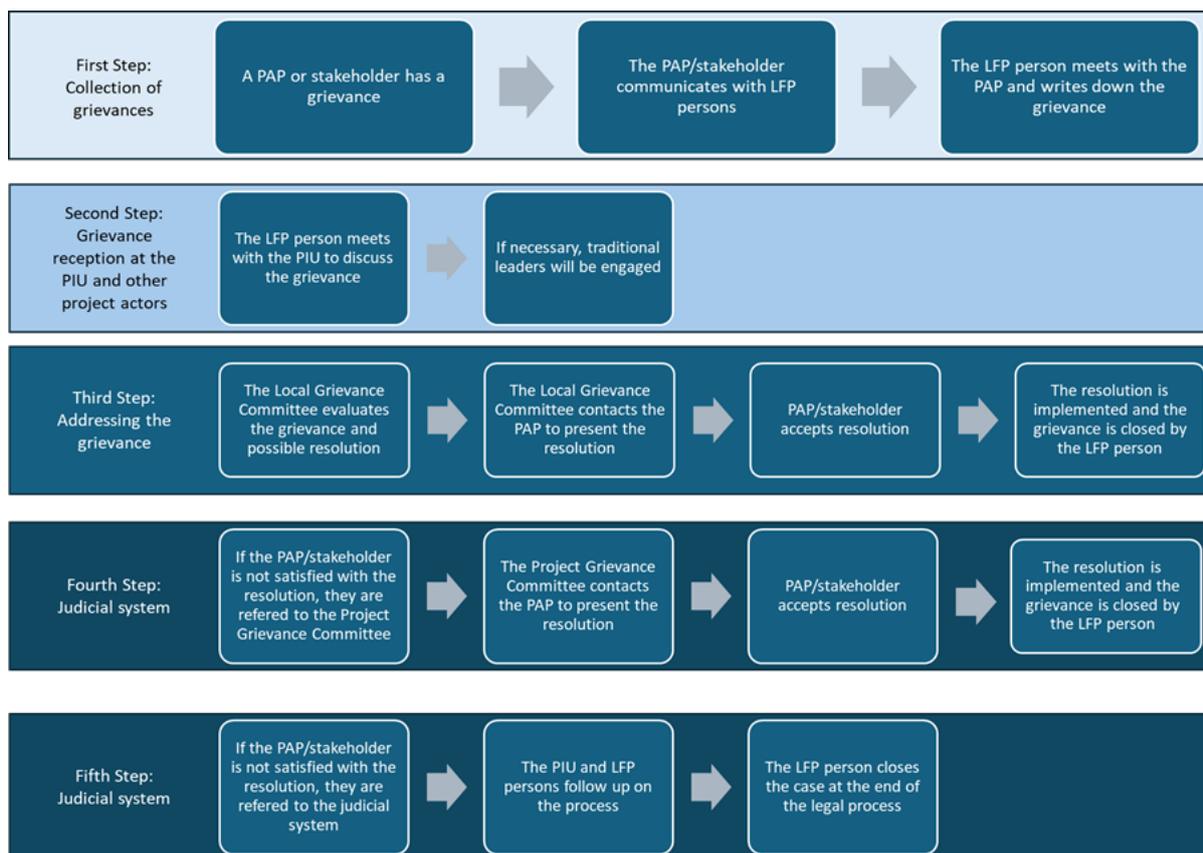


Figure 14-1 GRM Procedure

An example of a grievance form that should be used by the LFP persons is provided in Appendix 14-1. The following table presents the responsibility of each GRM actor. Funds and costs are detailed in the ESMP.

Table 14-1 GRM Actors during Project Preparation

Project Actors	Responsibility Regarding GRM
Consultant hired by the implementing agency to produce the E&S safeguard instrument (ESIA, RAP, and ESMP)	The Consultant has met with affected communities on several occasions during the ESIA and RAP preliminary stages.
Project implementation unit (PIU) of the implementing agency (ZESCO)	<p>The PIU has the responsibility to oversee the GRM and assist the various Project actors during meetings with the communities. In many cases, the PIU needs to provide answers to grievances and shall have a dedicated staff to record all answers and decisions. Any action to undertake during Project preparation needs to be done by the PIU.</p> <p>The PIU has the overall responsibility to ensure compliance of the GRM and to enforce it especially during resettlement implementation. The PIU will also make use of District GRM Coordinators drawn from ZESCO's local offices, to assist in the overall management of the GRM.</p> <p>The PIU needs to externally report the results of the mechanism and communicate with Project stakeholders including the lenders.</p>

Project Actors	Responsibility Regarding GRM
Local Focal Point Persons	<p>Local Focal Point (LFP) persons are in charge of the GRM and have the responsibility to collect and manage grievances and conflicts, and keep an updated database of grievances, including grievances regarding resettlement and compensation.</p> <p>LFP persons will be thoroughly trained by the ZESCO PIU staff.</p> <p>LFP persons have the responsibility to implement their activities in a transparent and inclusive way, free from coercion. They need to avoid all forms of elite capture. They are accountable to the PIU.</p>
Village headmen	<p>Conflicts related to claims of ownership of land shall be handled by village headmen and Chiefs who are in charge of reaching an agreement between claimants.</p> <p>Village headmen shall also be involved in communications with the LFP persons and shall be consulted in order to find concerted solutions to land conflicts.</p>

Ultimately the PIU will be in charge of addressing grievances and ensuring, as much as possible, that all claims are solved through amicable agreement in an acceptable timeline. Answers to all grievances shall be provided within two weeks, as much as possible. In all situations where PAPs are not satisfied with the outcome of the GRM, they can go to court. ZESCO will act according to the entitlement matrix (see Chapter 4) in a transparent way, ZESCO is however not empowered to address family disputes, which should be deferred to existing community resolution systems or the judicial court system.

It should be noted that all grievances related to gender-based violence (GBV) will be handled by the GBV Specialist and/or Social Scientist on the ZTIP PIU through the GBV Resolution Mechanism detailed in Section 4.8 of the ESMP (stand-alone report) and ZTIP GBV/SEAH Action Plan.

14.2.1 MONITORING AND REPORTING OF THE GRM

14.2.1.1 MONITORING

GRM monitoring during RAP activities will be done by the PIU. Chapter 15 describes the RAP monitoring program.

14.2.1.2 REPORTING

The PIU shall regularly report the performances of the GRM during Project implementation.

The Supervising Engineer and Contractors must regularly report (as part of the E&S reports) the performances of the GRM during Project construction.

15 MONITORING, EVALUATION, AND ADAPTIVE MANAGEMENT

Monitoring and evaluation take place when RAPs are implemented as shown in Figure 15-1.

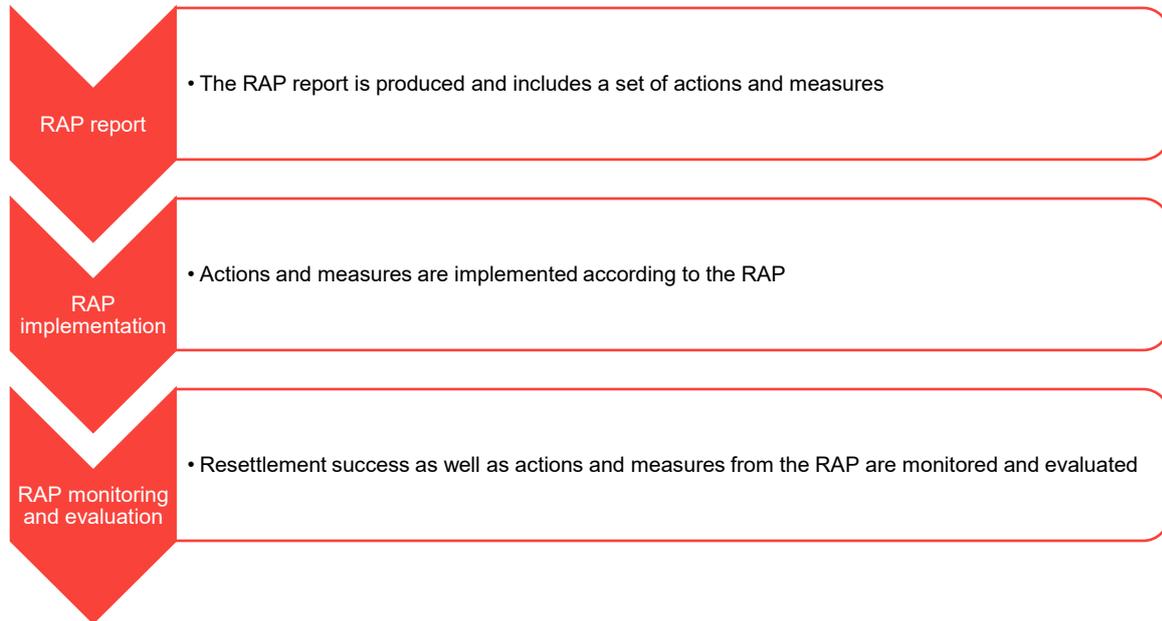


Figure 15-1 Overall RAP Process

15.1 MONITORING

The overall objective of monitoring is to provide Project managers and lenders, as well as PAPs, with timely and indicative information on whether compensation, resettlement, and impact mitigation are on track to achieve RAP objectives and to identify adjustments or corrective measures whenever necessary.

Monitoring will be implemented by ZESCO, primarily through the ZTIP PIU, and will use the following performance indicators:

- Number of public consultation and focus group meetings held;
- In place and functional GRM;
- Number of grievances recorded;
- Number of grievances that are resolved and number of cases in court;
- Number and percentage of compensation and assistance payments disbursed;
- Number of houses and secondary structures constructed to equal or superior standard;

- Number and status of resettlement housing provided in-kind by ZESCO and/or local contractors⁸¹;
- Number of vulnerable PAPs that have effectively been resettled, received compensation and assistance, and received land from traditional authorities;
- Number of customary land holders that received replacement land from traditional authorities, including both residential and agricultural land. This will be a focal point of dedicated monitoring by ZESCO to ensure that Traditional Authorities have complied with requirements to find alternative replacement land – at no cost – where required;
- Number of institutional entities that have had land replaced by the Traditional Authorities and levels of satisfaction with replacement;
- Number of communities that have received in-kind compensation to compensate for customary land repurposing. This includes both residential land as well as agricultural land;
- Number of areas for temporary land acquisition required by civil works contractors and progress with compensation and RAP related remedial measures implemented by the contracting party and its degree of conformance with RAP requirements. This will, as a core activity, ensure that all crops that may be impacted are valued as per market and replacement requirements and compensation is paid prior to a notice to proceed being issued to contractors for land access;
- Number of PAPs benefiting from the livelihood-based reforestation programme and/or who have participated in training programmes provided by the Ministry of Green Economy, Ministry of Community Development and Social Services and Ministry of Agriculture;
- Resolution of potential conflicts or competing claims, as registered as grievances, between owners and users of resources;
- Monitoring reports disclosed.

Monitoring will start within six months of the first stages of compensation sign-off, to monitor compensation and assistance payment, and it will continue for a risk appropriate period to evaluate whether PAPs are effectively resettled both economically and physically. At least every three months, ZESCO will conduct monitoring with a statistically valid random sample of PAPs using the performance indicators presented below. Samples will be selected in every district and numbers involved should be constant throughout the monitoring program. A subset of the sample must be those who are deemed to be vulnerable. A formal monitoring report will be developed and distributed bi-annually until the resettlement process is deemed to have been completed via the outcomes of the Completion Audit as set out below.

Selection of sampled PAPs to monitor effectiveness will not interfere with ZESCO’s ability to address grievances of all affected communities during the resettlement process nor to liaise with the GRM Focal Point persons. Observing public consultations with PAPs at the village level is also required.

It is recommended that a PAP representative be included in the monitoring process for increased transparency. The Local Focal Point persons should be involved as PAP representatives in site visits conducted for monitoring purposes.

The following table presents the performance indicators and required outcome of the implementation monitoring program.

⁸¹ As per Section 8.2.2, it is envisaged that replacement housing will be built by local contractors when in-kind replacement is requested by PAPs.

Table 15-1 Performance Indicators and Outcome for Monitoring

Performance Indicators (PIs) to Monitor	Rationale for this PI	Timing	Objectives and Outcomes
Number of public consultation and focus group meetings held	ZESCO will continuously engage with affected communities. After the RAP has been produced, there are many situations where public meetings will be held by ZESCO as part of its Stakeholder Engagement Plan (SEP).	After valuation At the time of compensation sign-offs (between the Disclosure and Disclaimer) Before construction After 2 years	The objective is to hold public consultations to ensure dissemination of information to PAPs and consultation procedures are carried out in accordance with the principles set out in the RAP. Public meetings must be meaningful and lead to improved social acceptability of the Project. At least four sessions should be held, at the following stages: <ol style="list-style-type: none"> 1. After valuation of assets; 2. During compensation sign-offs (between Disclosure and Disclaimer) or whenever there is a collective grievance; 3. To negotiate land entry and exit procedures before construction and present the calendar of activities; 4. After two years to evaluate the success of the RAP.
In place and functional GRM	Best practices recommend implementing a GRM.	As soon as possible, prior to resettlement	The objective is for the GRM to be operational before RAP implementation activities start. The GRM is in place and operational, it follows the framework provided in this RAP. Focal Point persons are in place in every district to collect grievances.
Number of grievances recorded	The GRM requires that grievances and responses to grievances be documented to ensure situations are adequately addressed within an acceptable timeframe.	Collected monthly by PIU GRM officer and reported on aggregated bi-annual basis with the monitoring report	The objective is to document all grievances and responses to grievances. All grievances must be tracked to continuously improve communication with communities.
Number of grievances that are resolved and number of cases in court	Not all PAPs will accept answers or actions conducted by ZESCO, those that have claims can go to the courts.	Collected monthly by PIU GRM officer and reported on aggregated bi-annual basis with the monitoring report	The objective is to resolve all cases amicably through the GRM and to avoid all court cases. However, some people are going to court in projects such as this because of family disputes before and after compensation payment. Resolution of family disputes should be done through the judicial system.
Number and percentage of compensations and assistance payments disbursed	This will help to assess the rapidity of compensation payment.	Collected monthly by PIU GRM officer and reported on aggregated bi-annual basis with the monitoring report	All PAPs should receive their payment as detailed in the Disclosure and Disclaimer documents within 6 months. No land access will be granted to contractors in instances where PAPS are impacted prior to compensation being paid. The outcome is to ensure people have resumed their livelihood activities and have received sufficient assistance to move out of the wayleave.

Performance Indicators (PIs) to Monitor	Rationale for this PI	Timing	Objectives and Outcomes
Number of houses and secondary structures constructed to equal or superior standard	This will help to assess the success of the resettlement process.	Collected monthly by PIU GRM officer and reported on aggregated bi-annual basis with the monitoring report	All PAPs should have finished re-building their house and structures before the second year. The outcome is to ensure all PAPs have a house to equal or superior standard than their original home and have rebuilt their secondary structures. Monitoring must describe the new houses and compare them with the previous houses.
Number and status of resettlement housing provided in-kind by ZESCO and/or its contracting agents	When PAPs opt for in-kind replacement of housing, resettlement should be monitored to assess the success of in-kind compensation.	Collected monthly by PIU GRM officer and reported on aggregated bi-annual basis with the monitoring report	All PAPs that opted for in-kind compensation should have their houses rebuilt for them before the second year. The outcome is to ensure all PAPs have a house to equal or superior standard than their original home and have rebuilt their secondary structures. Monitoring must describe the new houses and compare them with the previous houses.
Number of vulnerable PAPs that have effectively been resettled, received compensation and assistance, and received land from traditional authorities.	The RAP has identified vulnerable persons that will require assistance to ensure their successful resettlement.	Collected in bi-annual monitoring and reported on with the monitoring report.	All female heads of households and vulnerable persons are effectively resettled and satisfied with their new condition. Female heads of households have not faced any land grabbing or have not been disadvantaged by traditional authorities during land allocation.
Number of customary land holders that received replacement land from traditional authorities, including both residential and agricultural land.	This will help to assess the success of the resettlement process. Given the reliance on TAs to facilitate replacement land this is a key aspect of monitoring and should enjoy a priority emphasis in the activity of the monitoring teams.	Collected in quarterly monitoring and reported on with the monitoring report.	All customary land holders should have received a new land with similar characteristics from traditional authorities. All people are settled and well established.
Number of institutional entities that have had land replaced by the Traditional Authorities and levels of satisfaction with replacement			
Number of communities that have received in-kind compensation to compensate for customary land repurposing	This PI will help to assess the success of in-kind compensation for affected communities.	Collected in bi-annual monitoring and reported on with the monitoring report.	All impacted communities should have received this compensation and have made good use of it to build social infrastructure for the benefit of all community members.

Performance Indicators (PIs) to Monitor	Rationale for this PI	Timing	Objectives and Outcomes
Number of areas for temporary land acquisition required by civil works contractors and progress with compensation and RAP related remedial measures implemented by the contracting party and its degree of conformance with RAP requirements	It is important to assess these and report on compensation and RAP related remedial measures implemented by the contracting party and its degree of conformance with RAP requirements	Collected in quarterly monitoring	All temporary land acquisition has been undertaken in compliance with RAP directives. All compensation, including that for crops, made over before land access granted.
Number of PAPs benefiting from the livelihood-based reforestation programme and/or having been part of training programmes provided by the Community Development Department.	This will help to assess the degree of progress with integration of PAPs with livelihoods restoration initiatives.	Collected in bi-annual monitoring and reported on with the monitoring report.	All eligible PAPs should have been offered access to training and to programme participation. Numbers who participate to be recorded.
Resolution of potential conflicts or competing claims, as registered as grievance, between owners and users of resources.	This will help ensure that compensation is shared between owners and users based on the nature of their contract.	Collected in bi-annual monitoring and reported on with the monitoring report.	Users have benefitted from compensation paid to the owner. The compensation was shared based on the nature of the contract between the owner and the user.
Monitoring reports disclosed	It is important that monitoring activities lead to the production of reports that analyze the results and identify corrective measures to implement.	Every six (6) months until completion audit indicates all commitments are met.	Assess whether RAP inputs (activities) were adequate to mitigate impacts on PAPs. All monitoring and evaluation reports are disclosed to lenders and ZEMA, and corrective measures are implemented.

15.1.1 INSTITUTIONAL ARRANGEMENTS

As indicated, the ZTIP PIU will oversee resettlement monitoring, measuring performance indicators, writing quartile monitoring reports, and disclosing them to lenders and community members. In cases of poor performances, ZESCO will be in charge of implementing corrective actions.

Given that resettlement is not anticipated to lead to significant impacts as people will not be resettled in host communities, and that cash compensation is the main form of compensation, there is little need for external monitoring. The lenders will reserve the right to conduct independent verification of monitoring report. The need for external monitoring may be triggered by the lenders if the monitoring reports generated by ZESCO point to issues that may require significant adjustment. In such cases, the lenders and ZESCO will collaborate on terms of reference and appoint an external monitoring team.

If necessary, ZEMA can undertake external monitoring as part of a regular audit of the ESIA and RAP. ZEMA's responsibilities in terms of monitoring involves checking that the implementation of the RAP is in compliance with the approved RAP. ZEMA could also receive complaints from PAPs and act upon them.

15.1.2 CORRECTIVE ACTIONS

Whenever monitoring reveals poor performance of indicators, corrective actions will be implemented by ZESCO and/or its contractors. In such cases, monitoring reports will evaluate the effectiveness of corrective measures. The definition of poor performance is subject to interpretation, but the following table provides suggested thresholds.

Table 15-2 Thresholds of Performance Indicators

Performance Indicators (PIs) to Monitor	Definition of Poor Performance
Number of public consultation and focus group meetings held	No documented evidence of regular and milestone scheduled community consultation in impacted districts as defined by the indicators above.
In place and functional GRM	No GRM in place and absence of LFP persons in affected communities.
Number of grievances recorded	No log/ledger of grievances available for review.
Number of grievances that are resolved and number of cases in court	Less than 90% of cases are amicably resolved.
Number and percentage of compensation and assistance payments disbursed	Less than 100% of compensations and payments are paid within six (6) months. Instances where assets/rights are alienated prior to full compensation being received.
Number of houses and secondary structures constructed to equal or superior standard	No records of before and after review of housing units occupied by those who were physically displaced. Instances of people being left homeless or not able to complete replacement dwelling units being reported in GRM or in monitoring reports.
Number and status of resettlement housing provided in-kind by ZESCO and/or its contracting agents	Less than 100% of PAPs who requested in-kind compensation have received their house and compensation prior to physical displacement.
Number of vulnerable PAPs that have effectively been resettled, received compensation and assistance, and received land from traditional authorities.	Less than 100% of vulnerable PAP have a house and have received their compensation package prior to physical displacement.
Number of customary land holders that received replacement land (residential and/or agricultural) from traditional authorities	Less than 100% of qualifying customary holders having received replacement land.
Number of institutional entities that have had land replaced by the Traditional Authorities and their levels of satisfaction with the replacement	
Number of communities that have received in-kind compensation to compensate for customary land repurposing	Less than 100% of communities have received the relevant in-kind compensation within one year.
Number of temporary land acquisition required by civil works contractors and progress with compensation and RAP related remedial measures implemented by the contracting party and its degree of performance with RAP requirements	Less than 100% conformance with RAP requirements

Performance Indicators (PIs) to Monitor	Definition of Poor Performance
Number of PAPs benefiting from the livelihood-based reforestation programme and/or having been part of training programmes provided by the Community Development Department	No records of PAP participation in training programmes and no livelihood-based reforestation.
Resolution of potential conflicts or competing claims, as registered as grievance, between owners and users of resources	Users of affected assets have not benefitted from compensation paid to the owner.
Monitoring reports disclosed	Reports are not disclosed every 6 months.

15.2 EXTERNAL EVALUATION – COMPLETION AUDIT

The success of resettlement will be evaluated in a completion audit. It is envisaged that this will take place no later than two years after compensation sign-off, since after two years it is expected that all PAPs have rebuilt their home. Evaluation is focused on final results, on the effectiveness of the RAP implementation, and is based on discussions with those displaced and stakeholders as well as a review of the monitoring reports and process.

Evaluation will consider the baseline situation of PAPs (as detailed in Chapter 3) and compare their conditions prior to resettlement and after resettlement. Evaluation will be done by an external suitably qualified/competent expert as per World Bank requirements.

The objectives assigned to the evaluation will be as follows:

- Ensure the implementation of social measures is aligned with RAP content, lender policies, and national regulatory provisions;
- Assess the adequacy of compensation, displacement, and resettlement procedures;
- Ensure compensation has been provided for actual damage and that PAPs have regained their standard of living;
- Assess the outcomes of resettlement measures on sources of income, levels, and living conditions to see whether they meet the requirements of lender and national resettlement policies;
- Ensure that all temporary land acquisition areas have been properly rehabilitated as per exit agreements;
- Measure social acceptability of the resettlement;
- Assess the success of the monitoring program.

If the evaluation report concludes that living conditions of PAPs have deteriorated compared to baseline, the evaluation will recommend that additional corrective measures be implemented.

The evaluation must inform ZESCO and lenders of the success of the RAP implementation and enable the shortcomings identified in the resettlement process to be corrected in time. Evaluation shall focus on, at least the indicators set out in Table 15-3.

Table 15-3 Evaluation Indicators

Component	Evaluation Measures	Indicators	Performance Target
PAP quality and standard of living and level of satisfaction	Ensure the living standards of PAPs have not deteriorated since resettlement	PAP claims relating to the standard of living at the resettlement site, re-cultivation of plots after work. Comparison of the living conditions of PAPs before and after resettlement (using baseline information).	No complaint concerning the quality or standard of living at the resettlement site and the re-cultivation of affected plots. No major problems experienced by resettled PAPs. PAP satisfaction with commitments to assistance measures and compensation as expressed in the RAP being carried out.
Quality of life of vulnerable PAPs and level of satisfaction	Ensure the living standards of female heads of households, widows, and other vulnerable persons have not deteriorated since resettlement	PAP claims on the standard of living Problems faced by resettled vulnerable persons especially related to land access and construction of new houses. Comparison of the living condition of PAPs before and after resettlement (using baseline information).	No substantive complaints concerning the quality or standard of living at the resettlement site and the re-cultivation of affected plots. No substantive problems experienced by resettled PAPs. PAPs satisfaction with assistance measures and compensation as expressed in the RAP being carried out.
Social stability of affected communities	Evaluation of social cohesion within affected communities, evaluation of the use of the in-kind compensation to build social infrastructure	PAPs and community members are living in good terms and social infrastructure are used by community members, without any elite capture.	There are no conflicts on land and no conflicts between community members that could be related to resettlement or the use of the in-kind compensation package.
Assessment of inputs	Evaluation of the adequacy of the various inputs in terms of human resources and implemented activities	Inputs: activities from the RAP, dedicated human resources for the RAP, and assistance that was provided to PAPs	All inputs were satisfactory in achieving RAP objectives

Additional indicators or evaluation requirements may be added by ZESCO and/or the lenders. These will be based on issues that may have been identified in the monitoring process. A report will be written up. Depending on the performance results and the conclusion of the evaluation exercise, a close-out may have been said to have been met. If close out is not achieved, the report will describe the corrective actions required to achieve close out.

15.3 ADAPTIVE MANAGEMENT

RAP implementation programs are dynamic and may need to be adjusted on a regular basis. The following situations may require updates to the process of implementation as envisaged by this RAP report:

- Any changes or modification to the transmission line that deviate for the current alignment as covered in this RAP;
- Outcomes of various consultations with affected communities during RAP implementation may point to alternative strategies being required to be adopted;
- Outcomes of the Grievance Redress Mechanism may require adaptation of the process;
- Situation of workers’ camps, access roads, and all other infrastructure that cannot be designed at this stage and will require adaptation to the RAP because affected persons may be added to the list of PAPs;

- Outcomes of the monitoring and evaluation exercise.

All these situations will require adaptation of the RAP and changes will need to be recorded. Furthermore, once the final pylon location is known, a RAP Addendum will be prepared with the identification and valuation of affected customary land and crops.

The following sections provide recommendations for RAP implementation activities.

15.3.1 OUTCOME FROM THE GRIEVANCE REDRESS MECHANISM

The proposed GRM (see Section 14 of the RAP or ZESCO's SEP) requires that grievances be recorded and addressed. The RAP process must consider claims from people who were missed during the census and who may not have received adequate compensation and adjust compensation schedules as required.

15.3.2 ADDITIONAL ASSETS NOT CAPTURED IN THE RAP

As indicated above project design and construction activities proceed, it is highly probable that additional land will be required for workers' camps, access roads, borrow pits, etc. For all additional land accesses, the following procedure will be implemented:

- The location of the required piece of land is identified with the help of village headman so that possible impacts, mitigation, and avoidance measures can be discussed and so that the owner of the affected land can be identified.
- The required area is delineated, and the crops are compensated based on the most advantageous rates between the results from the market study and ZESCO valuation. At this stage, it is best to avoid physical resettlement.
- The compensation package is presented to the PAP and, upon agreement, the PAP signs the compensation sign off document (Disclosure form, see Chapter 8) which must clearly indicate the duration of work when resettlement is temporary.
- Contractor will be required to provide a site management plan, defining areas required for works and access. ZTIP PIU and the Owners Engineer will review the site management plan to ensure selected sites are in compliance with provision of the RAP and the ESMP.
- The compensation sign-off stipulates land entry and exit agreements between the contractor and the PAP whenever there is a temporary impact on land close to workers' camps and access roads. The ZTIP PIU will ratify land entry and exit agreements and ensure they are compliant with principles in this RAP.
- Payment is made.
- The PAP is met again to sign the Disclaimer form.
- The RAP database is updated to reflect additional PAPs.

